
ZERO EMISSION BUSING

IMPLEMENTATION PROGRESS REPORT

**Prepared for the Governor, the
temporary President of the State
Senate, and the Speaker of the
State Assembly**

OCTOBER 2025

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University

LESTER W. YOUNG, JR., <i>Chancellor</i> , B.S., M.S., Ed.D.	Beechhurst
JUDITH CHIN, <i>Vice Chancellor</i> B.S., M.S. in Ed.	Little Neck
ROGER TILLES, B.A., J.D.	Manhasset
CHRISTINE D. CEA, B.A., M.A., Ph.D.	Staten Island
WADE S. NORWOOD, B.A.	Rochester
BRIAN KRIST, B.A., M.A., J. D.	New York
KEITH B. WILEY, B.A., M.B.A.	Erie
FELICIA THOMAS-WILLIAMS, B.A., M.S.	Suffolk
SUSAN W. MITTLER, B.S., M.S.	Ithaca
FRANCES G. WILLS, B.A., M.A., M.Ed., C.A.S., Ph.D.	Ossining
ARAMINA VEGA FERRER, B.A., M.S. in Ed., Ph.D.	Bronx
SHINO TANIKAWA, B.A., M.S.	Manhattan
ROGER P. CATANIA, B.A., M.A., M.S., C.A.S., Ph.D.	Saranac Lake
ADRIAN I. HALE, A.S., B.A.	Rochester
HASONI L. PRATTS, B.S., M.P.A.	Brooklyn
PATRICK A. MANNION, B.A., M.B.A.	Fayetteville
SEEMA RIVERA, B.A., M.S., Ph.D.	Slingerlands

Commissioner of Education and President of The University

BETTY A. ROSA, B.A., M.S. in Ed., M.S. in Ed., M.Ed., Ed.D.

Senior Deputy Commissioner

JEFFREY MATTESON

Coordinator, Educational Aid Services

DAVID ELLIOTT

The State Education Department does not discriminate on the basis of race, creed, color, national origin, religion, age, sex, military, marital status, familial status, domestic violence victim status, carrier status, disability, genetic predisposition, sexual orientation and criminal record in its recruitment, educational programs, services, and activities. NYSED has adopted a web accessibility policy, and publications designed for distribution can be made available in an accessible format upon request. Inquiries regarding this policy of nondiscrimination should be directed to the Office of Human Resources Management, Room 528 EB, Education Building, Albany, New York 12234.

Table of Contents

INTRODUCTION	8
Background and Acknowledgements.....	9
Reporting Structure	10
List of Abbreviations Used in Reporting	11
STATEWIDE ANALYSIS	12
Statewide Reporting.....	13
Response Rate.....	13
Transportation Means	14
Bus Fleet Overview.....	16
Contracted Transportation.....	19
Infrastructure Overview	22
Utility Assessment	23
Funding the Transition	26
Voter Support	30
Challenges.....	32
Workforce Development	33
District Progress towards full transition	34
Analysis of Statewide Reporting	35
LABOR MARKET REGION ANALYSIS	37
Western New York Region.....	38
Regional Summary and Response Rate	38
Transportation Means	41
Bus Fleets.....	42
Infrastructure Assessment	45
Electric Service	46
Charging Stations and Infrastructure	47
Challenges.....	48
Voter Proposition/Approval	49
Funding Opportunities	50
Workforce Development Plan.....	51
Transition Towards Zero Emission Busing.....	52
District Comments-Summary	53
Finger Lakes Region	55

Regional Summary and Response Rate	55
Transportation Means	58
Bus Fleets.....	58
Infrastructure Assessment	61
Electric Service	62
Charging Stations and Infrastructure	63
Challenges.....	64
Voter Proposition/Approval	65
Funding Opportunities	66
Workforce Development Plan.....	67
Transition Towards Zero Emission Busing.....	68
District Comments-Summary	69
Central New York Region	71
Regional Summary and Response Rate	71
Transportation Means	73
Bus Fleets.....	74
Infrastructure Assessment	76
Electric Service	77
Charging Stations and Infrastructure	78
Challenges.....	79
Voter Proposition/Approval	80
Funding Opportunities	81
Workforce Development Plan.....	81
Transition towards Zero Emission Busing.....	82
District Comments-Summary	83
Southern Tier Region	85
Regional Summary and Response Rate	85
Transportation Means	87
Bus Fleets.....	88
Infrastructure Assessment	91
Electric Service	92
Charging Stations and Infrastructure	93
Challenges.....	94
Voter Proposition/Approval	95

Funding Opportunities	96
Workforce Development Plan.....	96
Transition Towards Zero Emission Busing.....	97
District Comments-Summary	98
North Country Region.....	100
Regional Summary and Response Rate	100
Transportation Means	102
Bus Fleets.....	103
Infrastructure Assessment	106
Electric Service	107
Charging Stations and Infrastructure	107
Challenges.....	109
Voter Proposition/Approval	110
Funding Opportunities	111
Workforce Development Plan.....	111
Transition towards Zero Emission Busing.....	112
District Comments-Summary	113
Mohawk Valley Region.....	115
Regional Summary and Response Rate	115
Transportation Means	117
Bus Fleets.....	118
Infrastructure Assessment	120
Electric Service	121
Charging Stations and Infrastructure	122
Challenges.....	123
Voter Proposition/Approval	124
Funding Opportunities	125
Workforce Development Plan.....	125
Transition Towards Zero Emission Busing.....	126
District Comments-Summary	127
Capital Region	129
Transportation Means	132
Bus Fleets.....	133
Infrastructure Assessment	136

Electric Service	137
Charging Stations and Infrastructure	138
Challenges.....	139
Voter Proposition/Approval	140
Funding Opportunities	141
Workforce Development Plan.....	142
Transition Towards Zero Emission Busing.....	143
District Comments-Summary	144
Hudson Valley Region	146
Regional Summary and Response Rate	146
Transportation Means	150
Bus Fleets.....	151
Infrastructure Assessment	153
Electric Service	154
Charging Stations and Infrastructure	155
Challenges.....	156
Voter Proposition/Approval	157
Funding Opportunities	157
Workforce Development Plan.....	158
Transition Towards Zero Emission Busing.....	159
District Comments-Summary	160
Long Island Region.....	162
Regional Summary and Response Rate	162
Transportation Means	166
Bus Fleets.....	167
Infrastructure Assessment	169
Electric Service	170
Charging Stations and Infrastructure	171
Challenges.....	172
Voter Proposition/Approval	173
Funding Opportunities	174
Workforce Development Plan.....	174
Transition Towards Zero Emission Busing.....	175
District Comments-Summary	176

New York City Region.....	179
Appendices.....	182
Appendix 1.....	183
New York City – 2024 Legislative Report.....	184
Appendix 2.....	192
NYSED 2025 Survey Instrument.....	193

INTRODUCTION

Background and Acknowledgements

New York State Education Law §3638 requires that all school buses in New York State must be zero-emission vehicles by the year 2035, with the addition that all buses purchased by school districts or third-party transportation service providers after June 30, 2027, must be zero-emission vehicles. While other zero emission technologies exist, the only one that can operate currently at the scale of fleets of multiple buses is the electric bus approach.

The law requires that that, beginning in 2024, every school district shall submit a progress report on the implementation to the Commissioner of Education every year, no later than August 1. The report must include, but not be limited to:

- (i) sufficiency of the school district's electric infrastructure to support anticipated electrical needs.
- (ii) The availability and installation of charging or fueling stations and other components and capital infrastructure required to support the transition to and full implementation of zero-emission school buses.
- (iii) whether the workforce development report pursuant to paragraph (c) of subdivision five of this section [§3638 of The Education Law] has been created and implemented.
- (iv) the number and proportion of zero-emission school buses the school district or any contractor providing transportation services is utilizing in the current school year; and
- (v) the number and proportion of zero-emission school buses purchased or leased by the school district or any contractor providing transportation services in the current school year and the total anticipated number for the next two years.

The school district reports must then be used to inform a comprehensive annual report prepared by the New York State Education Department (NYSED or “the Department”) on the Statewide progress of implementation of zero-emission school buses, due to the Governor, the temporary President of the State Senate, and the Speaker of the State Assembly by October 1, also beginning in 2024.

To address this statutory requirement, in 2024, NYSED developed the initial survey designed to create a baseline set of data to be used as a comparison with future years and to inform the development of guidance and informal benchmarks. In collecting data and information on current and anticipated fleet sizes, charging stations and infrastructure needs, electric service sufficiency, planning/outreach, and ballot proposition outcomes, NYSED captured information on the impacts of the mandated transition to zero emission buses, in addition to the assessment data necessary to generate this report.

It is important to note that NYSED worked closely with State agency colleagues at the New York State Energy and Research Development Authority (“NYSERDA”) and the New York State Department of Public Service (“DPS”), and with stakeholder groups such as the Joint Utilities of New York (“JU”), Public Service Enterprise Group-Long Island (“PSEG-LI”), and the New York School Bus Contractors Association (“NYSBCA”) to gather and verify information and data on school districts. Data provided by these organizations is used extensively throughout this report, and NYSED would like to acknowledge and thank them for their assistance and collaboration.

Report Structure

The following report is divided into three (3) main sections: an introduction with background information and acknowledgements, a series of statewide analyses, and a brief look at relevant datapoints for each New York State Labor Market Region. NYSED includes data visualizations in the form of charts, maps, and graphs displayed in-line with the text to the greatest extent possible. Textual analyses are presented in advance of accompanying charts and graphs. However, due to image sizing limitations and to ensure appropriate readability, some charts and graphs are presented on a separate page. Finally, numerical reporting and analyses in this report, including Statewide statistics, do not include data pertaining to the New York City Labor Market Region, which is served by the sole New York City School District. Basic geographic and enrollment data for the district, however, are included in the New York City Regional Summary section of this report. With permission from the New York City School District, a report detailing the district’s current progress toward transitioning to zero emission busing produced by the

District for the New York City Council in June 2024 is appended to this report as Appendix 1.

List of Abbreviations Used in Reporting

ConEd – Consolidated Edison Company of New York

FAS – Fleet Assessment

FEP – Fleet Electrification Plan

JU – Joint Utilities of New York

NYPA – New York Power Authority

NYSBCA – New York School Bus Contractors Association

NYSDPS – New York State Department of Public Service

NYSED – New York State Education Department

NYSERDA – New York State Energy Research and Development Authority

PSEG-LI – Public Service Enterprise Group of Long Island

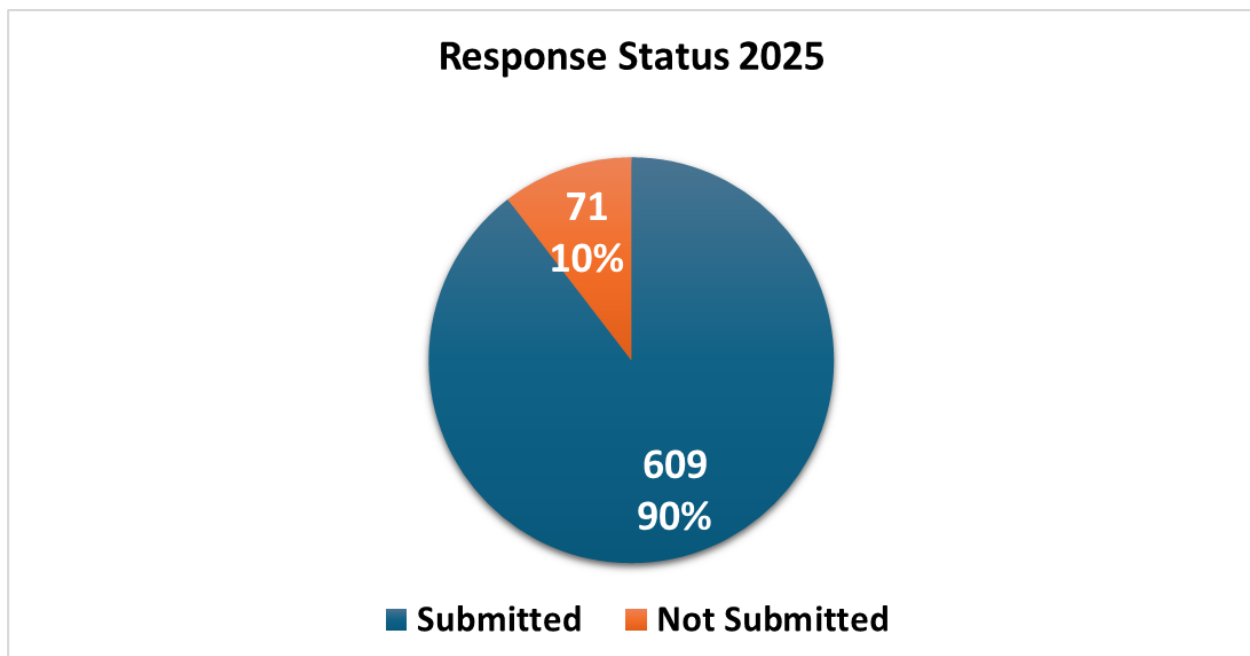
STATEWIDE ANALYSIS

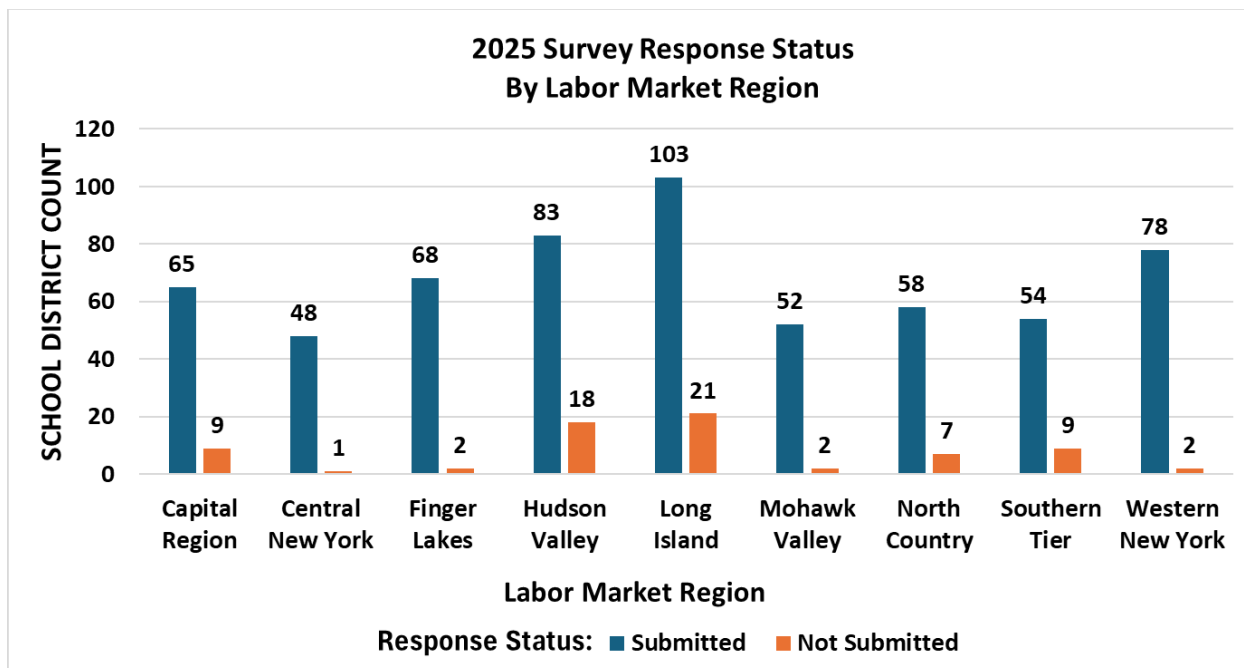
Statewide Reporting

Response Rate

NYSED surveyed six hundred eighty-one (681) non-Special Act school districts. Of these, six hundred-nine (609, 90%) responded to the survey, including the New York City School District. This is a four percent (4%) increase in response rate from 2024. As indicated in the introductory portion of this report, New York City data is not included in Statewide reporting in this section.

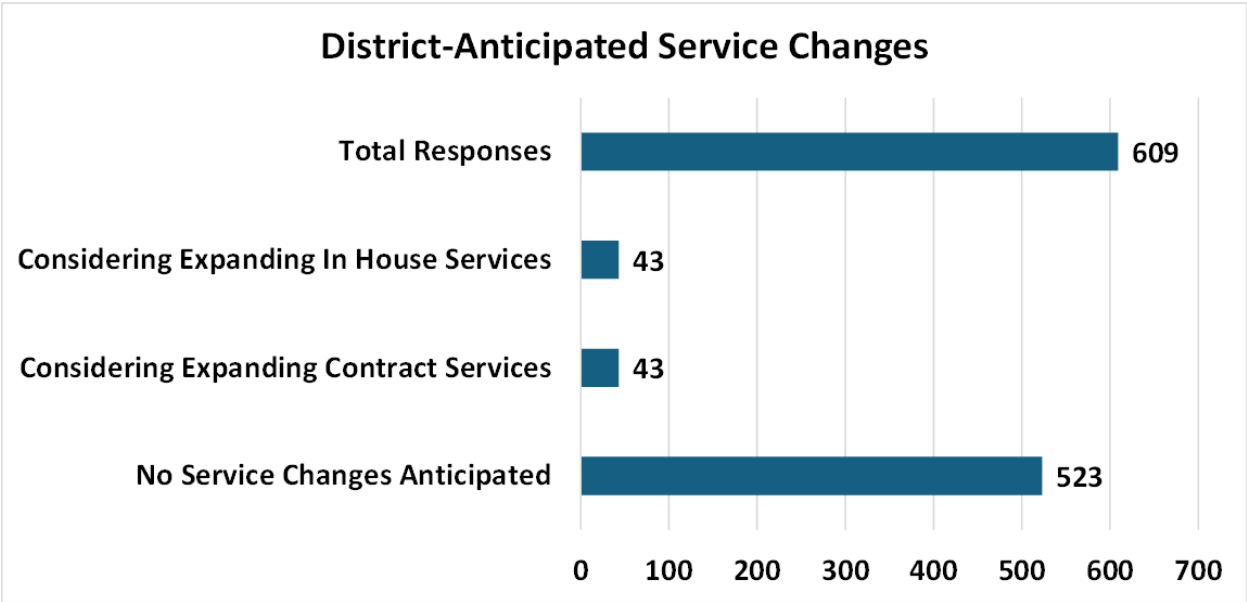
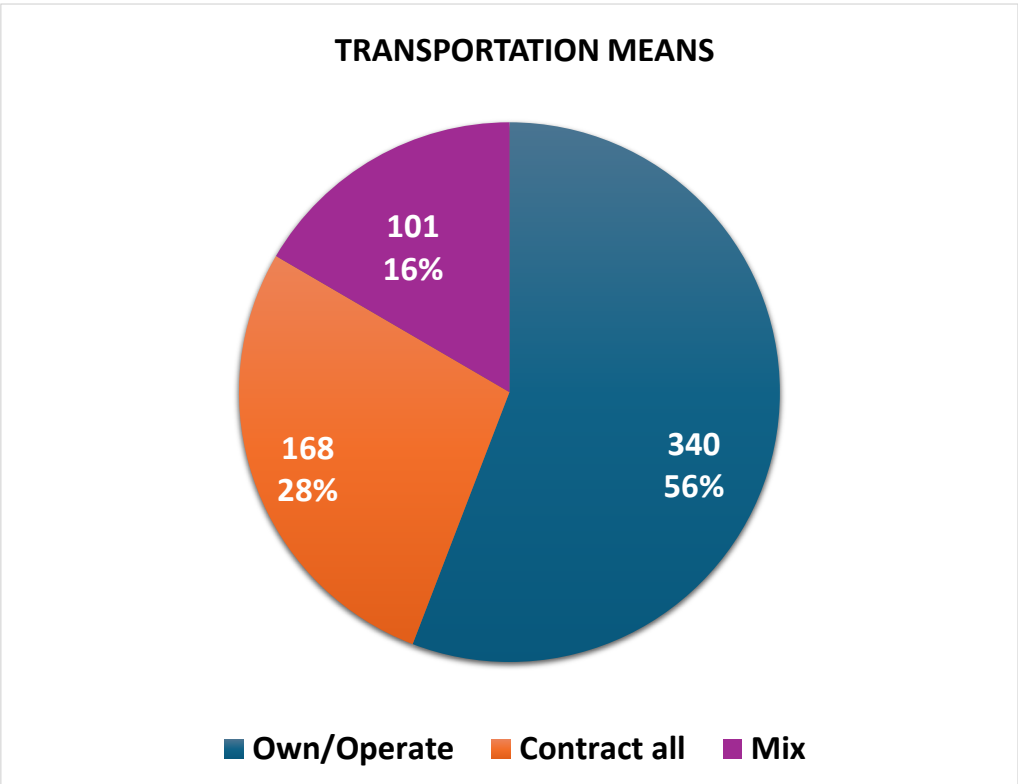
As illustrated in the graphs below, seventy-one school districts (71,10%) across the State did not submit responses to NYSED's transition assessment survey. As a result, the data used for reporting will include only school districts who provided responses to NYSED. For the purposes of this report, the charts and graphs included below provide analysis and observations pertaining only to responsive school districts. NYSED provided reminders for all districts via the NYSED's weekly email announcements. In addition, districts that did not submit the survey by July 30, 2025 were directly emailed a reminder.





Transportation Means

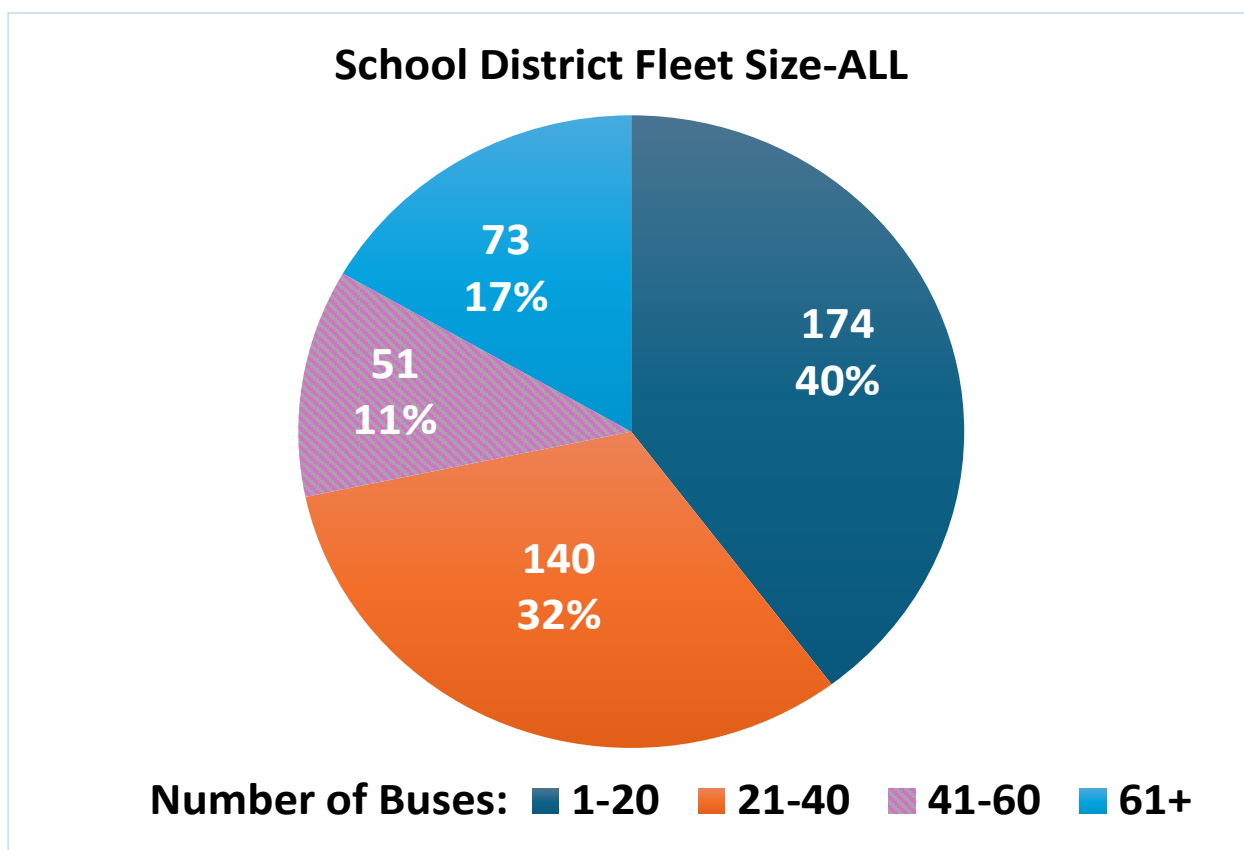
A majority of responsive school districts (72% or 440 districts) indicated that they own and operate all or some of the transportation fleet used to serve the district. These districts are responsible for the initial and ongoing capital and operational investments necessary to build out new infrastructure and secure new vehicles to comply with the zero-emission mandate. It should be noted, however, that the two (2) Labor Market Regions that indicated the highest concentration of contracted transportation service, Long Island and Hudson Valley, together served 711,171 students in the 2024-25 school year—fifty one percent (51%) of reported student enrollment statewide that year, excluding New York City. The same two Labor Market Regions also only encompass approximately 6,096.2 square miles, or about thirteen percent (13%) of the State. These data indicate that school districts in densely populated areas of the state are more likely to rely on contracted school bus services while less densely populated areas rely more heavily on their own bus fleets. When asked, forty-three districts (43, 7%) reported considering expanding Contract Services in response to the overall mandate, and forty-three districts (43, 7%) are considering expanding in-house services. However, five-hundred and twenty-three (523, 86%) districts reported they do not anticipate changing how bus services are currently being provided.

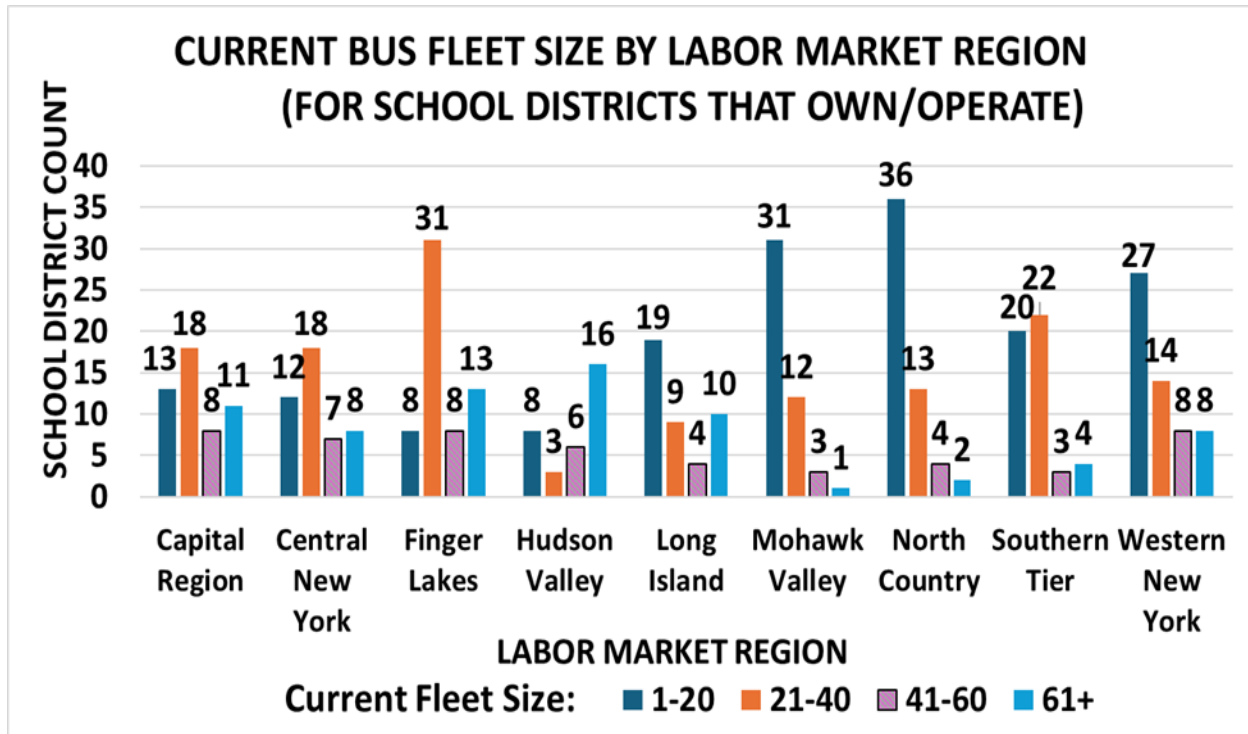


Bus Fleet Overview

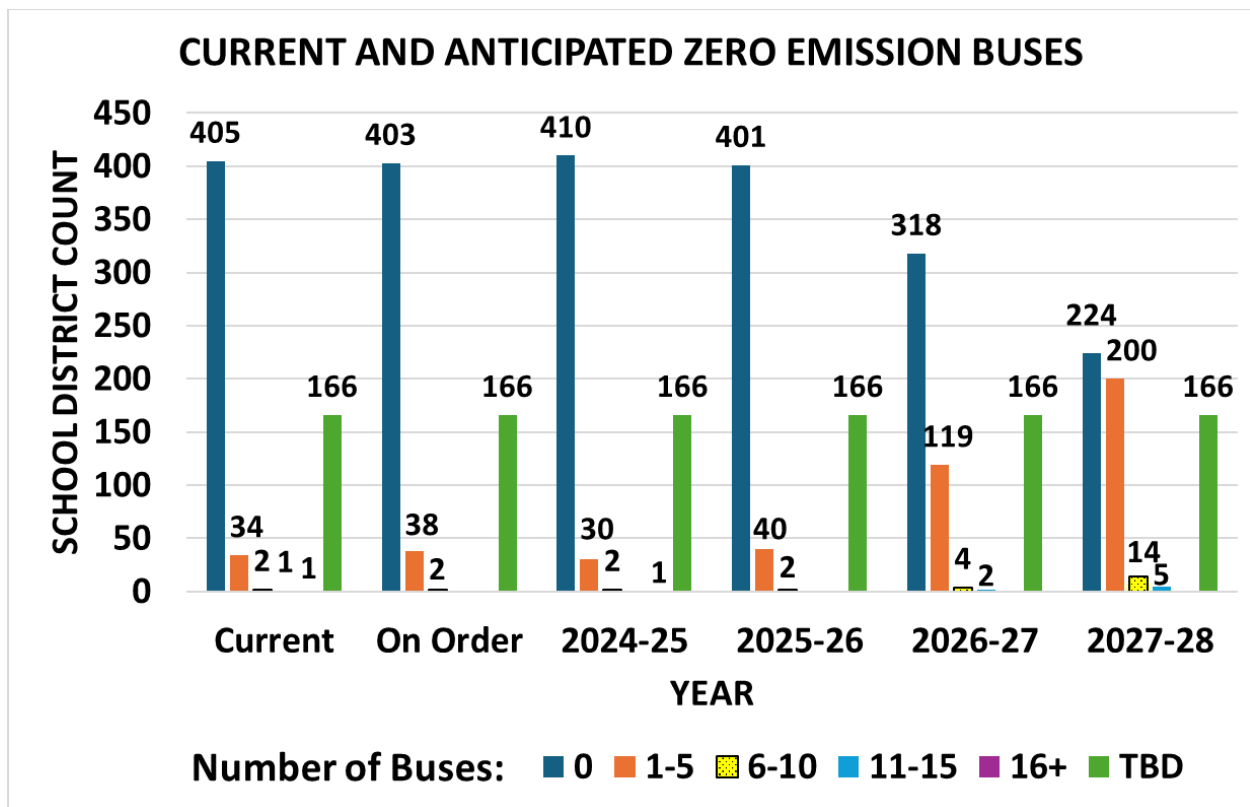
Four hundred thirty-eight (438) respondent school districts provided information on the fleets they own and operate. For reporting purposes, NYSED defines a small fleet as one contains up to twenty (20) vehicles, a medium fleet as twenty-one to forty (21-40) vehicles, a large fleet as forty-one to sixty (41-60) vehicles, and an extra-large fleet as more than sixty (60+) vehicles.

A large majority, three hundred-fourteen districts (314, 72%) indicate that they own small or medium sized fleets to serve their transportation needs. Of the remaining one hundred twenty-four (124) districts, a greater number of districts maintain extra-large fleets of more than sixty (60) vehicles than those that fall into the large range of 41-60 vehicles.





The number of zero-emission vehicles that are part of total bus fleets owned and operated by school districts is currently very small. Combining the count of vehicles owned by all four hundred thirty-eight (438) responsive school districts across the state yields 15,835 school buses that are currently operational. Of these, one hundred-seventeen (117), less than 1%, are reported to be zero-emission vehicles. Data show an increase from last year of seventy-six (76) new zero-emission buses. Districts reported a total of ninety-five (95) zero emission buses on order. This will increase the total from one hundred-seventeen (117) to two hundred-twelve (212) zero emission buses. However, as indicated in the graph below, school districts anticipate that more zero-emission vehicles will be included in bus fleets as the statutory transition period approaches.



These data do not include counts of electric buses currently owned and operated by third-party vendors contracted by school districts to provide transportation services. Like school districts, contractors currently operate relatively small numbers of electric buses. Data provided by the NYSBCA show only the following five (5) members that currently operate zero-emission vehicles. The data shows an increase of fifteen (15, 31%) vehicles over last year's data.

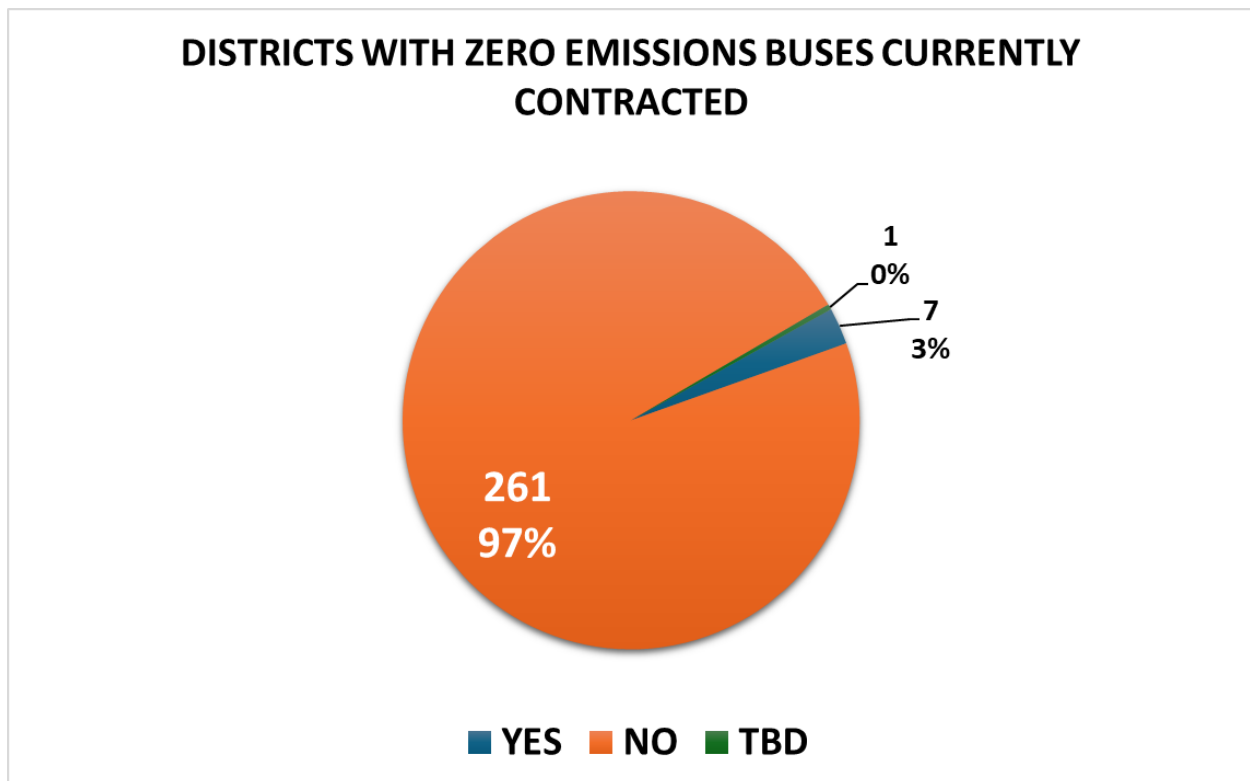
Contractor Name	Total Fleet Size Range	Zero-Emission Buses Currently Active-2025	Zero-Emission Buses Active-2024
Consolidated Bus Transit	1,001 – 1,500	26	5
Logan Bus & Affiliates	1,501 – 3,000	5	11
Pioneer Transportation	501 – 750	5	5
STA/Mid-City Transit	4,001 +	16	16
Suffolk Transportation	1,501 – 3,000	11	11

Contracted Transportation

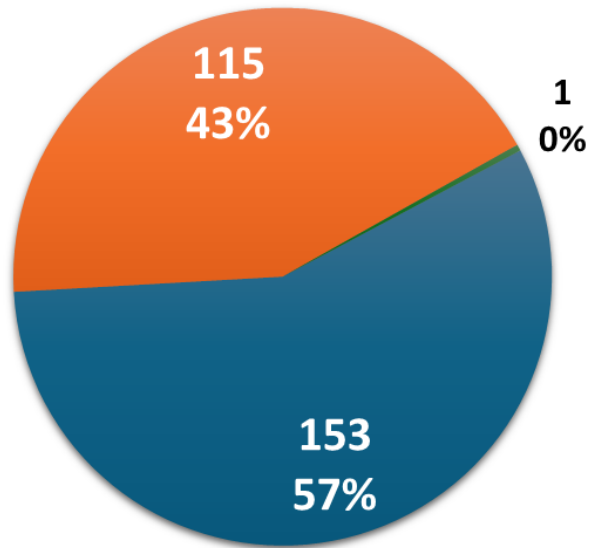
Districts that contract for some or all their district transportation needs were asked a series of questions regarding their contracts with vendors, including whether zero-emission buses are now or are anticipated to be a requirement to be considered a qualified bidder. Of the two hundred sixty-nine (269) responses, seven (7, 3%) districts currently require zero-emission vehicles in their contracts. Districts were asked if they anticipate requiring zero-emission vehicles in future RFPs or RFBs. Of the two hundred sixty-nine (269) responses, one hundred fifty-three (153, 57%) districts noted that they anticipate requiring zero-emission vehicles in the future. When asked if any of the district's current contractors utilized zero-emission buses to service the district's needs, of the two hundred sixty-eight (268) responses, seven (7, 2.6%) districts, reported yes, "the contractor was currently using zero-emission buses."

Districts that rely on contracted vendors for transportation service may face challenges securing required zero-emission busing services if vendors are slow to transition private bus fleets. However, districts that renew a five (5) year contract with a vendor the year prior to the statutory transition period appear to have an additional four (4) years of a contract term in which zero emission buses are not a requirement. In

addition, districts and vendors extending a previously executed contract that does not require zero emission buses may not need to procure a new contract due to the statutory provision that increased costs resulting from a new State or Federal mandate may be passed through to the school district upon approval of the Commissioner of Education.

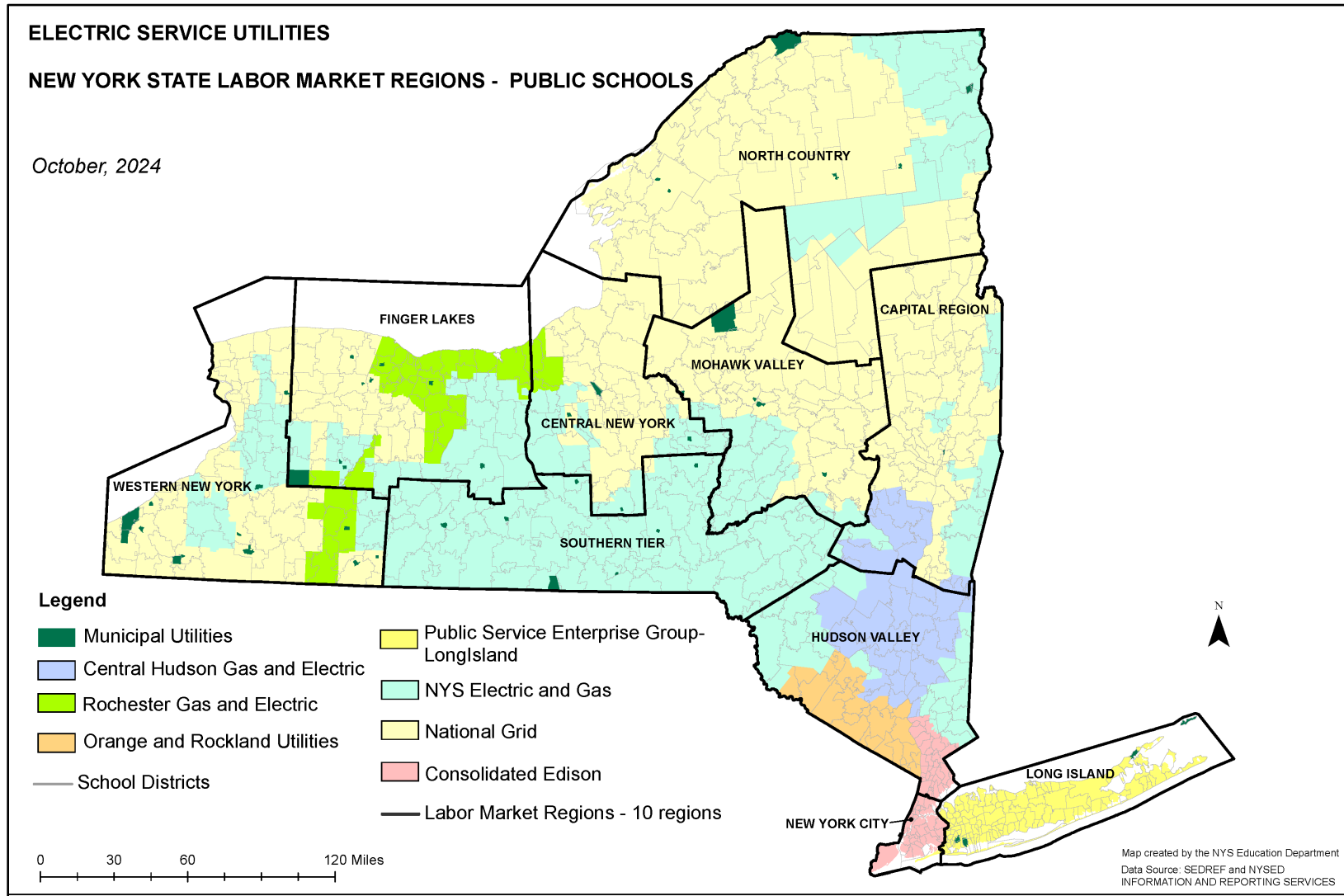


DISTRICTS WITH FUTURE ZERO EMISSIONS BUS CONTRACT PLANS



■ YES ■ NO ■ TBD

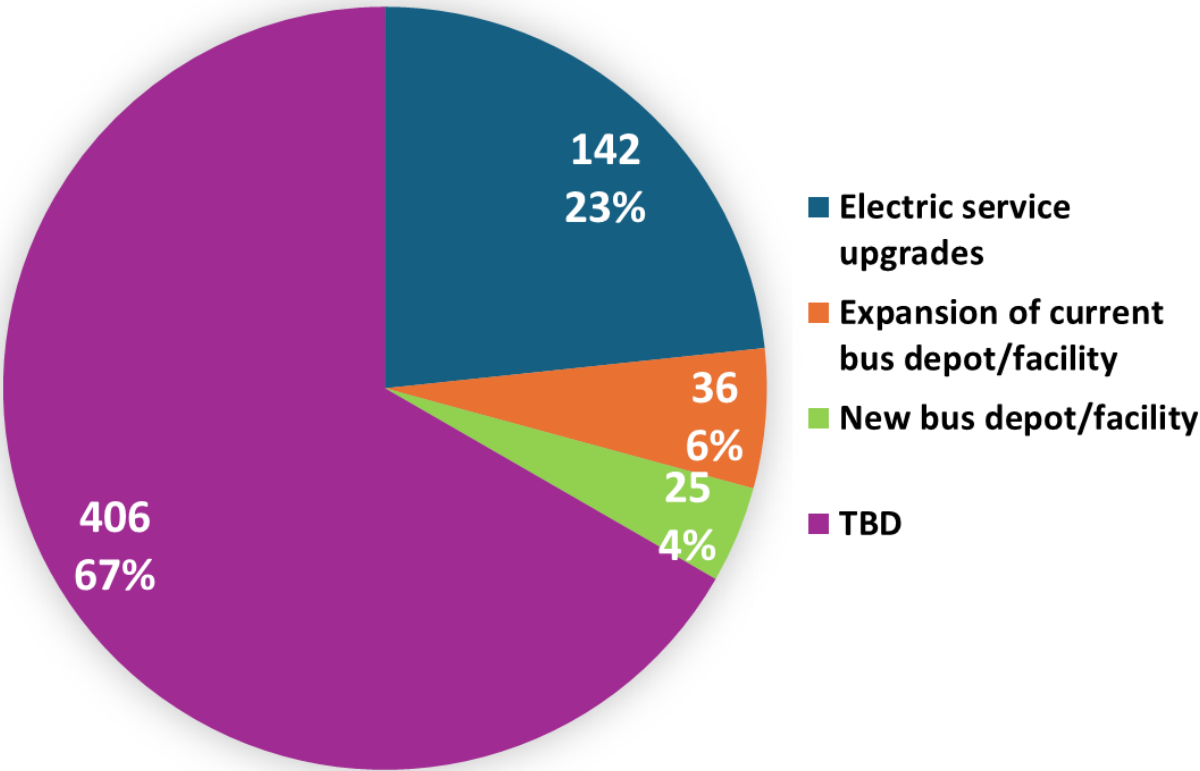
Infrastructure Overview



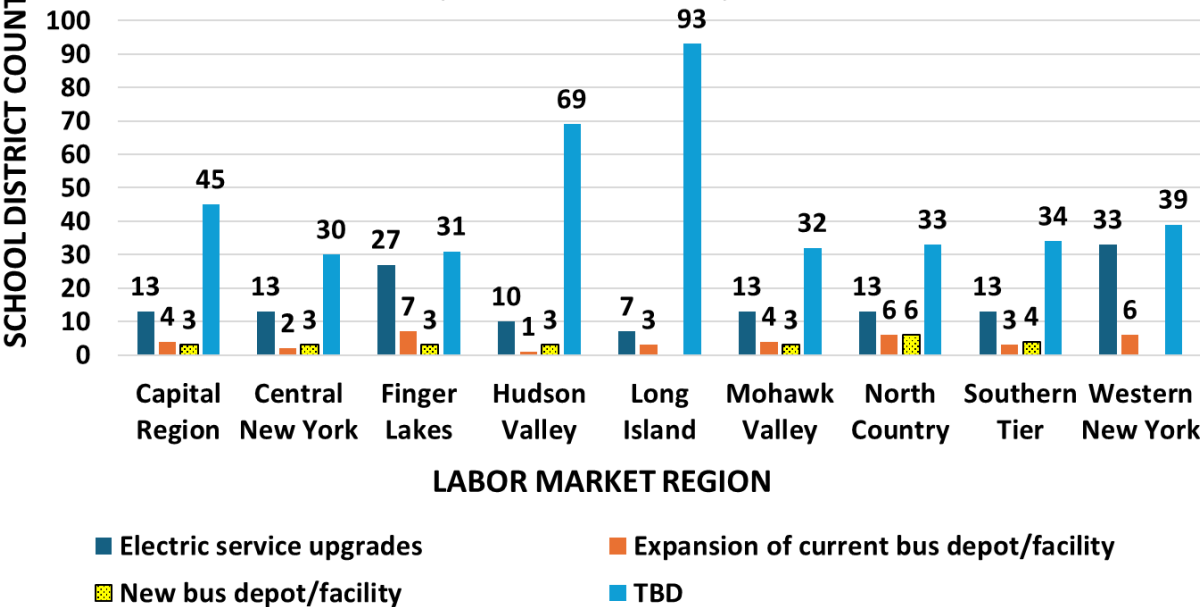
Utility Assessment

In addition to vehicles, school districts must also invest in capital upgrades to electric service and install vehicle charging stations to support transportation needs. The map above provides information on utility provider territories across New York State. The graphs below indicate that across the state, four hundred-six (406, 67%) of districts report they are still determining their electric service enhancements needs. One hundred forty-two districts (142, 23%) noted that they will need electric service upgrades; thirty-six districts (36, 6%) reported that they will need to expand their current bus depot/facility; and twenty-five (25, 4%) reported they will need a new bus depot/facility to support the zero-emission bussing. A response of “TBD” (To Be Determined) indicates that no final determination has been made or the responding district contracts for all transportation and does not intend to perform any capital improvements to support electrification at the district (this definition is applicable throughout this document). It is important to note that, while four-hundred six (406) responsive school districts indicate a “To Be Determined” status, data from NYSERDA indicates that in August 2025 statewide, three hundred forty-four (344) school districts had not yet received a completed Fleet Electrification Plan (“FEP”). Information and recommendations contained in completed FEPs is necessary to inform a school district’s immediate and long-term electric utility needs.

ELECTRIC SERVICE ENHANCEMENTS NEEDED?

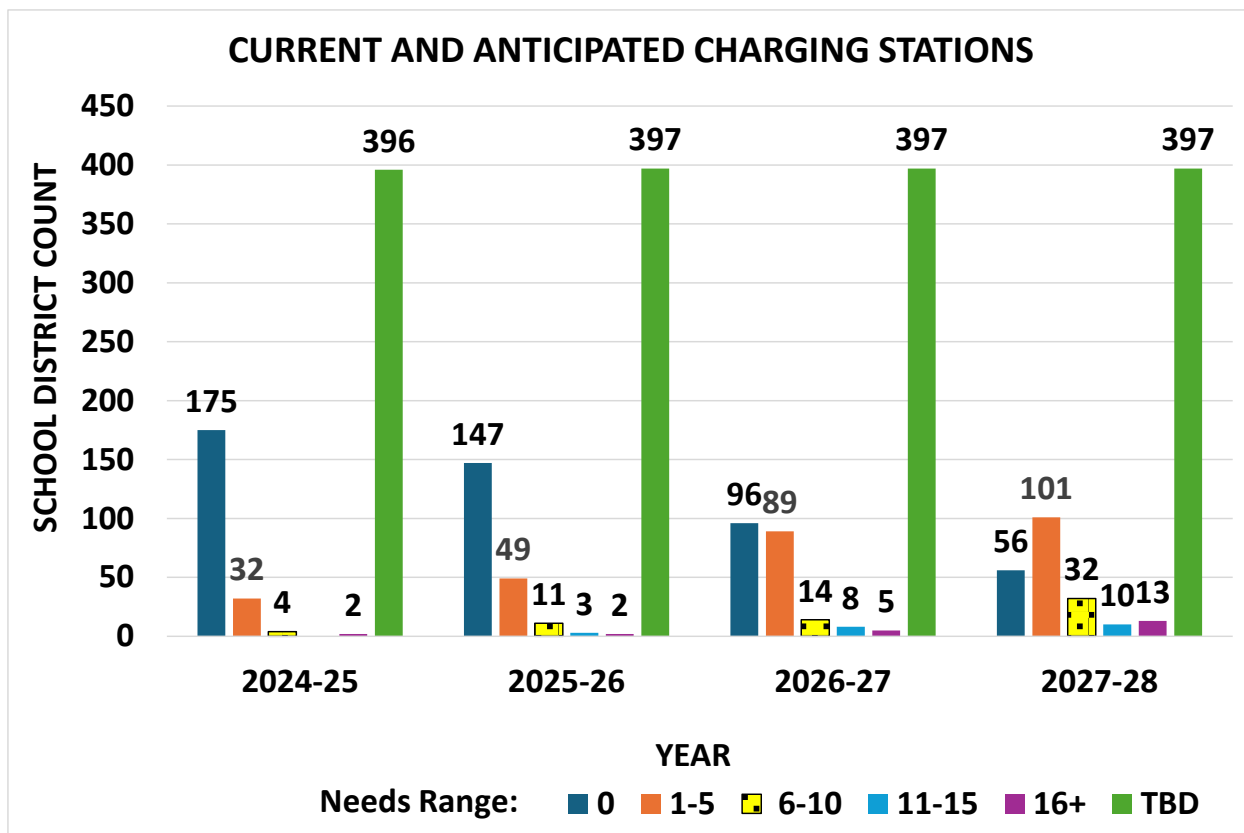


ELECTRIC SERVICE ENHANCEMENTS NEEDED?
By Labor Market Region



It should be noted that PSEG-LI, the members of the Joint Utilities of New York, and NYSERDA administer programs designed to assist districts with assessing their needs to support bus electrification. NYSERDA provides school districts with a Fleet Electrification Plan (“FEP”) that is designed to provide a comprehensive individual blueprint to participating districts, including an assessment of the status and recommendations on needs over time. A similar Fleet Assessment (“FAS”) may be obtained from a district’s utility provider, focused specifically on the electric supply upgrades that may be needed at the district. Granular data regarding which districts have commissioned such studies and their status is provided in the District Overview for each of the ten (10) New York State Labor Market Regions later in this report. While many school districts report that electrical updates are needed to support an electric bus fleet, three hundred sixty-eight districts (368, 60%) reported that they have reached out to NYSERDA to obtain assistance with commissioning a Fleet Electrification Plan (FEP). In addition, three hundred forty-four districts (344, 56%) reported they have requested an electric utility assessment or have a load letter from its utility provider. Of the three hundred forty-four (344) districts that are working with NYSERDA, ninety districts (90, 26%) have reported they have a completed FEP.

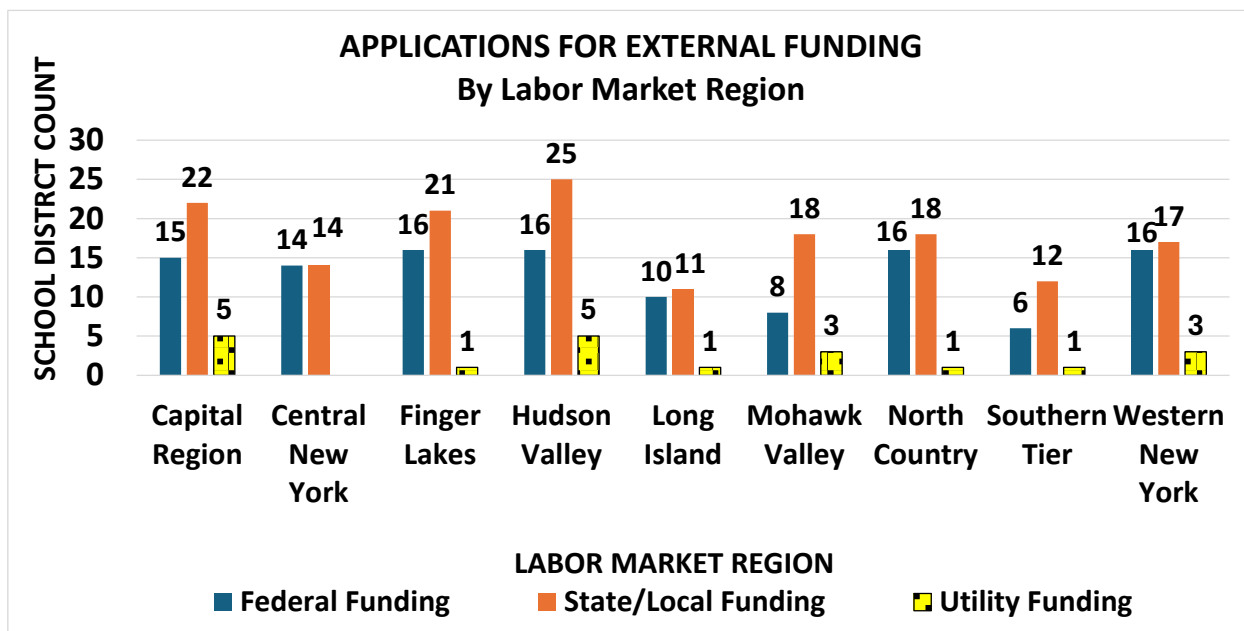
Still, while the vast majority of school districts will not have charging infrastructure available for use in the 2025-26 school year, there are several school districts with electric buses currently operating that have charging infrastructure installed at this time. Districts that Own/Operate their fleet report one hundred seventeen (117) zero-emission buses and one hundred forty-five (145) chargers in the 2024-25 school year. Districts that Own/Operate also reported ninety-one (91) zero-emission buses were on order at the time of reporting. Additionally, as with school districts’ acquiring of vehicles, it is expected that more charging stations will become available for use over time. Please find these data in the graph below:

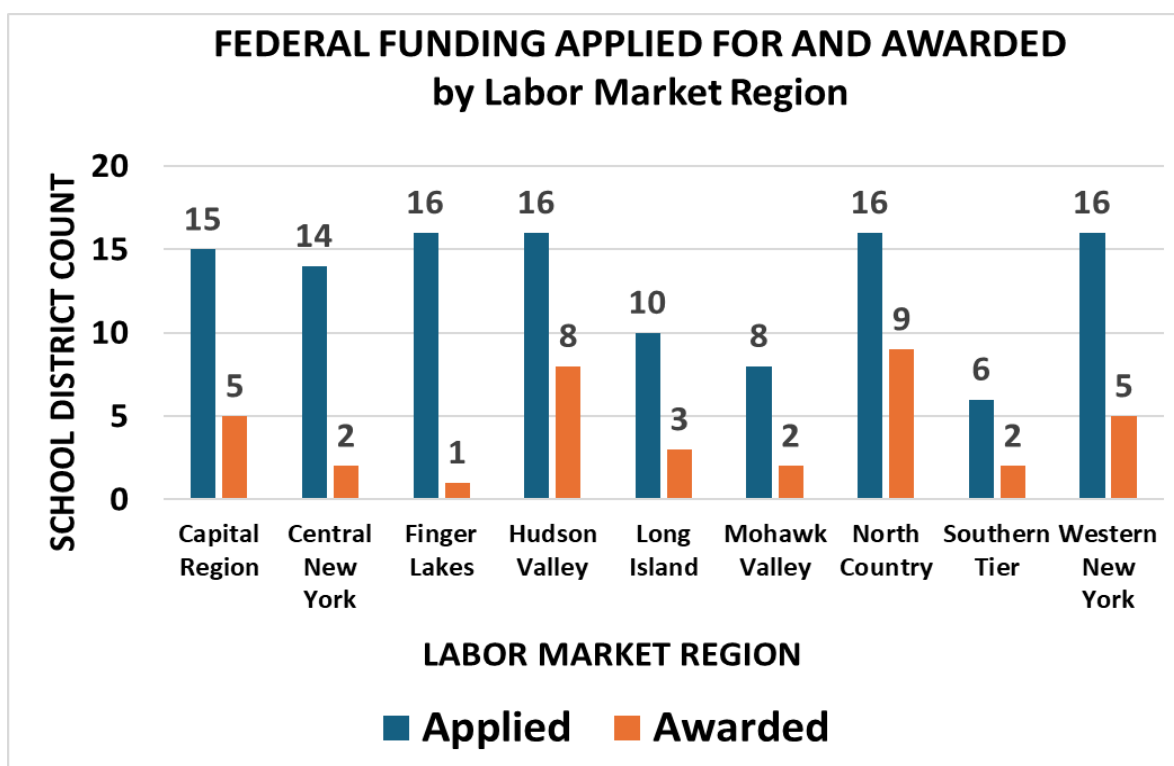
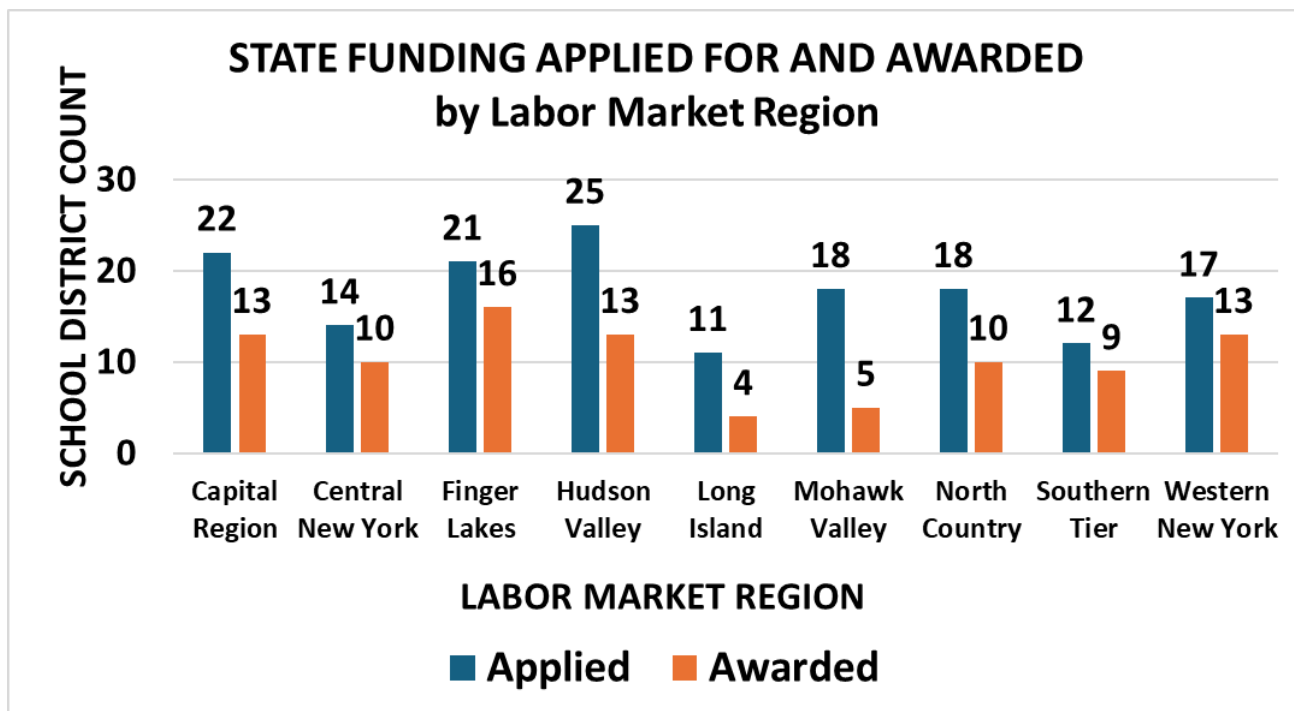


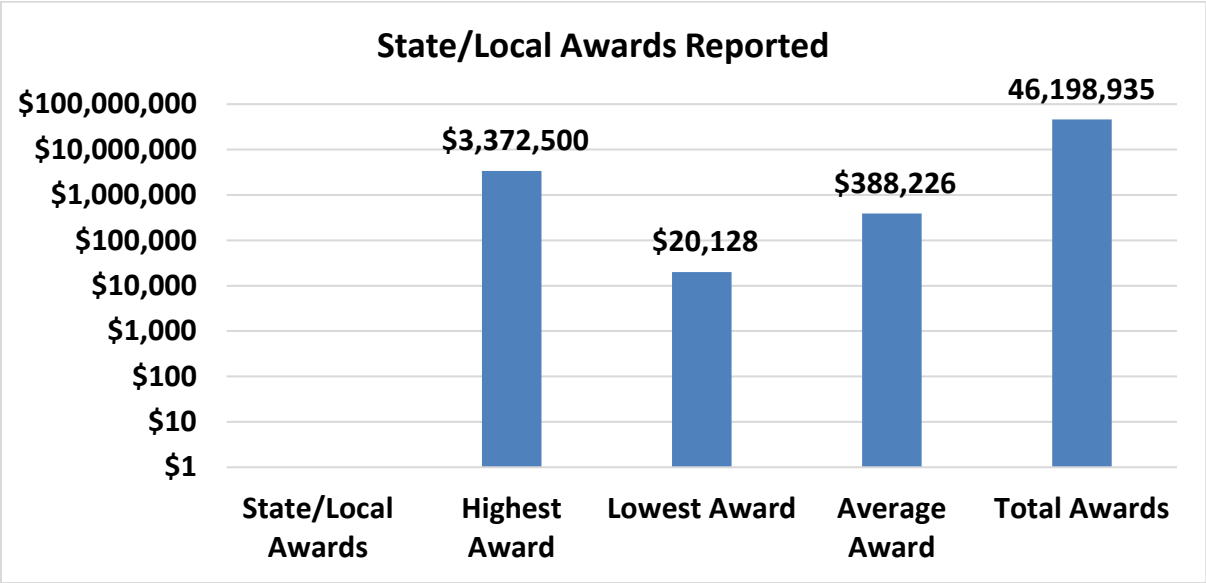
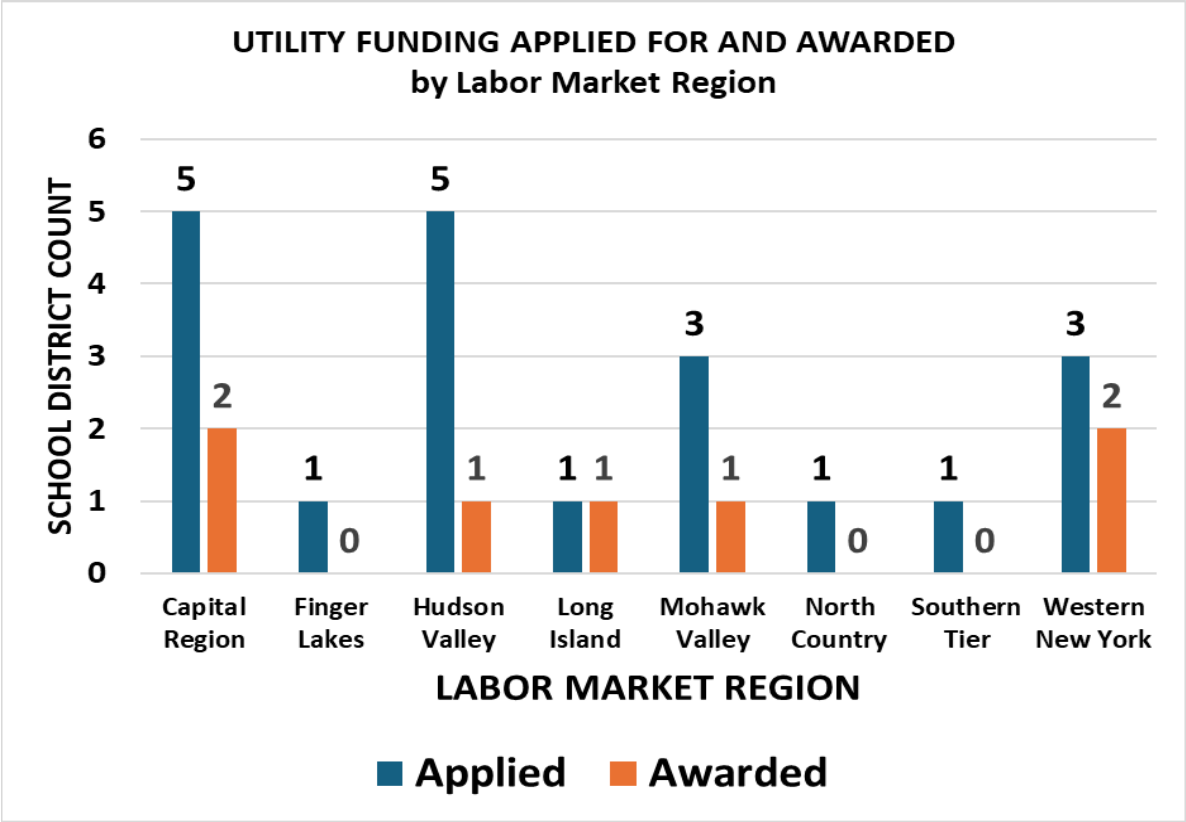
Funding the Transition

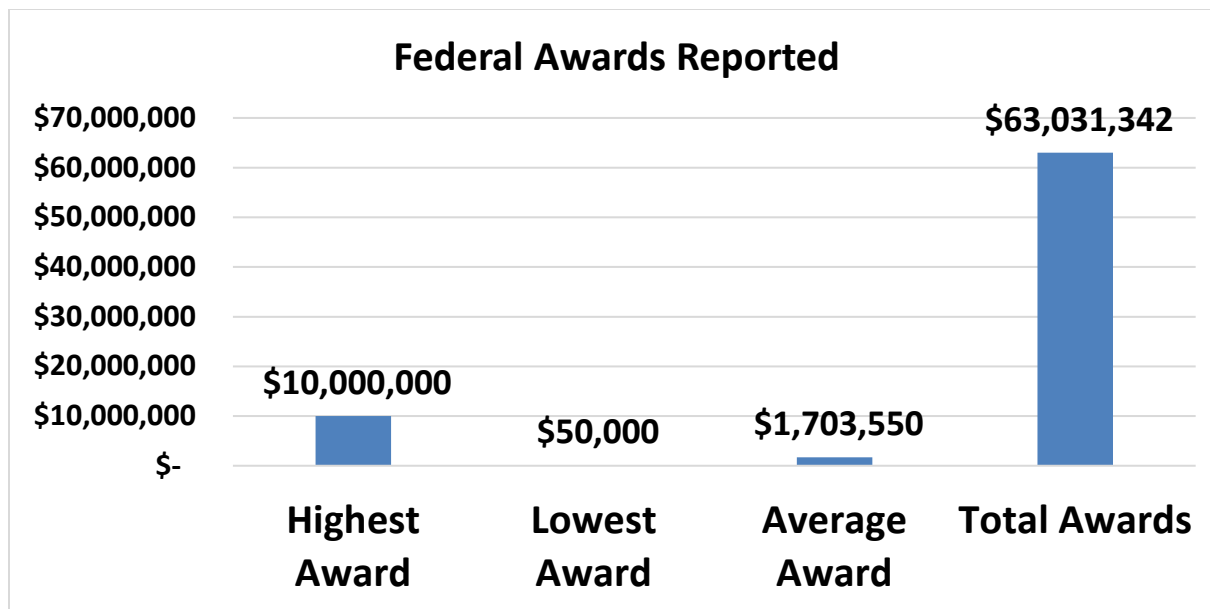
In its “Electric School Bus Roadmap,” NYSERDA projects that the overall cost to own and operate electric buses is less expensive than internal combustion equivalents and could save operators from a few thousand dollars to more than \$10,000 per bus, per year. Those cost savings are primarily based on total cost to own, which includes lower maintenance and repair costs due to fewer parts and components in an electric motor compared to an internal combustion engine. However, the initial investment currently needed for vehicles and the infrastructure to support them is substantially greater than the cost of replacing a fossil-fuel vehicle. To help defray the relatively high upfront costs associated with transitioning to zero emission busing, External funding opportunities, such as Federal EPA grants and reimbursement programs, and the NYSERDA-administered New York School Bus Incentive Program, are available to help school

districts mitigate the financial burden related to bus electrification. One hundred fifty-eight districts (158, 26%) reported they applied for State/Local grants with the average award being \$338,226. The highest State/Local award was for \$3,372,500 reported by Middletown City SD. One hundred seventeen districts (117, 19%) reported that they applied for Federal grants, with the average award being \$1,703,550. The graphs below show the number of districts that reported applying for funding, applications by Labor Market region, and the number of districts that report having been awarded funding by State and Federal sources.



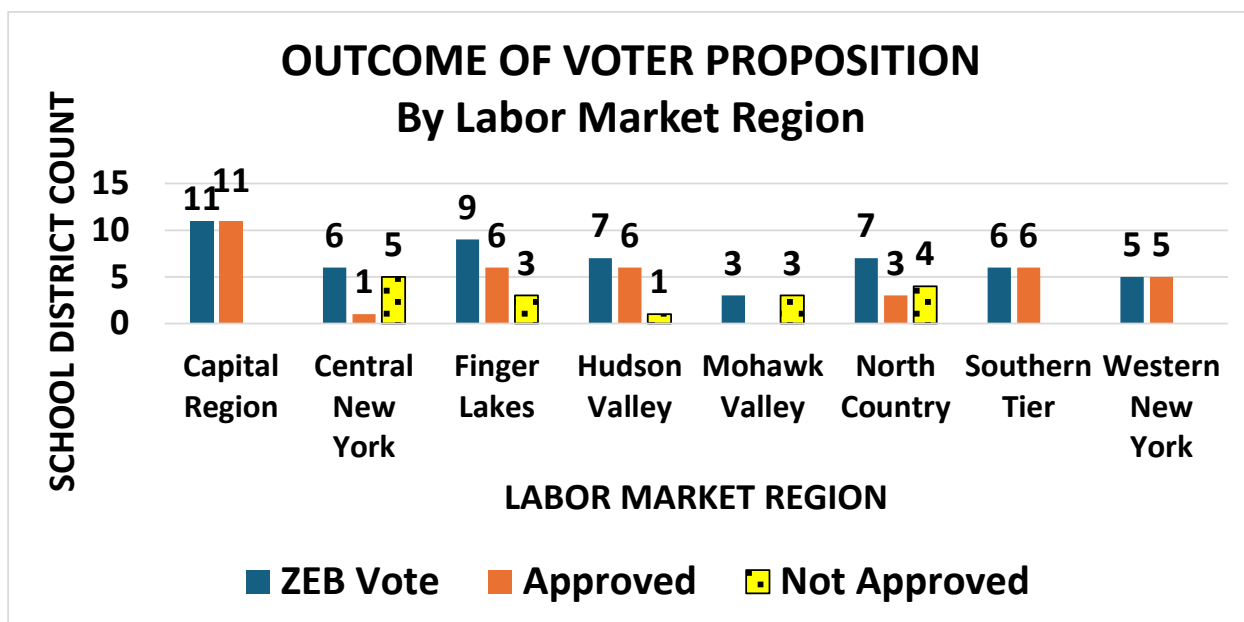
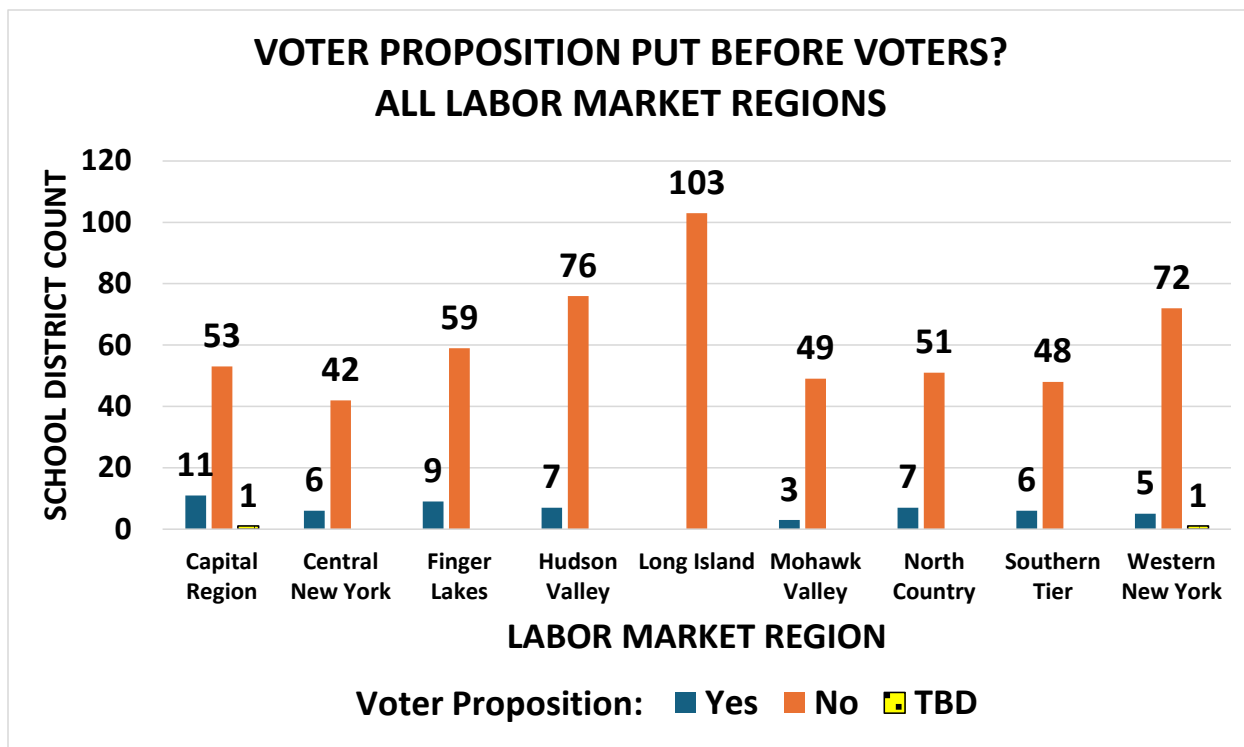






Voter Support

The external funding programs currently available to school districts that can be leveraged to support New York State's zero emission bus transition each come with a set of challenges. For instance, some of the federal funding available to school districts comes in the form of reimbursement, as opposed to an upfront grant or point of sale discount. Additionally, many of the utility make-ready programs will cover a substantial portion of utility-side upgrade costs, but they also are predominantly refund programs where a school district must cover all costs upfront. As a result, school districts will likely need to incur debt to transition bus fleets and upgrade infrastructure and facilities. Taking on debt requires voter approval. The following graphs indicate the number of school districts that reported placing a zero-emission busing related proposition on the ballot at a recent school district election or referendum, and the outcomes of those propositions that were put out to local voters.



Of the six hundred nine (609) school districts responding to the survey, only fifty-four (54, 8.9%) have held a public referendum on the matter of zero-emission busing. This is a slight increase by eleven (11) districts from last year's reporting. However, of those that were held, thirty-eight (38, 70%) did pass. As reported in the NYSED survey,

school districts report that they are hesitant to put a proposition before the voters due to perceived lack of support, either for the issue or for the added tax burden associated with it. Without voter authorization to incur debt needed to fund the transition, however, school districts are forced to continue planning without a firm timeline for plan execution. Finally, while there are many different programs and opportunities for school districts to secure grants and other external funds to support expenses related to zero-emission busing, funds are somewhat limited. These programs are primarily designed to prioritize and incentivize school districts serving economically disadvantaged communities—such districts are eligible for relatively larger awards. Economically disadvantaged school districts also generally have a more favorable State Transportation Aid Ratio, allowing a greater percentage of allowable transportation expenses to be returned to these districts in the form of Aid that is paid over a fixed amortization period for approved transportation capital expenses, or as a lump sum in the year following the expense for approved operating expenses. Due to this, wealthier, non-prioritized school districts with lower State Transportation Aid Ratios are faced with shifting more of the financial burden onto the local school district taxpayers directly.

Districts were asked to report a gross estimate of the cost to fully transition to zero-emission busing. Data shows a high of \$190,000,000. And a low of \$546,172. With a state average of \$20,000,543. BOCES is providing support to districts to assist them with the zero-emission busing, the data shows one hundred sixty-one (161, 26%) districts responded that they are receiving some support from BOCES.

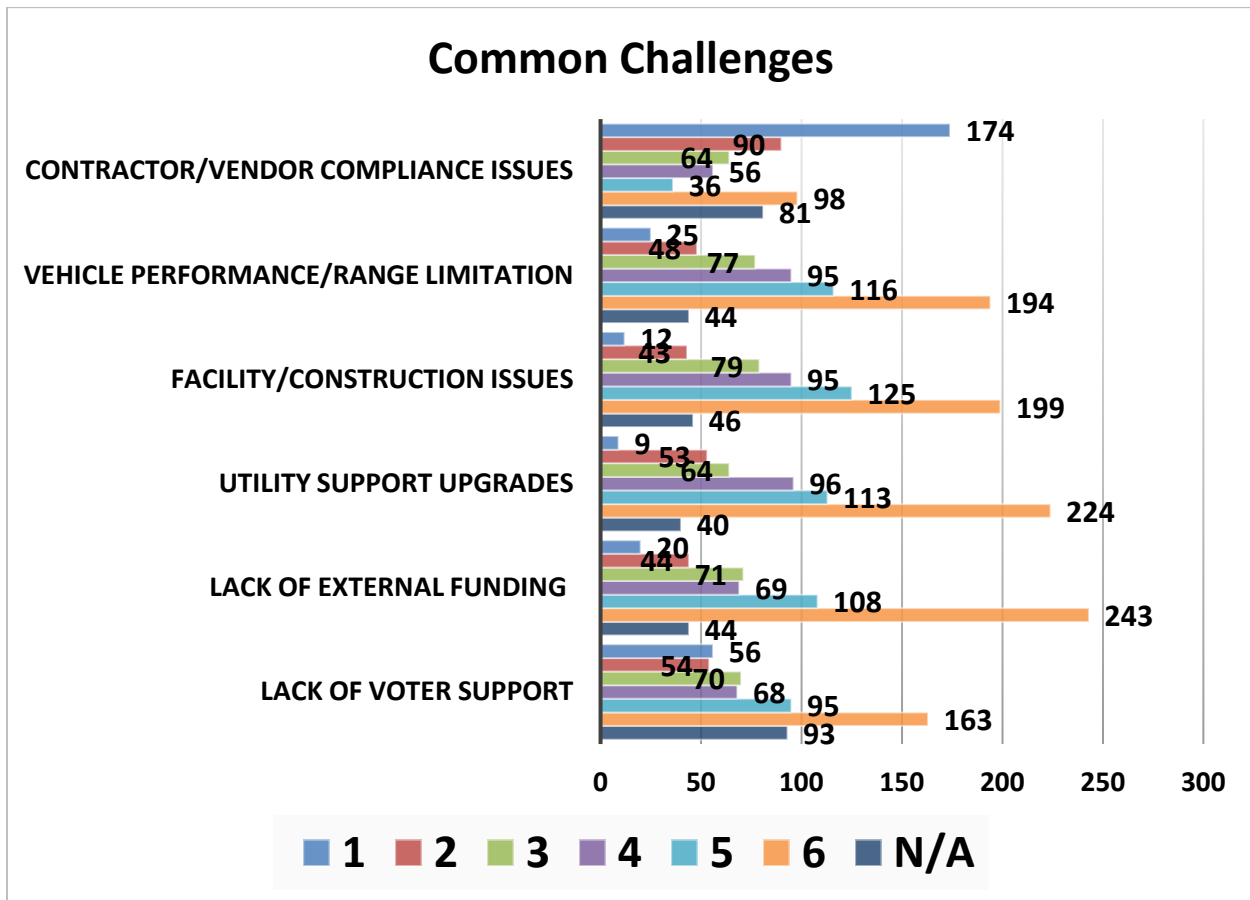
Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;

5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

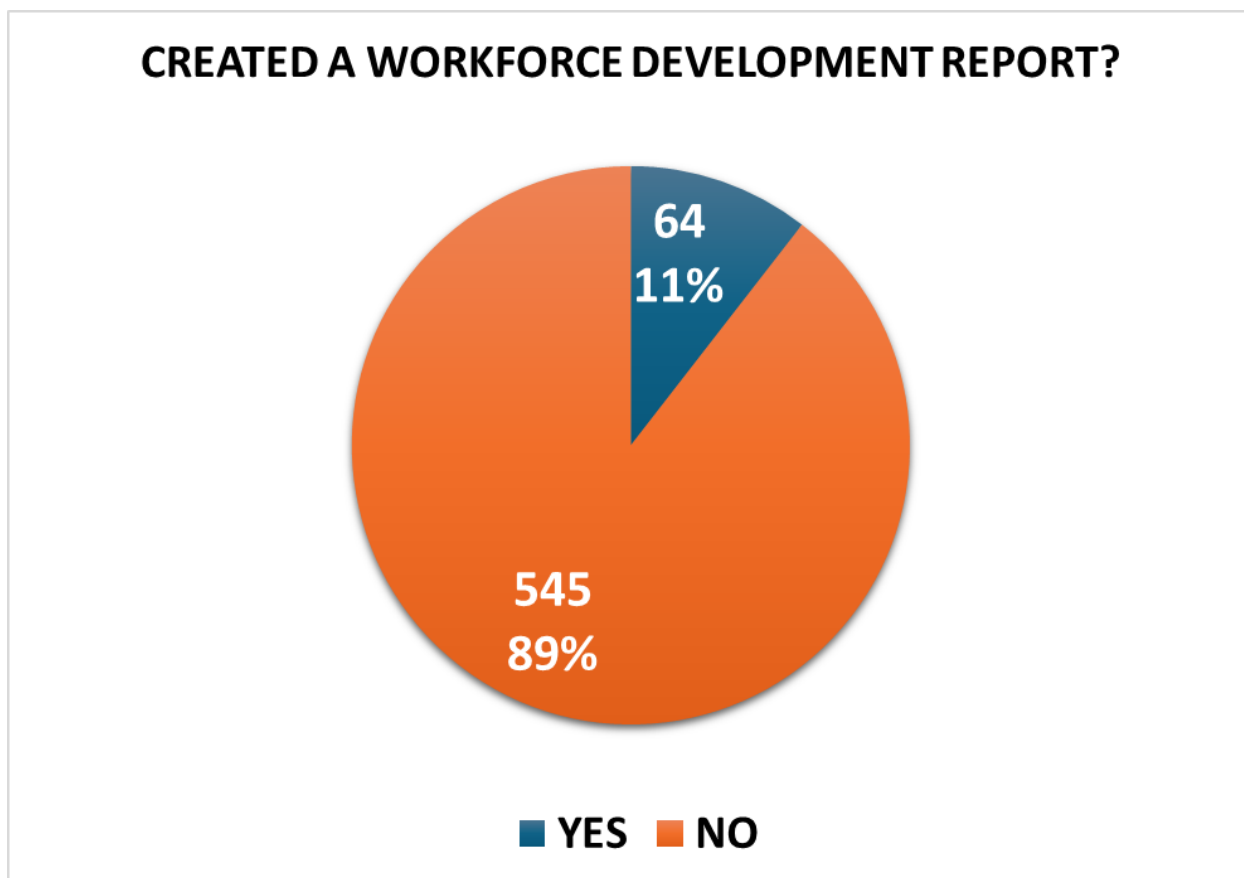
The overall results from the districts show that Lack of External Funding, Utility Support Upgrades, and Facility/Construction issues rated the highest in the most challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



Workforce Development

The survey asked to what extent a school district's workforce will be impacted by this transition. Statute requires that every school district or other student transportation service provider must create and implement a workforce development report that estimates the number of current positions that would be eliminated, substantially changed, or created because of bus fleet electrification; identifies gaps in the skills of its current bus operations and maintenance workforce; and includes a comprehensive plan to transition, train, or retrain staff, including the cost thereof. Data collected this year

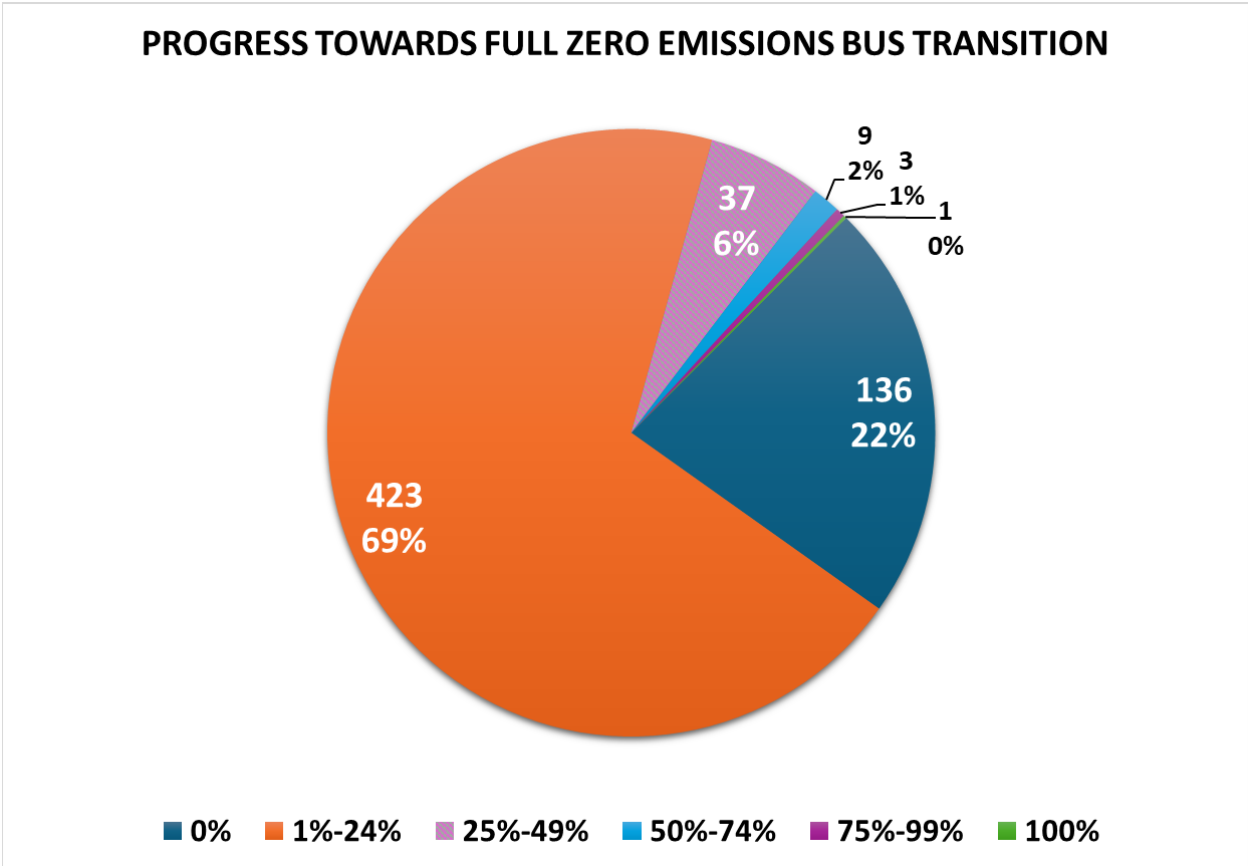
shows that sixty-four (64) districts reported that they have created a Workforce Development Report, this is about the same as last year's reporting.



District Progress towards full transition

Districts were asked to report on their status to full transition to the Zero-Emission busing. Four hundred twenty-three districts (423, 69%) reported being at 1-24% towards full transition to Zero-Emission busing, while one hundred thirty-six (136, 22%) districts reported being at zero percent (0%) towards transitioning. Thirty-seven districts (37, 6%) reported being at 25-49% towards full transition.

Three hundred sixty-eight (368, 60%) of the districts reported that they have been in contact with NYSERDA to obtain assistance with commissioning a Fleet Electrification Plan (FEP) and three hundred forty-four (344, 56%) of the districts reported that they have requested an electric utility needs assessment.



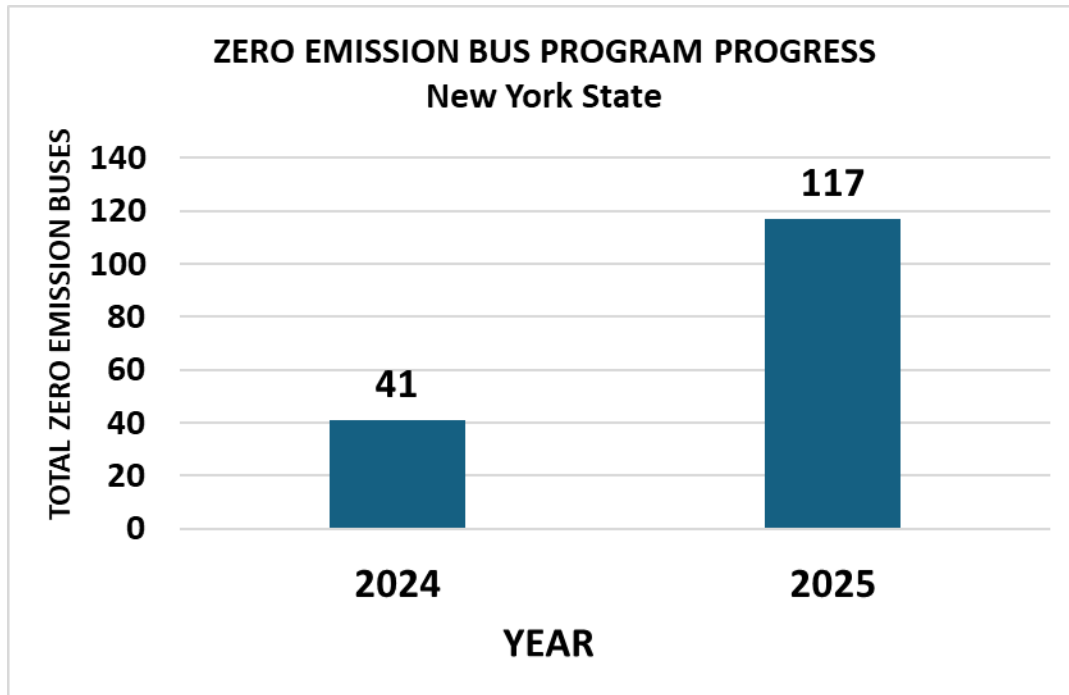
Analysis of Statewide Reporting

School districts and other student transportation providers in New York State are actively responding to the call to transition to fully zero-emission busing by 2035. While only a small minority of school districts have been able to successfully implement and operationalize plans to deploy zero-emission buses on the road today, an overwhelming majority of four hundred seventy-one (471, 77%) have started planning and developing actionable items in support of the statewide effort.

Last year, districts reported having a total of forty-one (41) zero emission buses in service. This year the districts have reported a total of one-hundred and seventeen (117) zero emission buses in service, this is a 185% increase.

NYSED will continue collaborating closely with stakeholder groups such as NYSERDA, NYSDPS, various advocacy and professional organizations, and school districts to provide support for the zero-emission transportation transition. NYSED’s

survey instrument will be reviewed annually and updated, if necessary, in response to the changing zero-emission transportation landscape across New York State.



LABOR MARKET REGION ANALYSIS

Western New York Region

Regional Summary and Response Rate

The Western New York Labor Market Region contains five (5) counties—Allegany, Cattaraugus, Chautauqua, Erie, and Niagara. Together, there are eighty (80) traditional school districts covering an area of approximately 5,088.3 square miles that were responsible for educating 162,544 school-age children in the 2024-25 school year. NYSED received responses from seventy-eight (78) school districts, bringing the overall response rate for the region to ninety-eight percent (98%), with two (2) non-responsive districts. Data from NYSERDA shows that eighteen (18, 22%) of the districts in the region have a completed Fleet Electrification Plan (FEP). And forty-three (43, 54%) are underway with their FEP process. A total of thirteen (13, 16.25%) of the districts have made no contact with NYSERDA as of this report. The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned.

WESTERN NEW YORK REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
AKRON CSD	142101	1,178	78.4	Submitted	Complete
ALDEN CSD	140101	1,474	57.35	Submitted	Underway
ALFRED-ALMOND CSD	020101	476	95.36	Submitted	No Contact
ALLEGANY-LIMESTONE CSD	040302	987	50.77	Submitted	No Contact
AMHERST CSD	140201	2,886	10.47	Submitted	Underway
ANDOVER CSD	020601	233	121.1	Submitted	Underway
BARKER CSD	401301	619	73.5	Submitted	Underway
BELFAST CSD	020801	298	65.61	Submitted	Complete
BEMUS POINT CSD	061001	547	59.15	Submitted	Underway
BOLIVAR-RICHBURG CSD	022902	603	98.87	Submitted	Complete
BROCTON CSD	062301	456	58.26	Submitted	Complete
BUFFALO CITY SD	140600	27,759	38.94	Not Submitted	Initial Contact Made

WESTERN NEW YORK REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
CANASERAGA CSD	021102	191	77.74	Submitted	No Contact
CASSADAGA VALLEY CSD	060401	745	141.3	Submitted	Underway
CATTARAUGUS-LITTLE VALLEY CSD	042302	765	181.7	Submitted	Underway
CHAUTAUQUA LAKE CSD	060503	657	109.2	Submitted	Underway
CHEEKTOWAGA CSD	140701	2,234	10.03	Submitted	Initial Contact Made
CHEEKTOWAGA-MARYVALE UFSD	140702	2,140	5.41	Submitted	Underway
CHEEKTOWAGA-SLOAN UFSD	140709	1,204	2.97	Submitted	Underway
CLARENCE CSD	140801	4,081	55.23	Submitted	Underway
CLEVELAND HILL UFSD	140703	1,318	2.25	Submitted	Underway
CLYMER CSD	060701	317	77.85	Submitted	Underway
CUBA-RUSHFORD CSD	022302	683	157	Submitted	Underway
DEPEW UFSD	140707	1,794	5.26	Submitted	Underway
DUNKIRK CITY SD	060800	1,858	16.51	Submitted	Underway
EAST AURORA UFSD	140301	1,668	30.99	Submitted	Initial Contact Made
EDEN CSD	141201	1,211	67.16	Submitted	Underway
ELLICOTTVILLE CSD	040901	487	114.8	Submitted	No Contact
EVANS-BRANT CSD (LAKE SHORE)	141401	2,010	53.27	Submitted	Complete
FALCONER CSD	061101	1,037	70.62	Submitted	Underway
FILLMORE CSD	022001	540	106.9	Not Submitted	Complete
FORESTVILLE CSD	061503	378	77.61	Submitted	Underway
FRANKLINVILLE CSD	041101	573	125.7	Submitted	Underway
FREDONIA CSD	062201	1,428	36.84	Submitted	No Contact
FREWSBURG CSD	060301	696	58.26	Submitted	No Contact
FRIENDSHIP CSD	021601	241	41.66	Submitted	Underway
FRONTIER CSD	141604	4,364	24.23	Submitted	Underway
GENESEE VALLEY CSD	020702	522	123.2	Submitted	No Contact
GOWANDA CSD	042801	1,019	76.11	Submitted	Complete
GRAND ISLAND CSD	141501	2,777	28.26	Submitted	Complete
HAMBURG CSD	141601	3,180	25.71	Submitted	No Contact
HINSDALE CSD	041401	335	53.53	Submitted	Underway

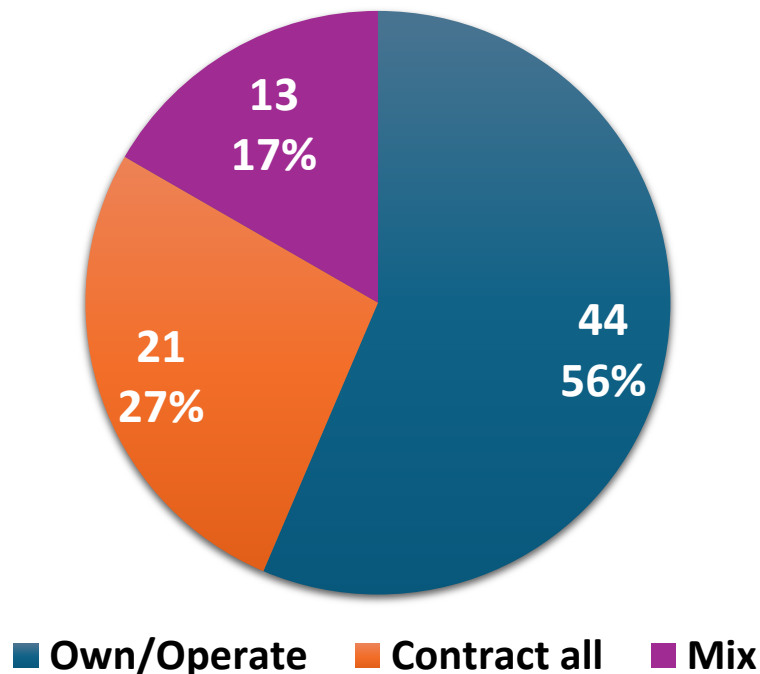
WESTERN NEW YORK REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
HOLLAND CSD	141701	697	73.31	Submitted	Complete
IROQUOIS CSD	141301	1,990	79.61	Submitted	Initial Contact Made
JAMESTOWN CITY SD	061700	4,146	18.38	Submitted	Complete
KENMORE-TONAWANDA UFSD	142601	6,302	16.75	Submitted	Complete
LACKAWANNA CITY SD	141800	2,006	5.04	Submitted	Initial Contact Made
LANCASTER CSD	141901	5,321	33.18	Submitted	Complete
LEWISTON-PORTER CSD	400301	1,909	52.92	Submitted	No Contact
LOCKPORT CITY SD	400400	4,064	31.31	Submitted	No Contact
NEWFANE CSD	400601	1,223	38.12	Submitted	Underway
NIAGARA FALLS CITY SD	400800	6,112	17.19	Submitted	No Contact
NIAGARA-WHEATFIELD CSD	400701	3,078	50.35	Submitted	Underway
NORTH COLLINS CSD	142201	520	57.45	Submitted	Underway
NORTH TONAWANDA CITY SD	400900	3,126	10.37	Submitted	Underway
OLEAN CITY SD	042400	1,772	21.69	Submitted	Underway
ORCHARD PARK CSD	142301	4,610	48.87	Submitted	Underway
PANAMA CSD	061601	382	61.84	Submitted	Underway
PINE VALLEY CSD (SOUTH DAYTON)	060601	476	118.6	Submitted	Underway
PORTVILLE CSD	042901	939	66.21	Submitted	Underway
RANDOLPH CSD	043001	761	261.8	Submitted	Complete
RIPLEY CSD	062401	127	29.49	Submitted	No Contact
ROYALTON-HARTLAND CSD	401201	1,058	81.26	Submitted	Complete
SALAMANCA CITY SD	043200	1,263	66.97	Submitted	Underway
SCIO CSD	022401	253	81.11	Submitted	Complete
SHERMAN CSD	062601	390	98.98	Submitted	Underway
SILVER CREEK CSD	061501	881	35.81	Submitted	Underway
SOUTHWESTERN CSD AT JAMESTOWN	060201	1,199	46.68	Submitted	Underway
SPRINGVILLE-GRIFFITH INST CSD	141101	1,526	146.9	Submitted	Underway
STARPOINT CSD	401001	2,870	73.78	Submitted	Underway
SWEET HOME CSD	140207	3,632	12.3	Submitted	Complete

WESTERN NEW YORK REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
TONAWANDA CITY SD	142500	1,646	4.24	Submitted	Underway
WELLSVILLE CSD	022601	1,087	107.4	Submitted	Underway
WEST SENECA CSD	142801	5,800	20.67	Submitted	Complete
WEST VALLEY CSD	040204	181	53.34	Submitted	Underway
WESTFIELD CSD	062901	592	41.93	Submitted	Complete
WHITESVILLE CSD	022101	112	47.59	Submitted	Applied
WILLIAMSVILLE CSD	140203	9,518	36.51	Submitted	Underway
WILSON CSD	401501	952	65.25	Submitted	Underway
YORKSHIRE-PIONEER CSD	043501	2,054	210.2	Submitted	No Contact

Transportation Means

More than half of the school districts in the region own and operate buses. Forty-four (44, 56%) districts currently own and operate all school buses serving districts' needs; twenty-one (21, 27%) districts indicate that all transportation services are contracted out, and thirteen (13, 17%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.

TRANSPORTATION MEANS Western New York Region



Bus Fleets

Fifty-seven (57) school districts in the Western New York Region provided NYSED with information on their current bus fleet and anticipated future needs. Twenty-seven (27, 47%) districts maintain between 1 and 20 buses; fourteen (14, 25%) districts own between 21 and 40 buses; eight (8, 14%) districts own between 41 and 60 buses; and eight (8, 14%) districts have fleets of more than 60 vehicles. Of these reported fleets, fifty-one (51) school districts reported that no zero-emission buses are currently owned. Six (6) districts, however, do currently maintain some zero emission buses:

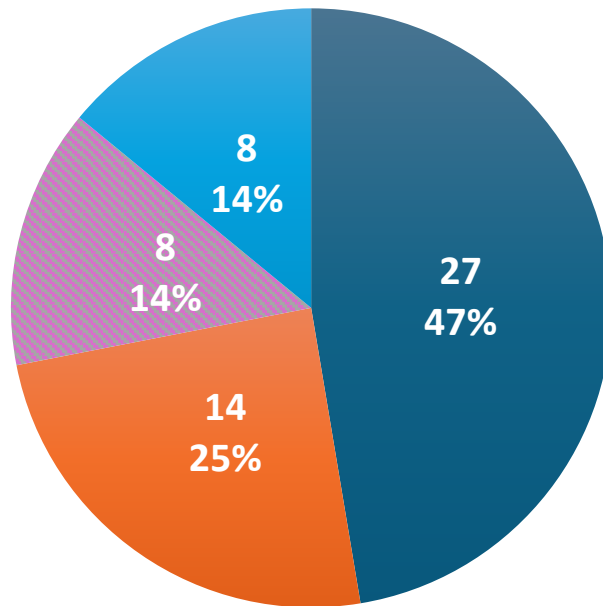
- Evans-Bryant (Lake Shore) reports owning twenty-three (23) zero emission buses in a total fleet of forty-nine (49) buses (approximately 47%). This is the district with the highest zero-emission buses in the state. In May of 2025, their voters approved a proposition for zero emission busing. The district noted that they are at 50-74% of progress towards full transition to zero

emission busing. They received \$2,532,780 in State/Local Awards and \$7,900,000 in Federal Awards. They also received \$8,166 from their utility. The district reported that twenty-five (25) chargers are currently installed and operational and has plans to increase that to forty-five (45) chargers by the 2027-28 school year. Additional information from the district noted that they are in the process of transitioning their minibuses. They commented that it has been very easy to work with their partners and the external funding sources have been “amazing”. The vehicles have performed well, and they have realized operational savings. The oldest vehicle is going into its fourth year, and they have not had any issues or performance concerns. They have made significant progress towards the zero-emission busing initiative and should be recognized.

- Cassadaga Valley CSD reported four (4, 14%) zero emission buses out of a fleet of twenty-seven buses (27).
- Sweet Home CSD reported three (3, 4%) zero emission buses out of a fleet of sixty-eight buses (68).
- Pine Valley CSD reported two (2, 9%) zero emission buses out of a fleet of twenty-three buses (23).
- Springville-Griffith CSD reported one (1, 2%) zero emission bus out of a fleet of forty-three buses (43).
- Districts in this region report a total of sixteen (16) zero emission buses on order.

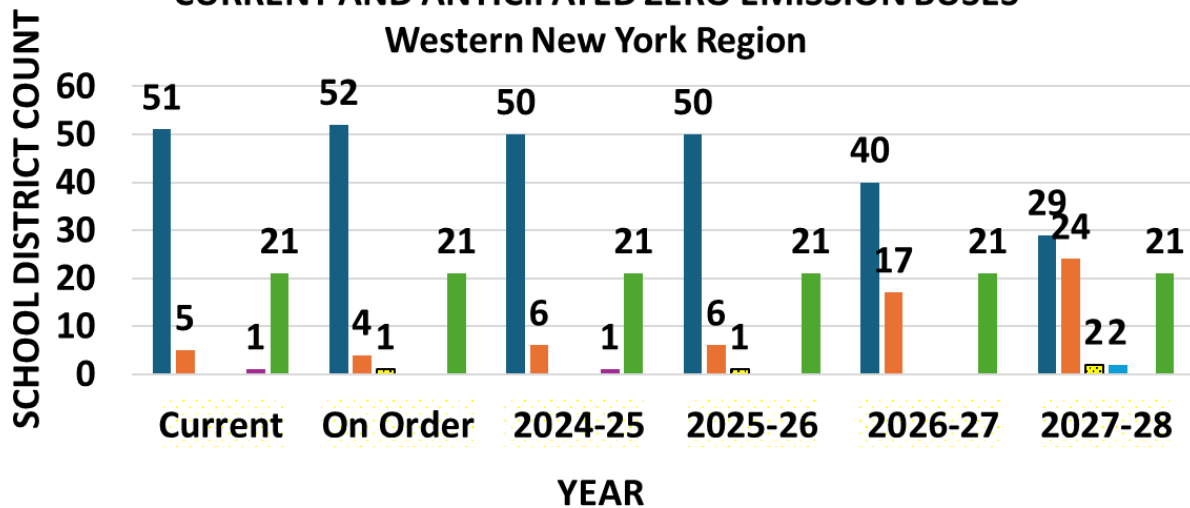
Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Western New York Region



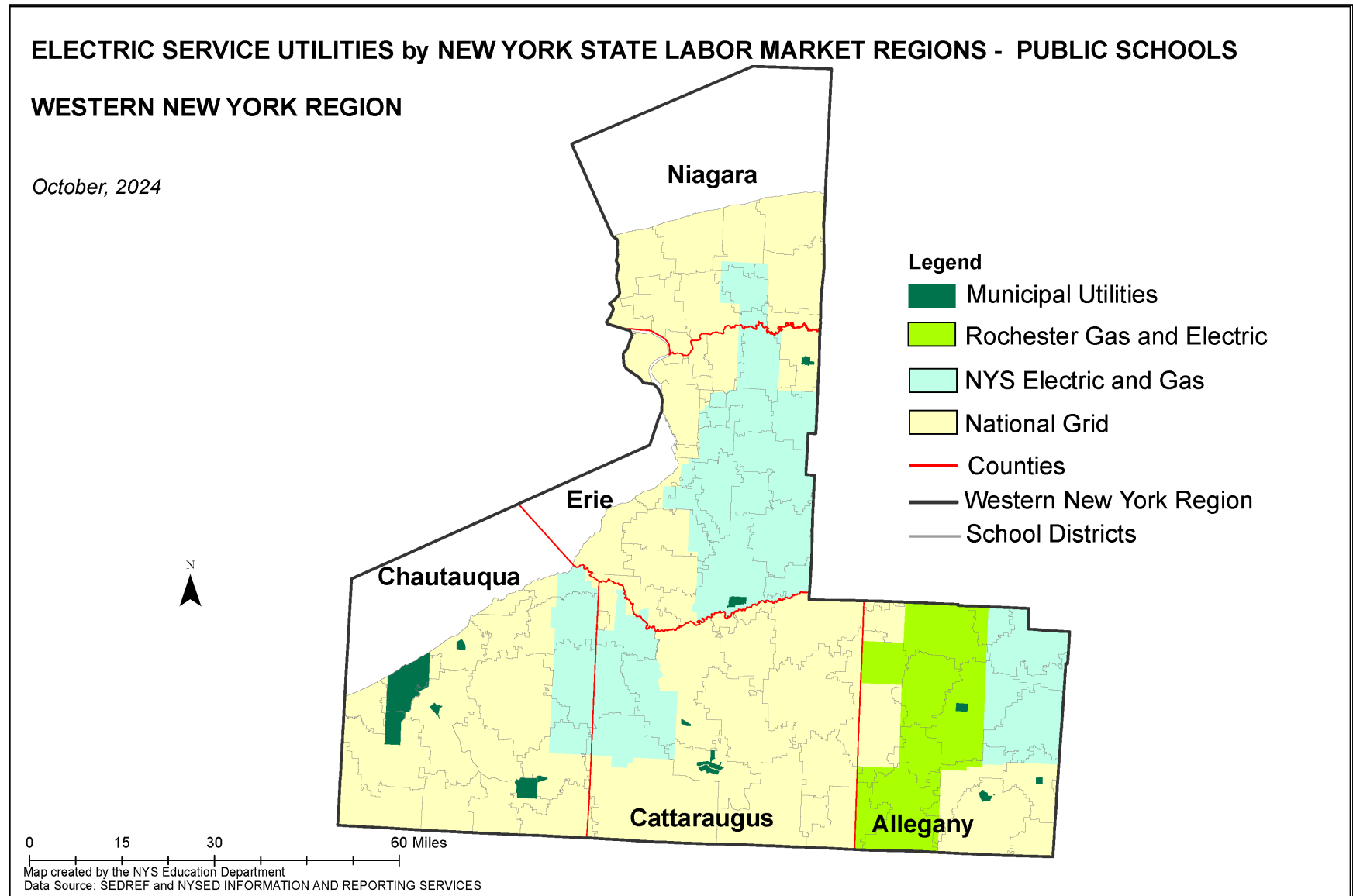
Number of Buses: 1-20 21-40 41-60 61+

CURRENT AND ANTICIPATED ZERO EMISSION BUSES Western New York Region



Number of Buses: 0 1-5 6-10 11-15 16+ TBD

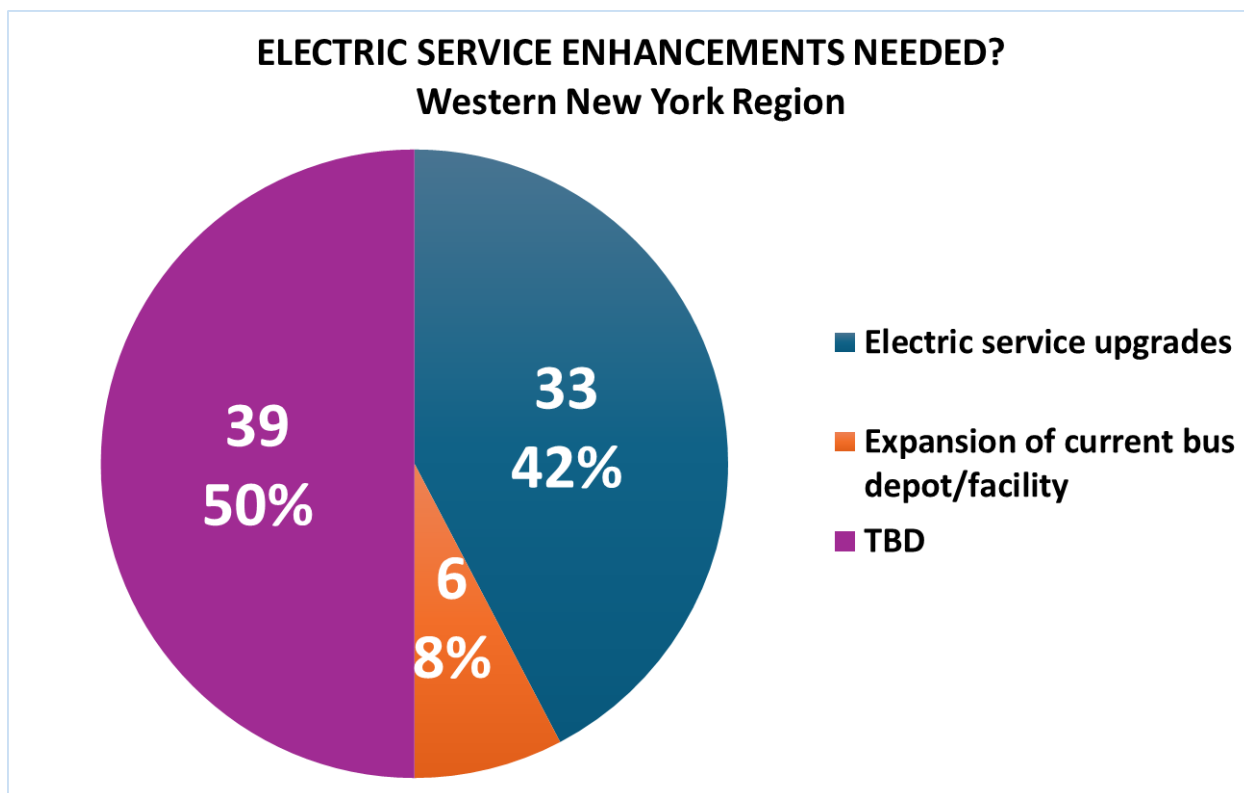
Infrastructure Assessment



Electric Service

School Districts in the Western New York Region primarily receive electricity from three (3) major utility companies—National Grid, NYSEG, and RG&E. However, as indicated, there are some small utility providers serving a similarly small number of districts.

In general, districts in the Western New York Region report that current electric service is sufficient for their needs in 2025-26. However, as shown in the graph below, thirty-three (33) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, six (6) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. A total of thirty-nine (39) districts are still assessing their needs.

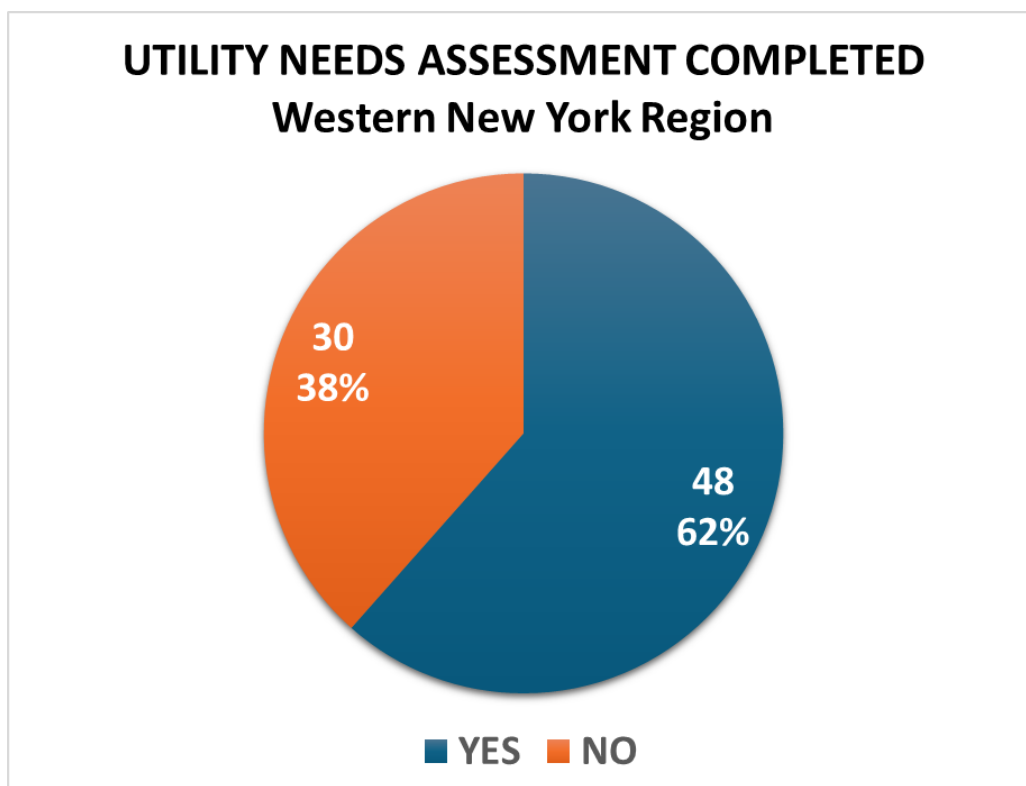


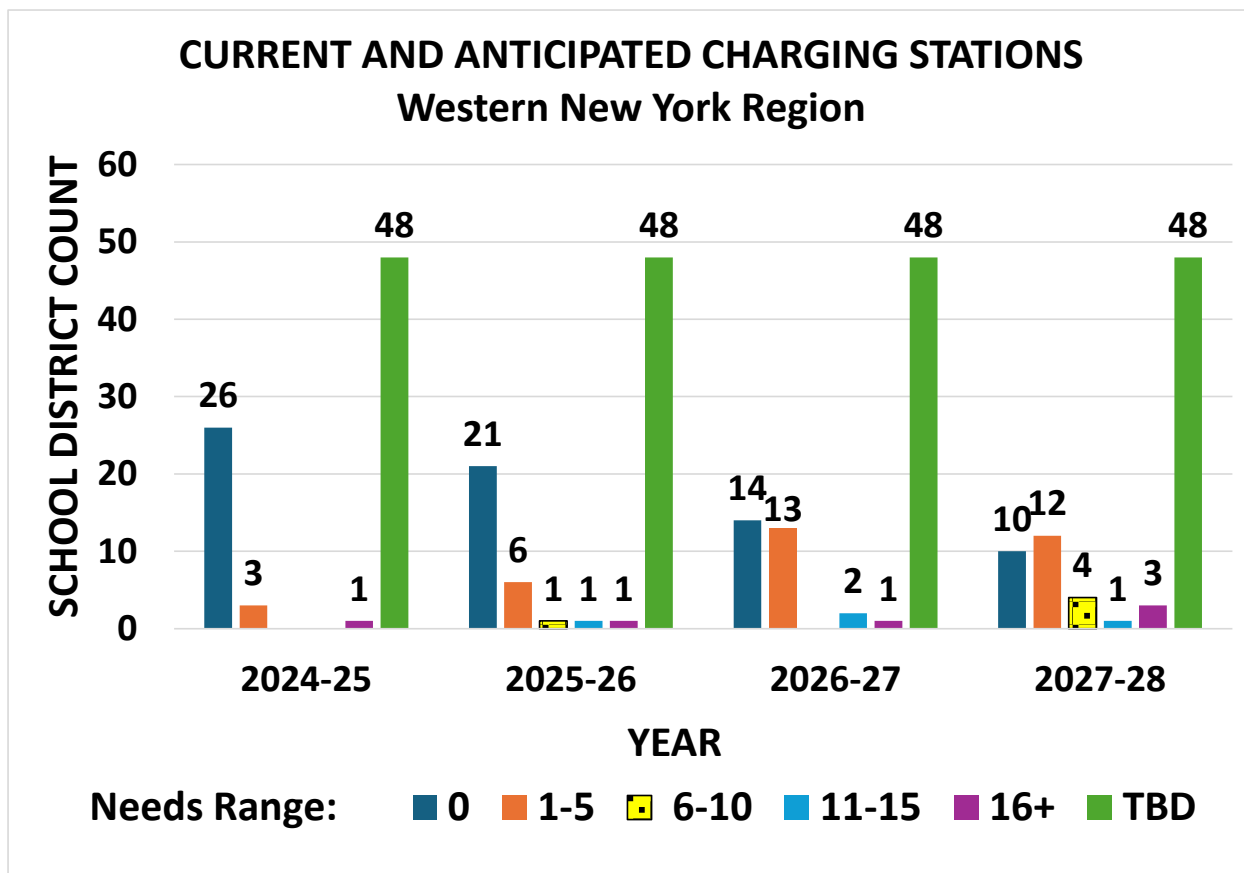
Charging Stations and Infrastructure

The Western Labor Market Region reported in 2024-25 school year a total of thirty-two (32) charging stations with Evans-Brant CSD (Lake Shore) reporting the highest count at twenty-five (25) charging stations. Districts anticipate gradually increasing charging stations with a total of fifty-seven (57) installed and operational by the end of the 2025-26 school year.

Forty-eight (48) school districts in the region report that there are no charging stations available in the district, currently. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2026-27 school year, at least thirteen (13) districts in the region anticipate that some charging stations will be installed. Data show that they anticipate a total of eighty-two (82) charging stations. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts and needing to wait until formal fleet electrification plans are completed.

Based on the data collected from seventy-eight (78) districts, a total of forty-eight (48, 62%) districts have completed their electric utility needs assessment or have a load letter from their utility provider.





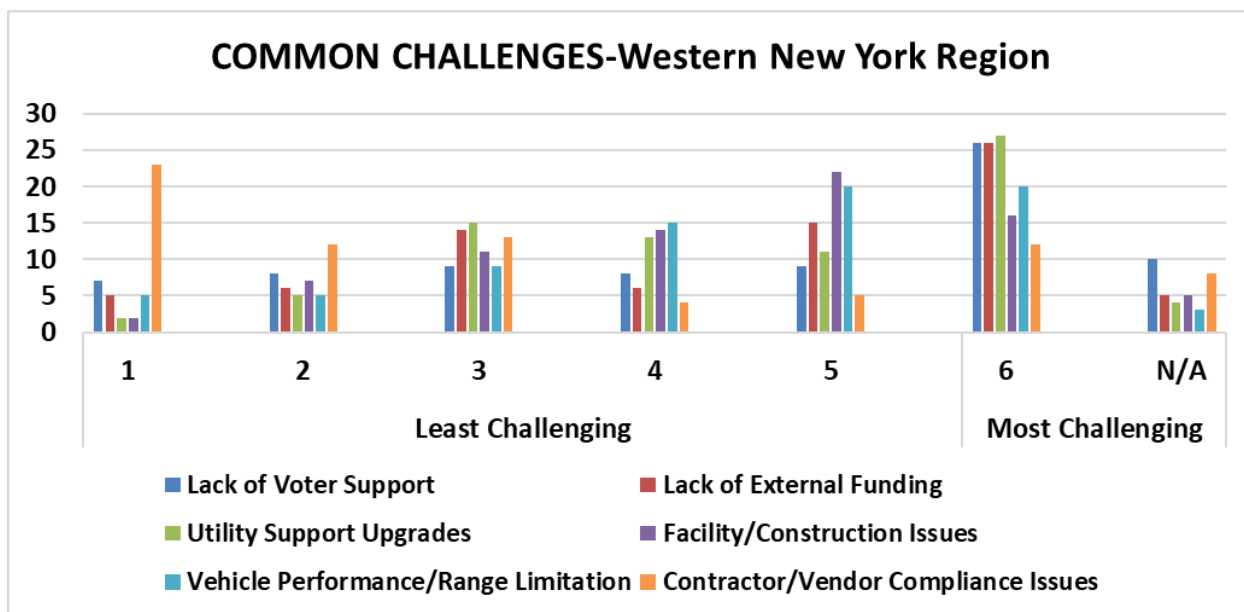
Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Western NY region show that Utility Support upgrades, Lack of Voter Support and Lack of External Funding rated the highest in the most challenging

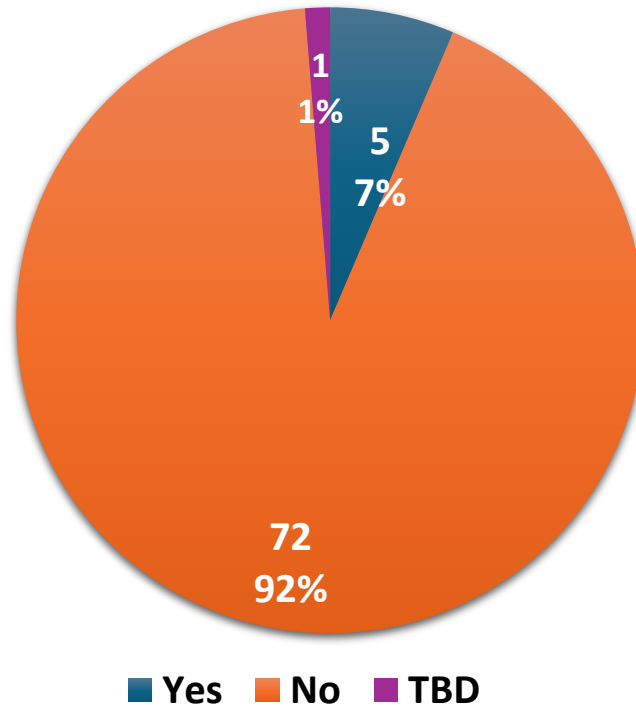
section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



Voter Proposition/Approval

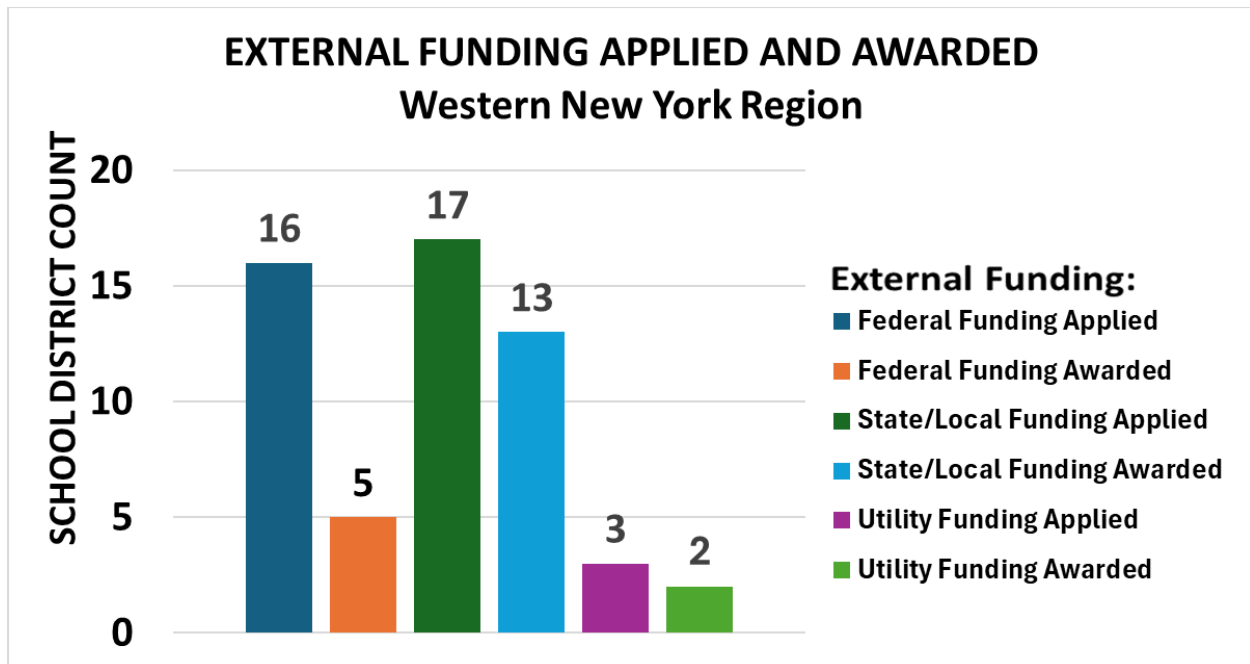
The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data shows that in the Western New York region five (5, 6%) districts have put a voter proposition before the voters, and all five (5) were approved.

VOTER PROPOSITION? Western New York Region



Funding Opportunities

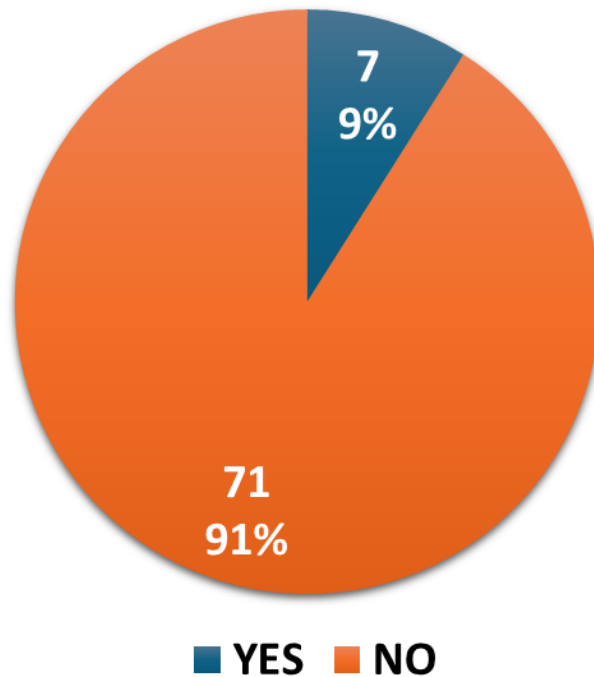
State/Local Funding opportunities were available to many districts and seventeen districts (17, 22%) applied for and received these funds with a range from a low of \$37,500. to a high of \$2,532,780. The average award was approximately \$300,000. Federal Funding opportunities have been available to the districts and sixteen districts (16, 20%) applied for and received funds with a low of \$400,000 to a high of \$7,900,000. The average Federal award was approximately \$687,368. Three (3) districts reported applying for Utility Funding and received funds with a low of \$8,166 and a high of \$300,000.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Western New York region seven districts (7, 9%) reported completing a Workforce Development Plan out of seventy-eight (78) districts.

**CREATED A WORKFORCE DEVELOPMENT REPORT?
Western New York Region**



Transition Towards Zero Emission Busing

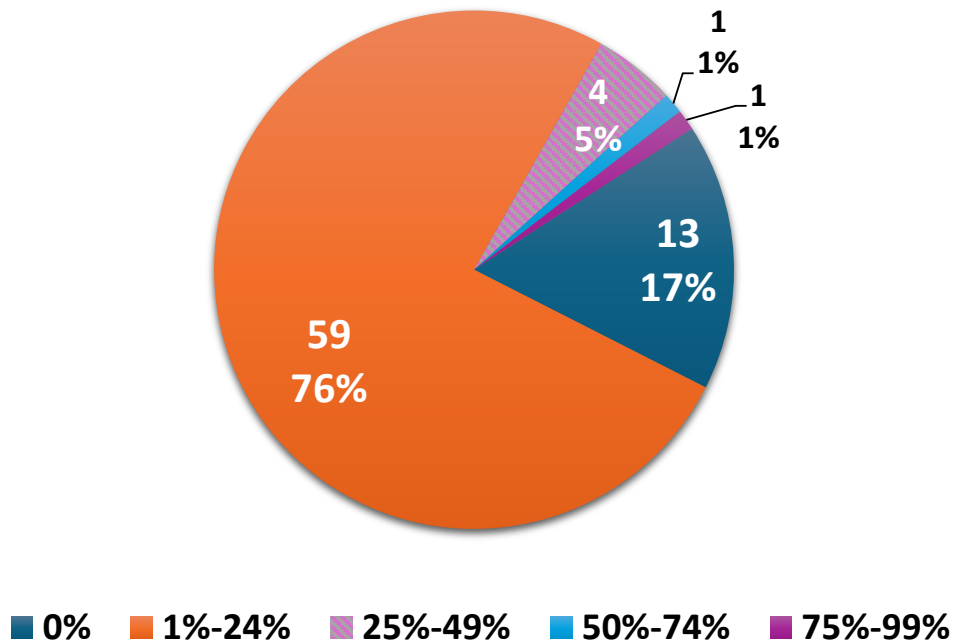
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 75-99% complete;
- One (1) district reported it is 50-74% complete;
- Four (4) districts reported they are 25-49% complete;
- Fifty-nine (59) districts reported they are 1-24% complete; and
- Thirteen (13) districts reported making no progress to date.

In total, sixty-four districts (64, 83%) have begun the transition to zero-emission busing, while fourteen districts (14, 17.9%) remain at zero percent (0%).

**PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION
Western New York Region**



District Comments-Summary

Out of eighty (80) school districts in Western NY, seventy-eight (78) submitted the survey and thirty-five (35, 45%) provided additional comments. The most common concern or obstacle was cost, upfront costs with insufficient state and federal funding, and long-term operational and maintenance expense. Voter opposition to the mandate is strong in this region due to these financial concerns, the prospect of increased taxes and utility rates for all residents was noted. Most districts report the need for significant infrastructural upgrades, both electrical and garage facilities, and storage for chargers and buses. Not all districts own their garages, some are leased with landlords unwilling/unable to upgrade the facilities, and/or residents opposed to constructing new facilities to house the buses and chargers.

Range as well as geographic and climate factors were the most common concern after cost. Large rural districts that must cover anywhere between one hundred (100) and three hundred (300) square miles stated that many of their routes could not be serviced by electric buses, which would run out of charge before completing their routes.

Mountainous terrain that produced more of a strain on the battery and extreme cold and aging roads and bridges also made reliability questionable; there was concern that students could be stranded in remote areas if the bus battery died or would not be picked up for school if busses could not operate in sub-zero temperatures. They cited feasibility studies from consultants like Wendel and Cornice Technologies to back up these claims. The most common complaint about range aside from regular runs was the inability of ZEBs to do distant field trips and athletic events. Even if busses had enough charge to get students to these distant destinations, there was no guarantee they could get them back: would there be available chargers in distant locals and/or enough time to re-charge the busses to bring students home when the events of the day were finished? Also, the question of what to do in cases of emergency and early dismissal from school (half-days); buses would not be re-charged from their morning runs and available to take students back home. Just a few districts mentioned workforce impacts: the costs of re-training or difficulty in hiring mechanics and bus drivers overall.

Finger Lakes Region

Regional Summary and Response Rate

The Finger Lakes Labor Market Region contains nine (9) counties—Orleans, Monroe, Wayne, Genesee, Wyoming, Livingston, Ontario, Yates, and Seneca. Together, there are seventy (70) traditional school districts covering an area of approximately 4,464.5 square miles that were responsible for educating 142,389 school-age children in the 2024-25 school year. NYSED received responses from sixty-eight (68) school districts, bringing the overall response rate for the region to ninety-seven percent (97%), with two (2) non-responsive districts. This is an increase of four (4) districts from last year. Data from NYSERDA shows that sixteen (16, 23%) of the districts in the region have a completed Fleet Electrification Plan (FEP), and forty-two (42, 60%) are underway with their FEP process. Additionally, two districts (2, 3%) have made initial contact with NYSERDA. Currently ten (10, 14%) of the districts have made no contact with NYSERDA as of this report. The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

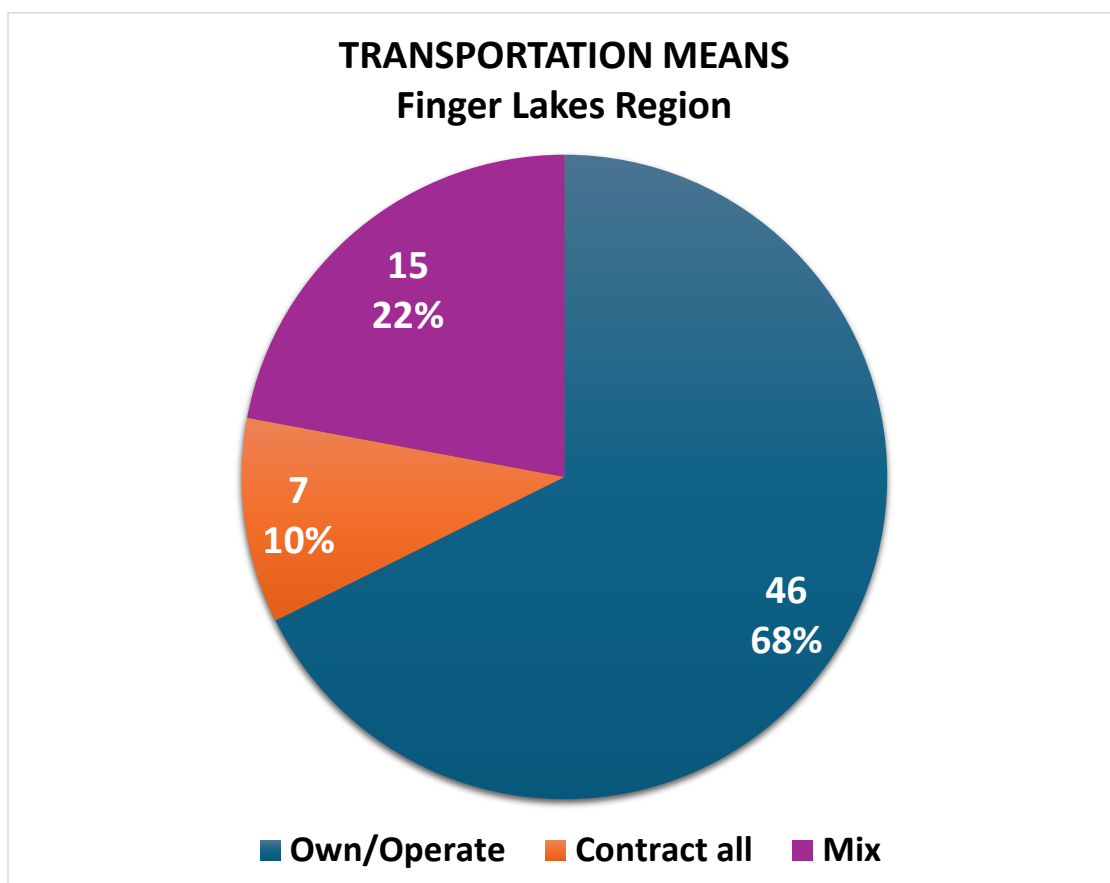
FINGER LAKES LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ALBION CSD	450101	1,649	129.3	Submitted	Underway
ALEXANDER CSD	180202	693	79.2	Submitted	Underway
ATTICA CSD	670201	1,088	148.3	Submitted	Underway
AVON CSD	240101	872	50.09	Not Submitted	Complete
BATAVIA CITY SD	180300	2,075	25.65	Submitted	Underway
BRIGHTON CSD	260101	3,409	3.07	Submitted	No Contact
BROCKPORT CSD	261801	3,152	69.6	Submitted	Underway
BYRON-BERGEN CSD	180701	857	79.18	Submitted	Complete
CALEDONIA-MUMFORD CSD	240201	766	49.18	Submitted	Complete
CANANDAIGUA CITY SD	430300	3,054	87.98	Submitted	No Contact
CHURCHVILLE-CHILI CSD	261501	3,677	53.47	Submitted	Underway
CLYDE-SAVANNAH CSD	650301	667	73.94	Submitted	Complete

FINGER LAKES LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
DALTON-NUNDA CSD (KESHEQUA)	241101	504	118.2	Not Submitted	Complete
DANSVILLE CSD	241001	1,180	125.8	Submitted	Underway
DUNDEE CSD	680801	561	91.84	Submitted	Underway
EAST BLOOMFIELD CSD	430501	711	60.61	Submitted	Underway
EAST IRONDEQUOIT CSD	260801	2,675	10.39	Submitted	Initial Contact Made
EAST ROCHESTER UFSD	261313	889	2.97	Submitted	Initial Contact Made
ELBA CSD	180901	393	41.09	Submitted	Underway
FAIRPORT CSD	261301	5,093	24.8	Submitted	No Contact
GANANDA CSD	650902	766	6	Submitted	Complete
GATES CHILI CSD	260401	3,598	21.04	Submitted	No Contact
GENESEO CSD	240401	873	72.82	Submitted	Underway
GENEVA CITY SD	430700	1,895	42.46	Submitted	Underway
GORHAM-MIDDLESEX CSD (MARCUS WHITMAN)	430901	994	143.8	Submitted	Underway
GREECE CSD	260501	9,749	29.93	Submitted	Underway
HILTON CSD	261101	4,016	67.05	Submitted	No Contact
HOLLEY CSD	450704	889	53.04	Submitted	Underway
HONEOYE CSD	431401	525	86.05	Submitted	Underway
HONEOYE FALLS-LIMA CSD	260901	2,044	74.58	Submitted	Underway
KENDALL CSD	450607	657	57.13	Submitted	Underway
LE ROY CSD	181001	1,063	45.05	Submitted	Underway
LETCHWORTH CSD	670401	820	120.9	Submitted	Complete
LIVONIA CSD	240801	1,271	82.78	Submitted	Complete
LYNDONVILLE CSD	451001	555	65.59	Submitted	Underway
LYONS CSD	650501	863	48.14	Submitted	Underway
MANCHESTER-SHORTSVILLE CSD (RED JACK)	431101	683	28.41	Submitted	Underway
MARION CSD	650701	563	32.6	Submitted	No Contact
MEDINA CSD	450801	1,269	81.41	Submitted	Complete
MT MORRIS CSD	240901	515	37.84	Submitted	Underway
NAPLES CSD	431201	553	107.1	Submitted	Underway

FINGER LAKES LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
NEWARK CSD	650101	1,732	21.5	Submitted	No Contact
NORTH ROSE-WOLCOTT CSD	651501	985	123.9	Submitted	Underway
OAKFIELD-ALABAMA CSD	181101	649	71.23	Submitted	Complete
PALMYRA-MACEDON CSD	650901	1,571	52.87	Submitted	Underway
PAVILION CSD	181201	585	72.63	Submitted	Complete
PEMBROKE CSD	181302	875	69.11	Submitted	Complete
PENFIELD CSD	261201	4,651	28.81	Submitted	No Contact
PENN YAN CSD	680601	1,231	165.7	Submitted	Underway
PERRY CSD	671201	698	65.61	Submitted	Complete
PHELPS-CLIFTON SPRINGS CSD	431301	1,438	86.01	Submitted	Underway
PITTSFORD CSD	261401	5,516	30.38	Submitted	Underway
RED CREEK CSD	651503	745	60.42	Submitted	Underway
ROCHESTER CITY SD	261600	19,791	41.98	Submitted	Complete
ROMULUS CSD	560603	399	87.26	Submitted	Underway
RUSH-HENRIETTA CSD	261701	5,524	60.77	Submitted	Underway
SENECA FALLS CSD	560701	1,120	56.37	Submitted	Underway
SODUS CSD	651201	959	63.98	Submitted	Underway
SOUTH SENECA CSD	560501	586	151.2	Submitted	Underway
SPENCERPORT CSD	261001	3,462	37.12	Submitted	Underway
VICTOR CSD	431701	4,086	43.25	Submitted	No Contact
WARSAW CSD	671501	741	72.63	Submitted	Underway
WATERLOO CSD	561006	1,357	83.08	Submitted	Underway
WAYNE CSD	650801	2,031	64.87	Submitted	Underway
WEBSTER CSD	261901	7,675	51.2	Submitted	Underway
WEST IRONDEQUOIT CSD	260803	3,561	6.91	Submitted	No Contact
WHEATLAND-CHILI CSD	262001	637	23.19	Submitted	Complete
WILLIAMSON CSD	651402	904	31.27	Submitted	Underway
WYOMING CSD	671002	136	44.99	Submitted	Underway
YORK CSD	241701	618	67.67	Submitted	Complete

Transportation Means

Nearly all school districts in the Finger Lakes Region own and operate buses. Forty-six districts (46, 68%) currently own and operate all school buses serving districts' needs; seven districts (7, 10%) indicate that all transportation services are contracted out, and fifteen (15, 22%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.



Bus Fleets

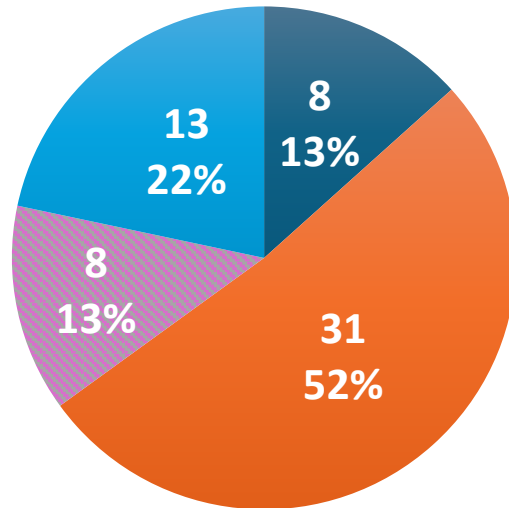
Sixty (60) school districts in the Finger Lakes Region provided NYSED with information on their current bus fleet and anticipated future needs. Eight (8) districts maintain between 1 and 20 buses; thirty-one (31) districts own between 21 and 40 buses; eight (8) districts own between 41 and 60 buses; and thirteen (13) districts have fleets in

excess of 60 vehicles. Of these reported fleets, fifty-five (55) school districts reported that no zero emission buses are currently owned. Six (6) districts, however, do currently maintain some zero emission buses:

- Gates-Chili CSD currently operates fifteen (15, 17%) zero emission bus out of a fleet of eighty-eight (88) buses.
- Penfield CSD currently operates two (2, 2.5%) zero emission buses out of a fleet of eighty buses (80) with six (6) zero emission buses on order.
- Naples CSD currently operates two (2, 9%) zero emission buses out of a fleet of twenty-three (23) buses.
- Le Roy CSD currently operates one (1, 3%) zero emission bus out of a fleet of thirty-four (34) buses with one (1) zero emission bus on order.
- Livonia CSD currently operates one (1, 3%) zero emission bus out of a fleet of thirty-eight (38) buses.
- York CSD currently operates one (1, 4%) zero emission bus out of a fleet of twenty-three buses (23).
- Districts in this region report a total of twelve (12) zero emission buses on order.

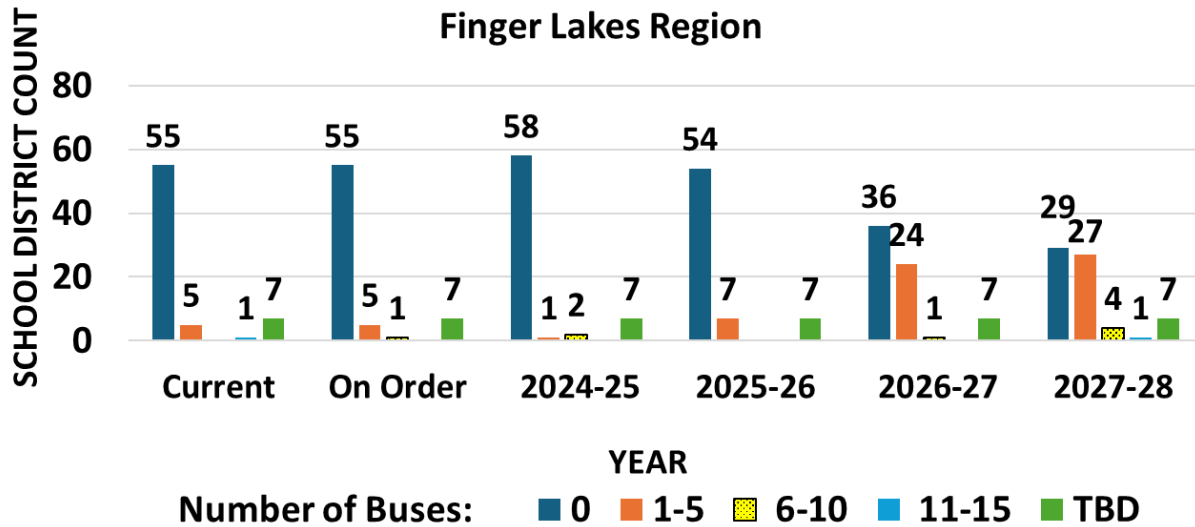
Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Finger Lakes Region



Number of Buses: ■ 1-20 ■ 21-40 ■ 41-60 ■ 61+

CURRENT AND ANTICIPATED ZERO EMISSION BUSES Finger Lakes Region



Number of Buses: ■ 0 ■ 1-5 ■ 6-10 ■ 11-15 ■ TBD

Infrastructure Assessment

ELECTRIC SERVICE UTILITIES by NEW YORK STATE LABOR MARKET REGIONS - PUBLIC SCHOOLS

FINGER LAKES REGION

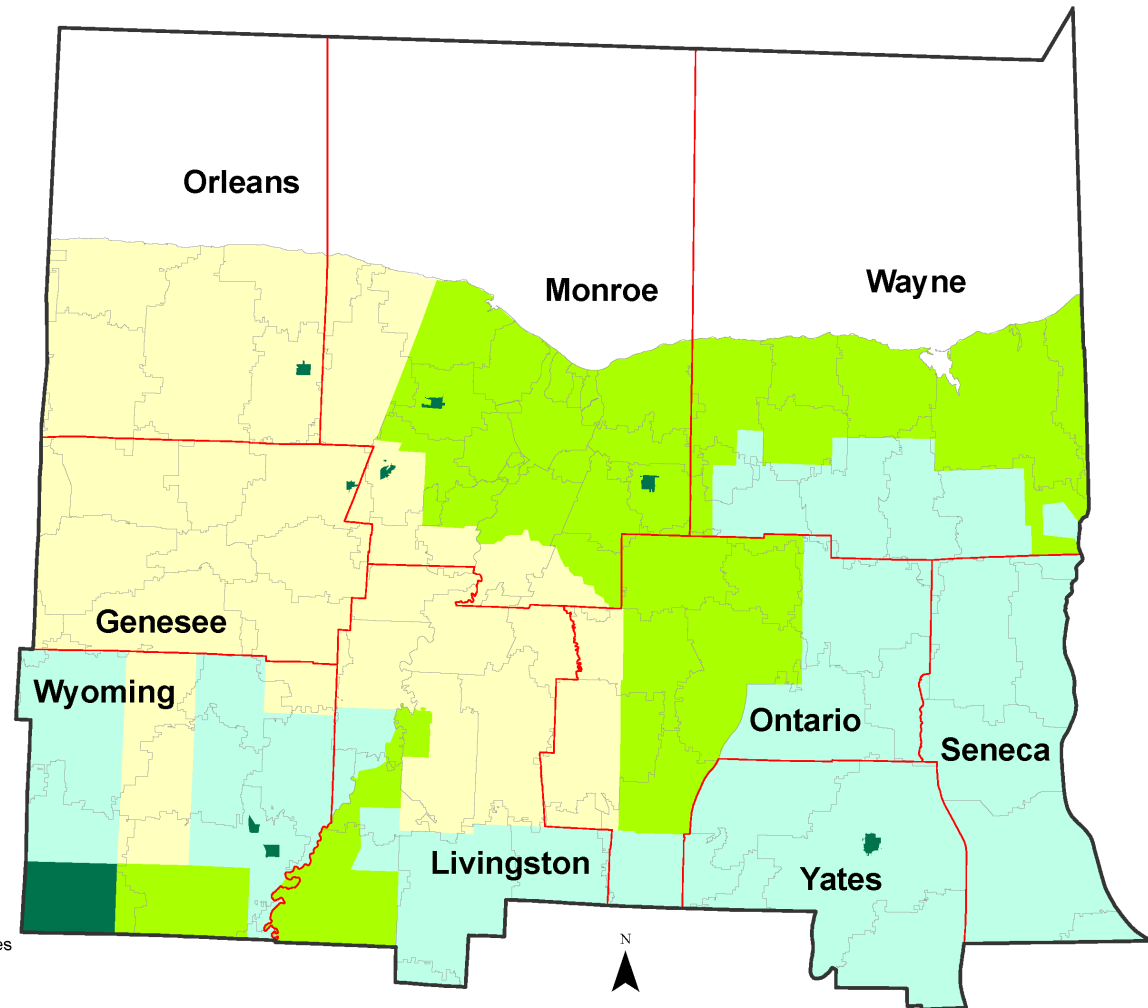
October, 2024

Legend

-  Municipal Utilities
-  Rochester Gas and Electric
-  NYS Electric and Gas
-  National Grid
-  Counties
-  Finger Lakes Region
-  School Districts

0 15 30 60 Miles

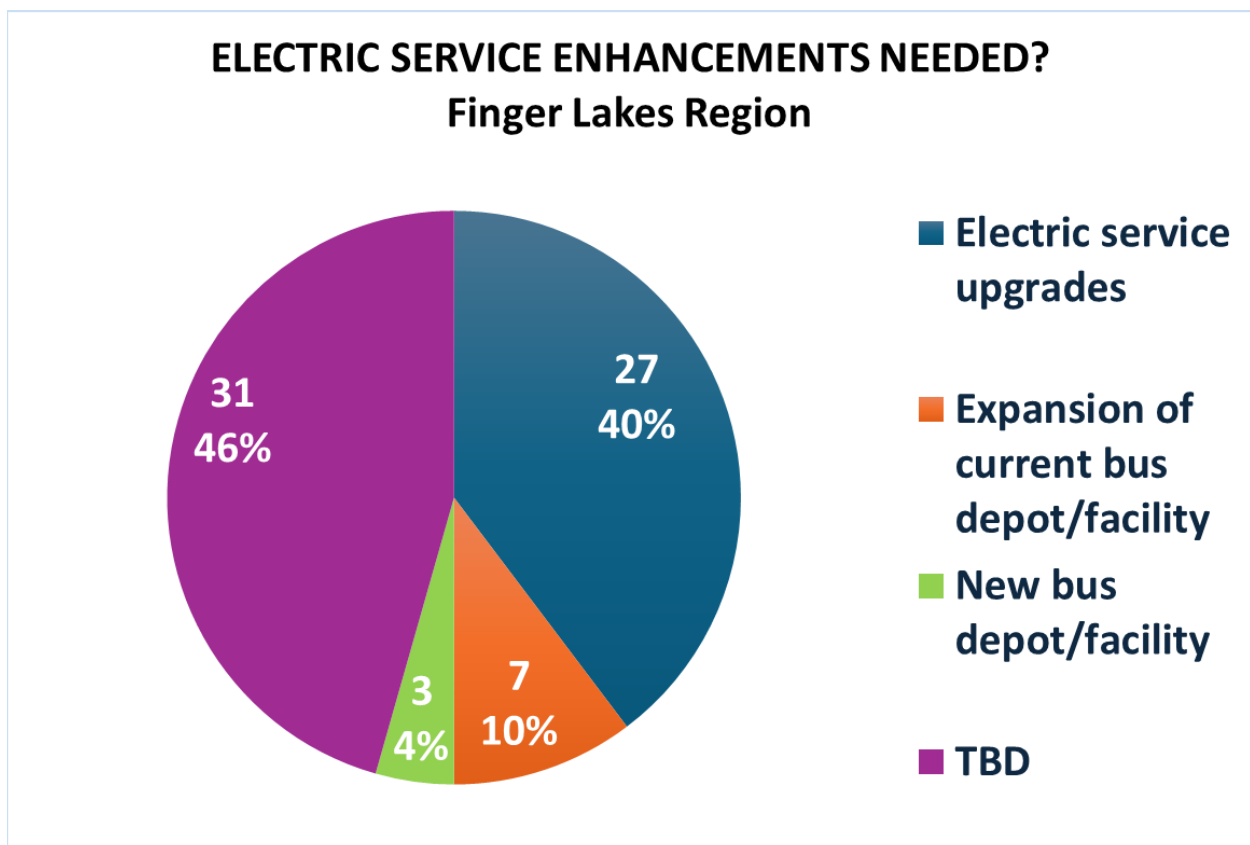
Map created by the NYS Education Department
Data Source: SEDREF and NYSED INFORMATION AND REPORTING SERVICES



Electric Service

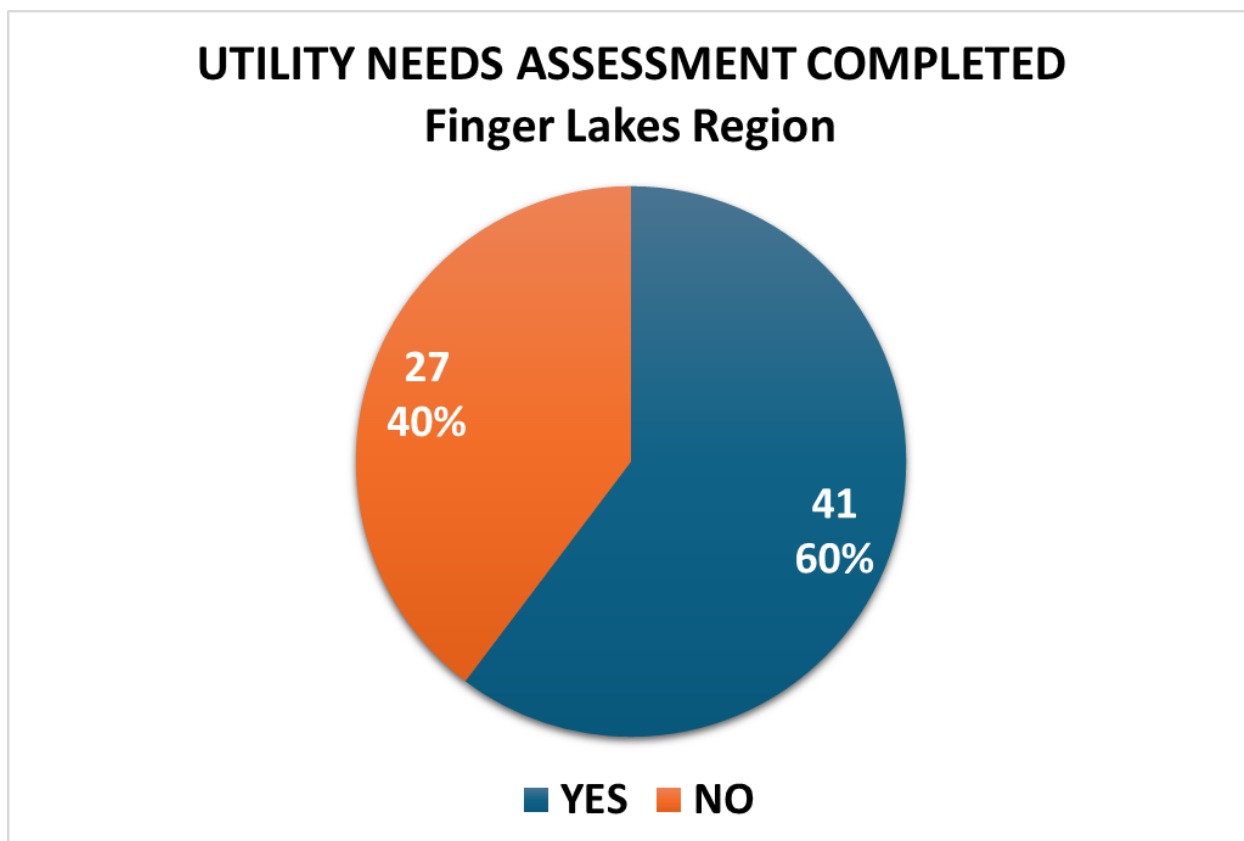
School Districts in the Finger Lakes Region primarily receive electricity from three (3) major utility companies—National Grid, NYSEG, and RG&E. However, also as indicated, there are some small utility providers serving a similarly small number of districts.

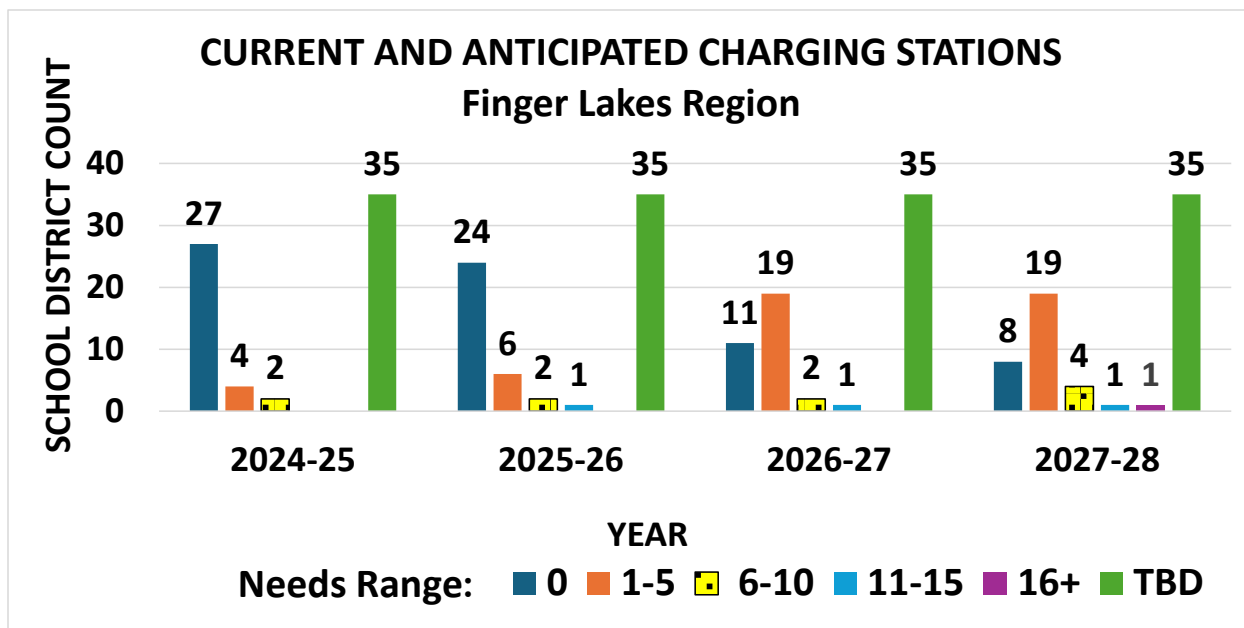
In general, districts in the Finger Lakes Region report that current electric service is sufficient for their needs in 2024-25. However, as evidenced in the graph below, twenty-seven (27) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, seven (7) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. A total of thirty-one (31) districts are still assessing their needs and three (3) districts reported needing a new bus depot/facility.



Charging Stations and Infrastructure

Twenty-seven (27) school districts in the region report that there are no charging stations available in the district, currently. However, four (4) districts report that 1-5 chargers are currently installed and operating. In addition, two (2) districts report having 6-10 chargers installed. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least thirty-three (33) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts and needing to wait until formal fleet electrification plans are completed. Based on the data collected from sixty-eight (68) districts, forty-one (41, 60%) districts have completed their electric utility needs assessment or have a load letter from their utility provider.



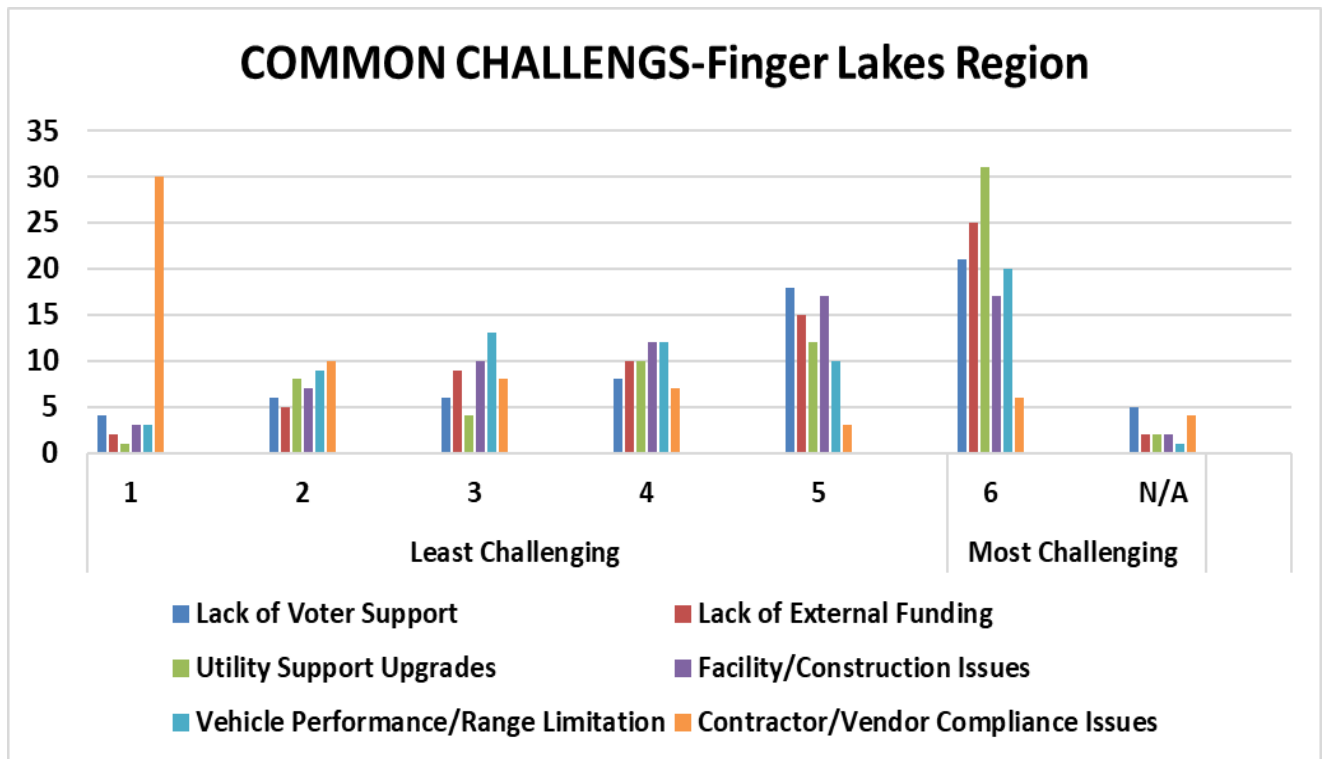


Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

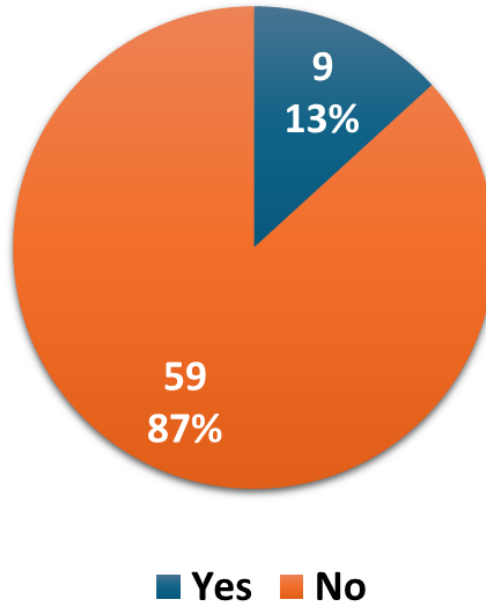
The results from the Finger Lakes region show that Utility Support upgrades, Lack of External Funding and Lack of Voter Support were rated the highest in the most challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



Voter Proposition/Approval

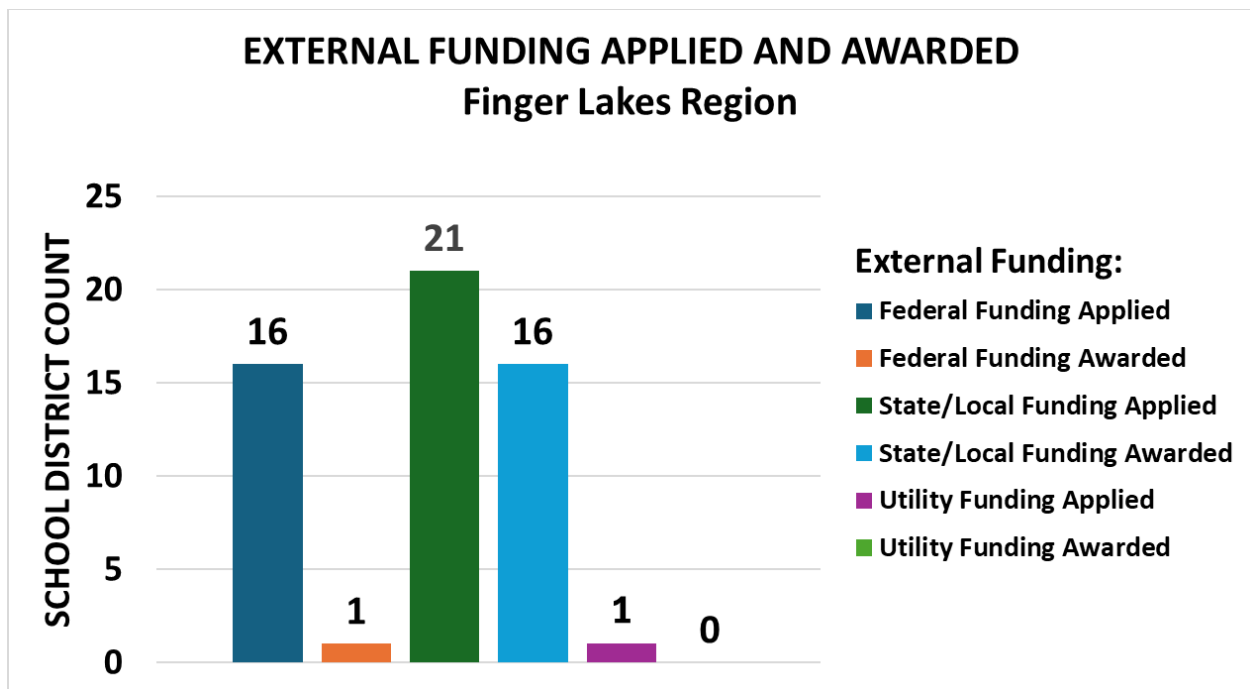
The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data show that in the Finger Lakes region nine (9, 13%) districts have put a voter proposition before the voters, and six (6) were approved by voters.

VOTER PROPOSITION? Finger Lakes Region



Funding Opportunities

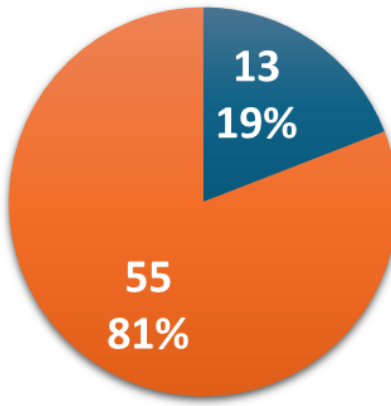
State/Local Funding opportunities were available to many districts, and twenty-one (21, 31%) districts applied for and received these funds with a range from a low of \$20,128 to a high of \$2,580,500. The average award was approximately \$272,682. Federal Funding opportunities have been available to the districts and sixteen (16, 24%) districts reported they applied for funds with only one (1) district reporting they were awarded \$400,000 in Federal funding. Only one (1) district reported applying for Utility Funding and did not receive any funding.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Finger Lakes region thirteen districts (13, 19%) reported completing a Workforce Development Plan out of sixty-eight (68) responsive districts.

CREATED A WORKFORCE DEVELOPMENT REPORT? Finger Lakes Region



■ YES ■ NO

Transition Towards Zero Emission Busing

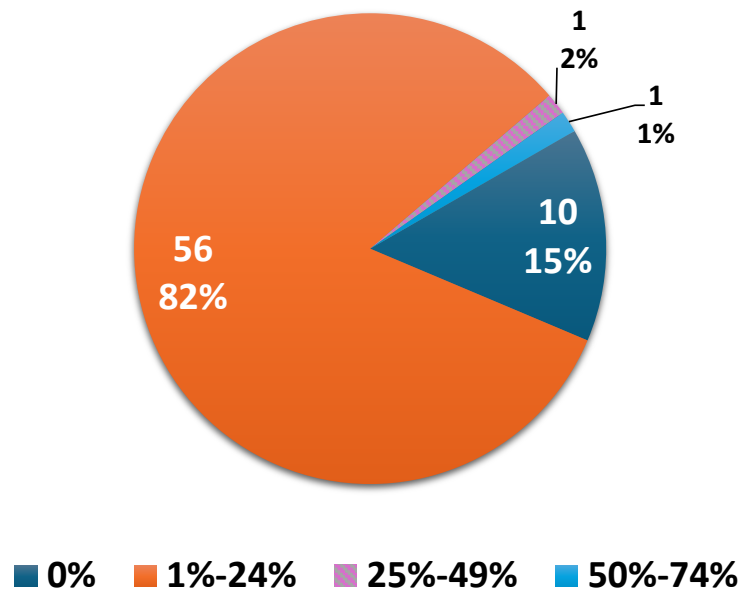
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 50-74% complete;
- One (1) district reported it is 25-49% complete;
- Fifty-six (56) districts reported they are 1-24% complete; and
- Ten (10) districts reported they have not yet made any progress to date.

In total, fifty-eight districts (58, 85%) have begun the transition to zero-emission busing, while ten districts (10, 15%) remain at 0%.

PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION Finger Lakes Region



District Comments-Summary

The Finger Lakes Labor Market Region hosts seventy (70) school districts; out of these sixty-eight (68) completed the survey and fifty (50) left comments. Costs overall, in the way of tax increases and the need of most districts to upgrade their facilities and electrical infrastructure posed great challenges for districts in this region. Costs included things beyond bus and charging station purchases. School electric bills and rising rates for communities with municipal energy providers were cited as causes of concern that drove voter opposition. Districts that rely heavily on private contractors worried about the rising rates of their transportation contracts; for rural districts, cost increases put significant pressure on already strained school budgets. Some feared the need to cut programs and staff to meet the burdens of upgrades; state and federal funding were deemed insufficient to meet the high costs, particularly over the long-term maintenance.

Range was also a concern of the many rural districts in this region who report that their Fleet Electrification Plans found that their routes could not be completed, and “analysis results included only the regular AM/PM bus routes, excluding the additional extra-curricular and field trip routes that operate daily.” Cold weather and rough terrain

that would hinder the operation of electric buses and pose potential risks to student safety were also among the main concerns.

Central New York Region

Regional Summary and Response Rate

The Central New York Labor Market Region contains five (5) counties—Cayuga, Onondaga, Cortland, Oswego, and Madison. Together, there are forty-nine (49) traditional school districts covering an area of approximately 3,616.5 square miles that were responsible for educating 99,051 school-age children in the 2024-25 school year. NYSED received responses from forty-eight (48) school districts, bringing the overall response rate for the region to ninety-eight percent (98%), with one (1) non-responsive district. Data from NYSERDA shows that three (3, 6%) of the districts in the region have a completed Fleet Electrification Plan (FEP). And twenty (20, 41%) are underway with their FEP process. Additionally, five (5, 10%) of the districts report having made the initial contact with NYSERDA to begin the process. Currently twenty (20, 41%) of the districts have made no contact with NYSERDA as of this report.

The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”) if commissioned:

CENTRAL NEW YORK LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ALTMAR-PARISH-WILLIAMSTOWN CSD	460102	944	168	Submitted	Underway
AUBURN CITY SD	050100	3,732	38.01	Submitted	Initial Contact Made
BALDWINVILLE CSD	420901	5,194	62.86	Submitted	No Contact
BROOKFIELD CSD	250109	182	66.86	Submitted	Underway
CANASTOTA CSD	250901	1,185	56.41	Submitted	No Contact
CATO-MERIDIAN CSD	050401	811	95.76	Submitted	Underway
CAZENOVIA CSD	250201	1,304	112.6	Submitted	Initial Contact Made
CENTRAL SQUARE CSD	460801	3,318	180.4	Submitted	Underway
CHITTENANGO CSD	251601	1,811	66.12	Submitted	No Contact
CINCINNATUS CSD	110101	436	136.9	Submitted	Underway

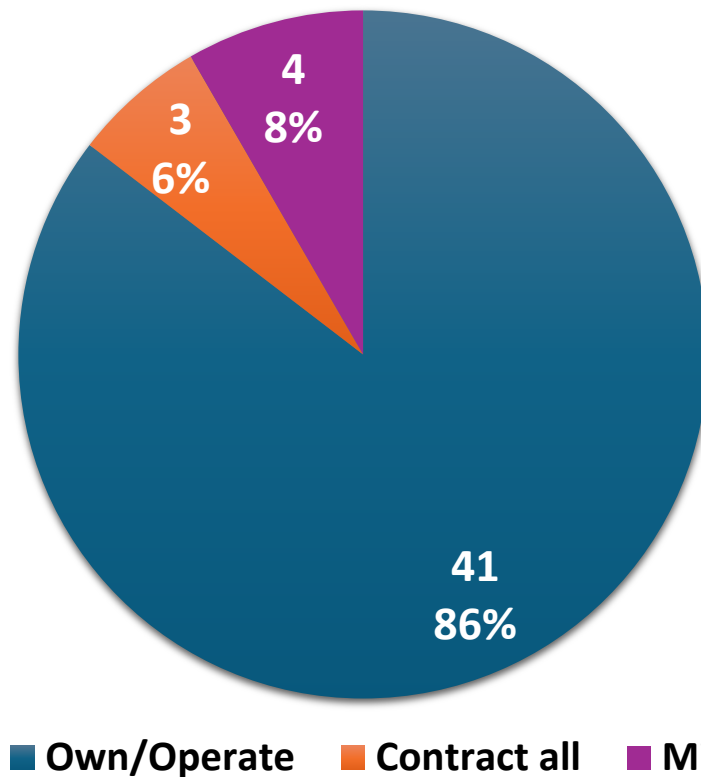
CENTRAL NEW YORK LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
CORTLAND CITY SD	110200	1,820	45.75	Submitted	Initial Contact Made
DERUYTER CSD	250301	286	92.52	Submitted	No Contact
EAST SYRACUSE MINOA CSD	420401	3,184	48.48	Submitted	No Contact
FABIUS-POMPEY CSD	420601	610	123.6	Submitted	No Contact
FAYETTEVILLE-MANLIUS CSD	421001	4,104	39.41	Submitted	No Contact
FULTON CITY SD	460500	3,005	67.97	Submitted	No Contact
HAMILTON CSD	250701	524	55.31	Submitted	Underway
HANNIBAL CSD	460701	1,146	67.41	Submitted	Underway
HOMER CSD	110701	1,742	175.7	Submitted	No Contact
JAMESVILLE-DEWITT CSD	420411	2,360	21.69	Submitted	Initial Contact Made
JORDAN-ELBRIDGE CSD	420501	1,029	51.47	Submitted	No Contact
LAFAYETTE CSD	420807	714	30.57	Submitted	No Contact
LIVERPOOL CSD	421501	6,629	20.88	Submitted	No Contact
LYNCOURT UFSD	421504	388	2.46	Submitted	No Contact
MADISON CSD	251101	387	50.22	Submitted	Underway
MARATHON CSD	110901	637	102	Submitted	Underway
MARCELLUS CSD	421101	1,353	56.54	Submitted	Initial Contact Made
MCGRAW CSD	110304	451	57.18	Submitted	No Contact
MEXICO CSD	460901	1,961	134.9	Submitted	Underway
MORAVIA CSD	051301	807	127.4	Submitted	No Contact
MORRISVILLE-EATON CSD	250401	565	76.89	Submitted	Complete
NORTH SYRACUSE CSD	420303	7,394	58.05	Submitted	No Contact
ONEIDA CITY SD	251400	1,585	36.06	Submitted	Applied
ONONDAGA CSD	421201	728	35.19	Submitted	Underway
OSWEGO CITY SD	461300	3,460	57.51	Submitted	No Contact
PHOENIX CSD	462001	1,550	74.58	Submitted	No Contact
PORT BYRON CSD	051101	757	73.39	Submitted	Complete
PULASKI CSD	461801	879	64.66	Submitted	Underway
SANDY CREEK CSD	461901	738	205.6	Submitted	Underway

CENTRAL NEW YORK LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
SKANEATELES CSD	421601	1,212	75.58	Not Submitted	Underway
SOLVAY UFSD	420702	1,244	10.58	Submitted	Underway
SOUTHERN CAYUGA CSD	050701	604	160.8	Submitted	No Contact
STOCKBRIDGE VALLEY CSD	251501	377	42.5	Submitted	No Contact
SYRACUSE CITY SD	421800	17,641	33.71	Submitted	Underway
TULLY CSD	421902	702	79.86	Submitted	Complete
UNION SPRINGS CSD	051901	676	82.98	Submitted	Underway
WEEDSPORT CSD	050301	664	38.84	Submitted	Underway
WEST GENESEE CSD	420101	4,507	38.24	Submitted	Underway
WESTHILL CSD	420701	1,714	16.11	Submitted	Underway

Transportation Means

Nearly all school districts in the Central New York Region own and operate buses. Forty-one districts (41, 85%) currently own and operate all school buses serving districts' needs; three districts (3, 6%) indicate that all transportation services are contracted out, and four (4, 8%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.

TRANSPORTATION MEANS Central New York Region



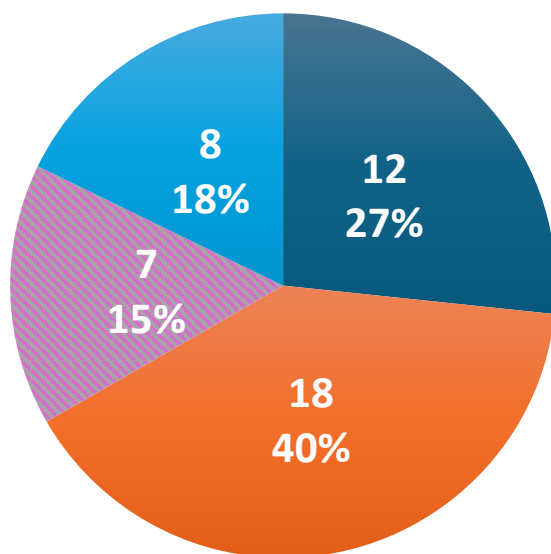
Bus Fleets

Forty-five (45) school districts in the Central New York Region provided NYSED with information on their current bus fleet and anticipated future needs. Twelve (12) districts maintain between 1 and 20 buses; eighteen (18) districts own between 21 and 40 buses; seven (7) districts own between 41 and 60 buses; and eight (8) districts have fleets in excess of 60 vehicles. Of these reported fleets, forty-four (44) school districts reported that no zero emission buses are currently owned. In addition, all forty-five (45) districts reported that they do not have any zero emission buses on order. One (1) district, however, does currently maintain one zero emission bus:

- Fabius-Pompey currently operates one (1, 3.8%) zero emission bus out of a fleet of twenty-six buses (26).
- Districts in this region report no zero emission buses on order.

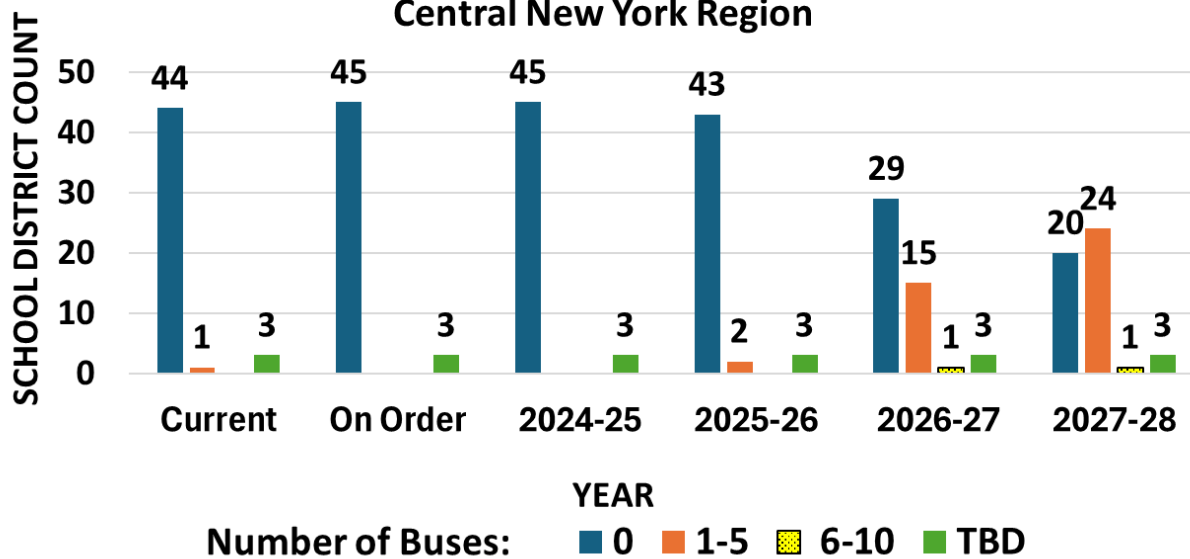
Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Central New York Region

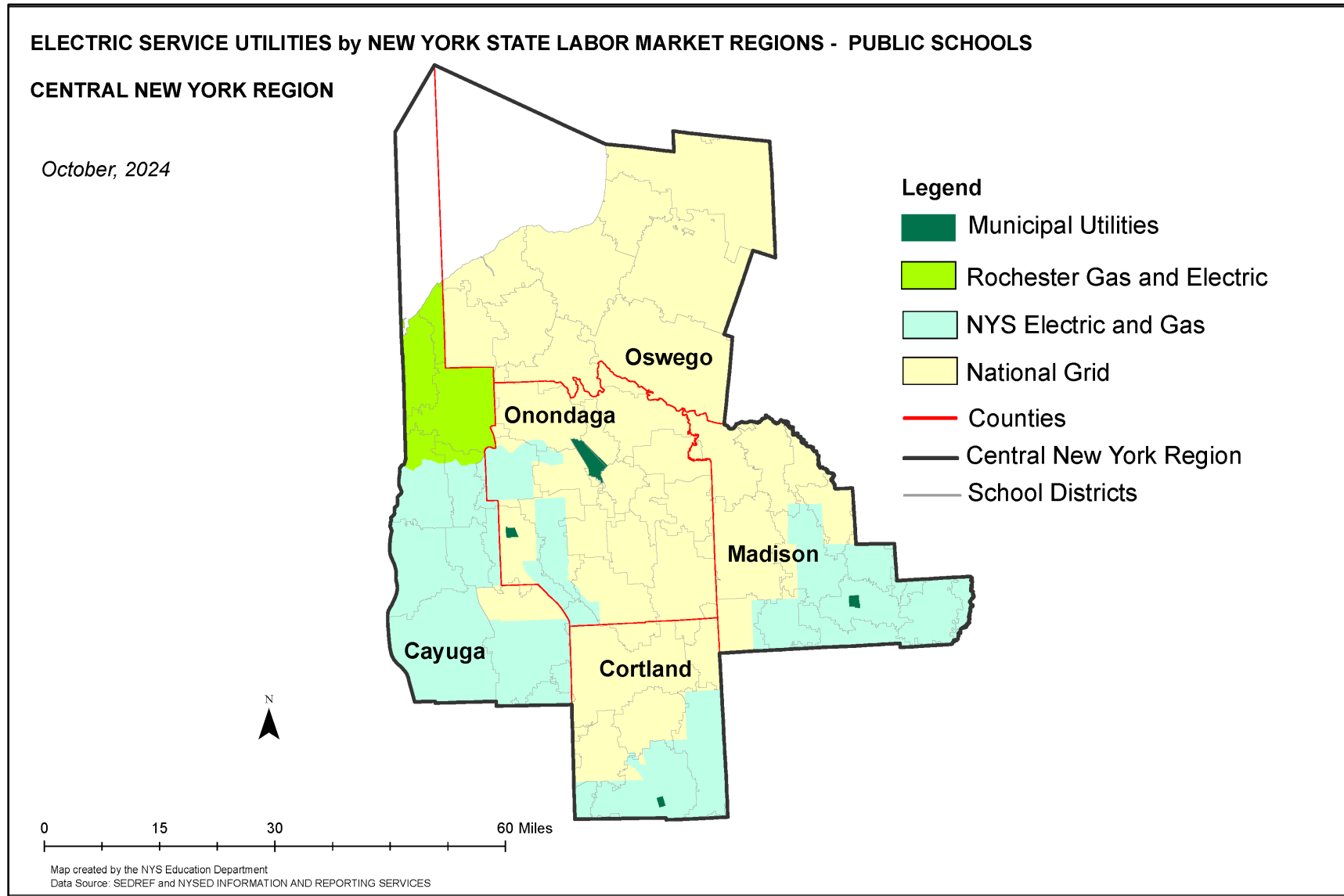


Number of School Buses: ■ 1-20 ■ 21-40 ■ 41-60 ■ 61+

CURRENT AND ANTICIPATED ZERO EMISSION BUSES Central New York Region

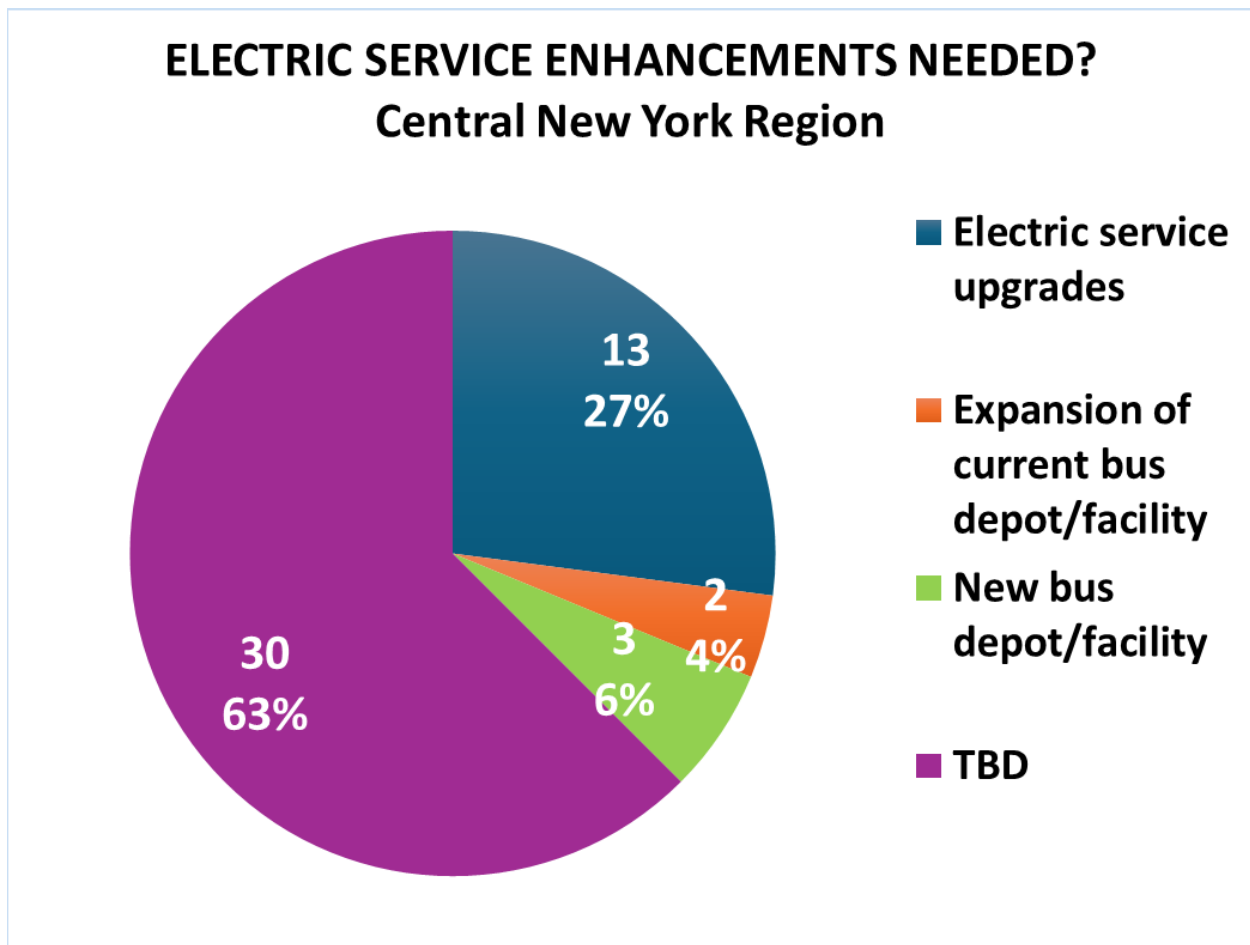


Infrastructure Assessment



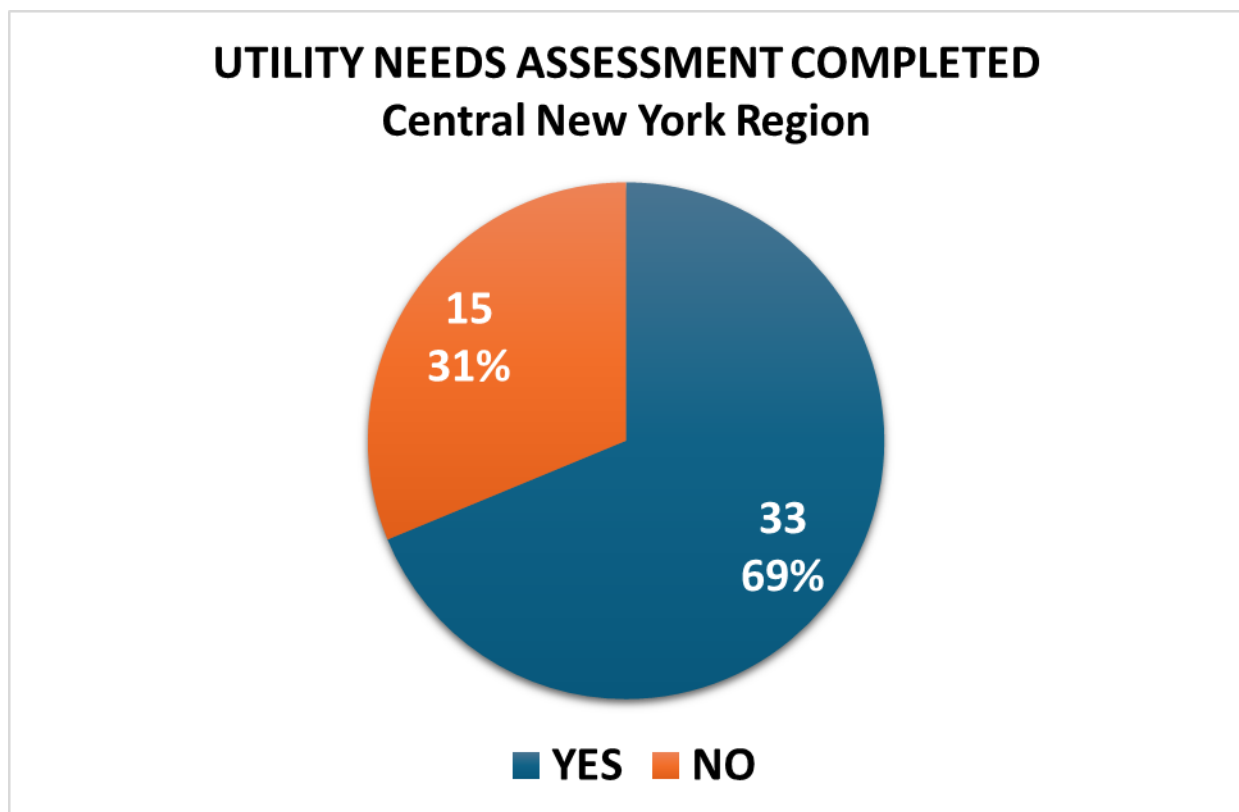
Electric Service

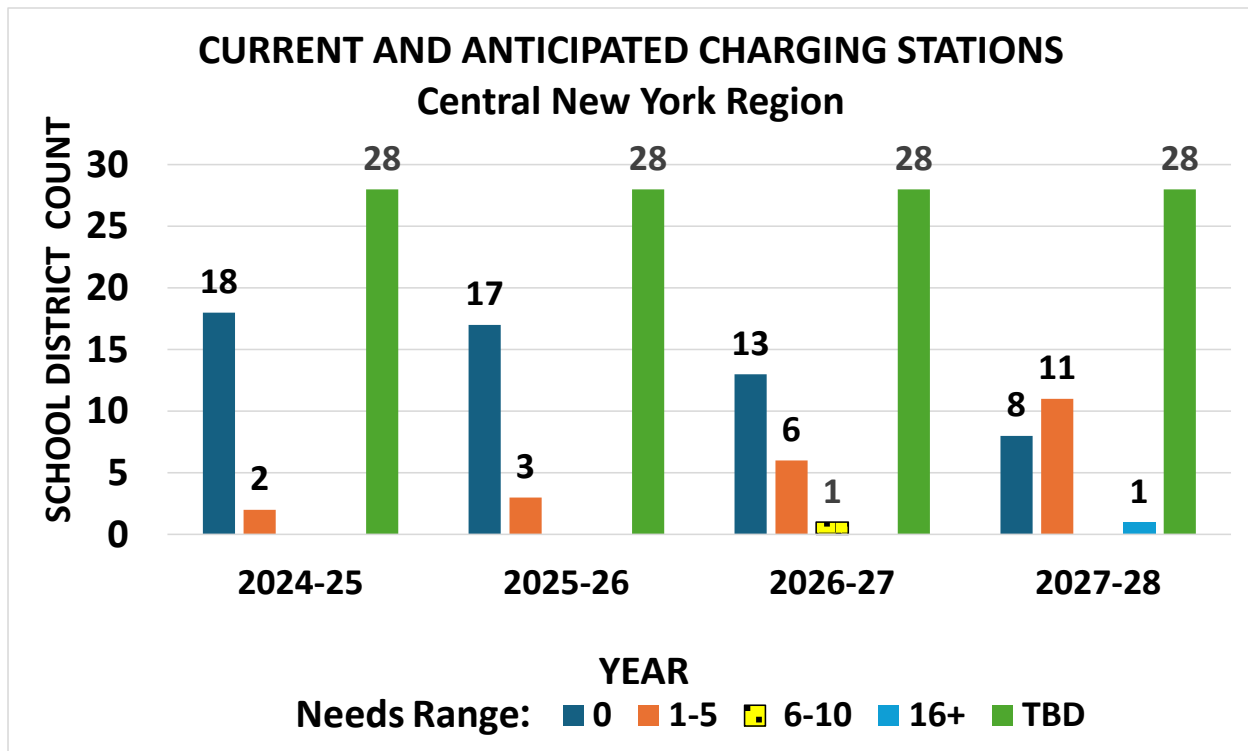
School Districts in the Central New York Region primarily receive electricity from three (3) major utility companies—National Grid, NYSEG, and RG&E. However, as indicated, there are some small utility providers serving a similarly small number of districts. In general, districts in the Central New York Region report that current electric service is sufficient for their needs in 2025-26. However, as evidenced in the graph below, thirteen (13) districts anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, two (2) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing, and three (3) districts reported needing a new bus depot/facility. A total of thirty (30) districts are still assessing their needs.



Charging Stations and Infrastructure

Forty-three (43) school districts in the region report that there are no charging stations available in the district, currently. However, two (2) districts report that 1-5 chargers are installed already or are anticipated for 2025-26. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least twenty (20) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts and needing to wait until formal fleet electrification plans are completed. Based on the data collected from forty-eight districts (48), thirty-three districts (33, 69%) have completed their electric utility needs assessment or have a load letter from their utility provider.



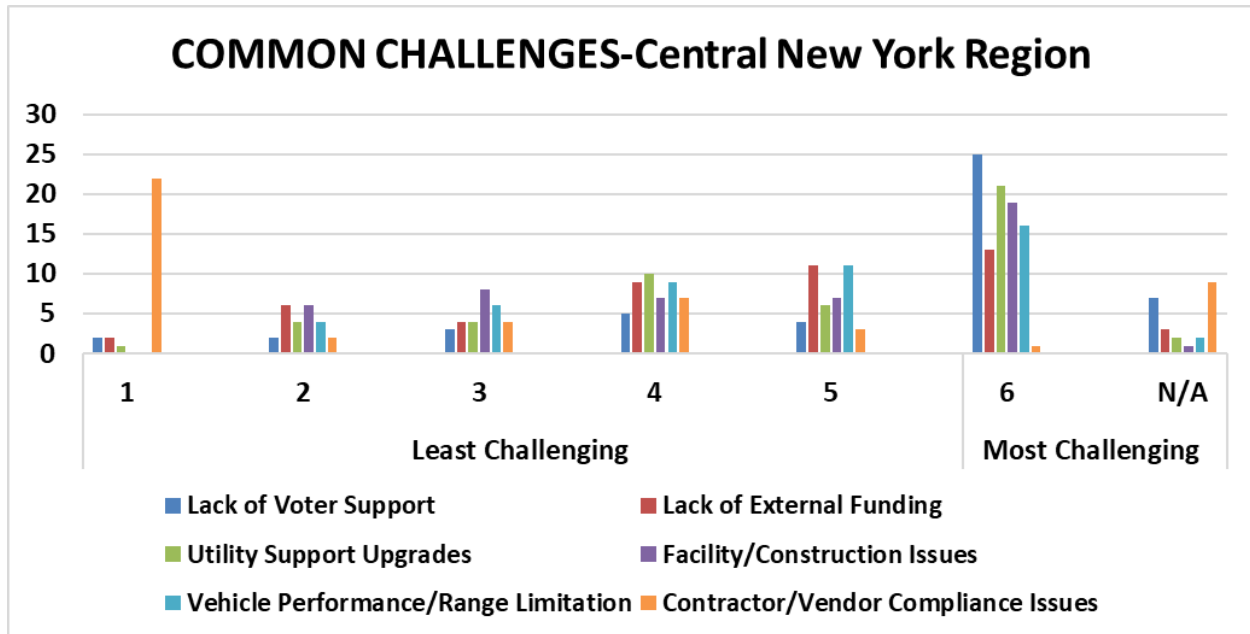


Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

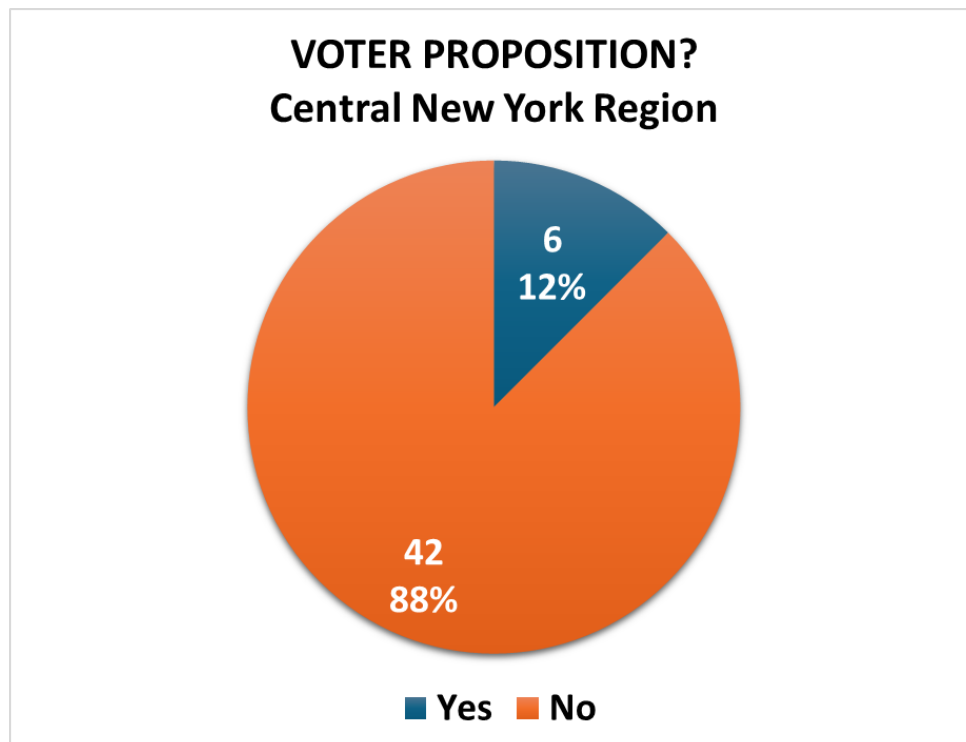
1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Central New York region show that Lack of Voter Support, Utility Support upgrades, and Facility Construction issues rated the highest in the most challenging section, whereas Contractor/Vendor Compliance Issues were the least challenging concern.



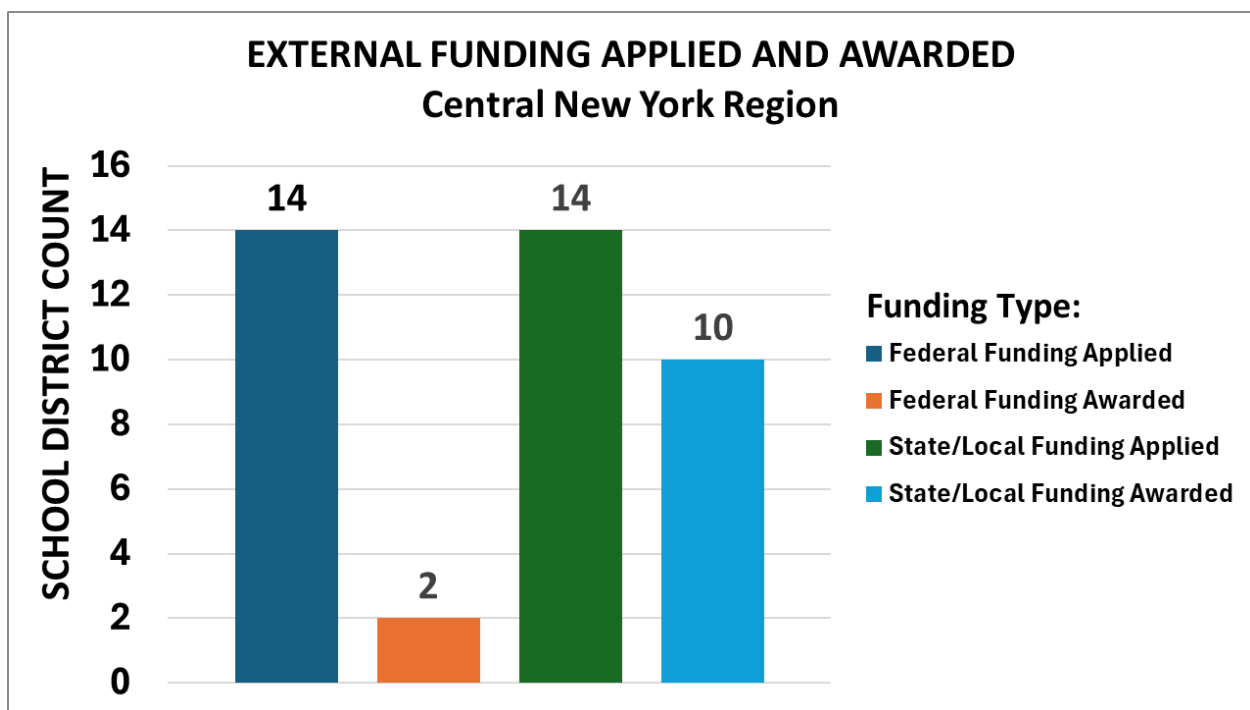
Voter Proposition/Approval

The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data show that in the Central New York region, six districts (6, 12%) have put a voter proposition before the voters, and only one (1) was approved.



Funding Opportunities

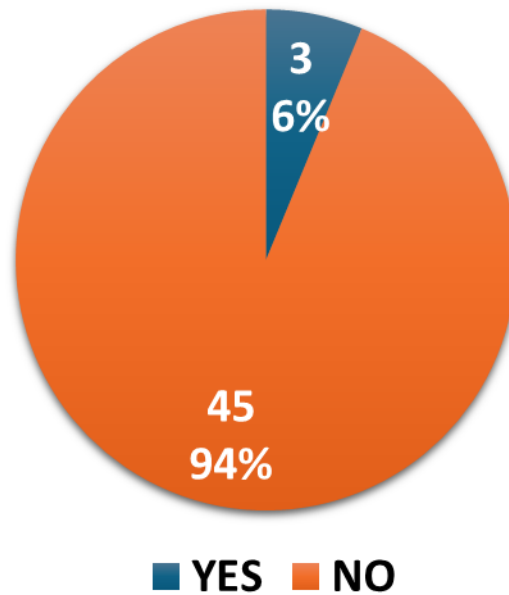
State/Local Funding opportunities were available to many districts and fourteen districts (14, 31%) applied for funds and ten (10) districts received these funds with a range from a low of \$22,400 to a high of \$530,500. The average award was approximately \$133,687. Federal Funding opportunities have been available to the districts and fourteen districts (14, 31%) applied for funds. Two (2) districts received funds, one (1) district received \$1,975,000 and the second district received \$1,185,000. No districts reported applying for Utility Funding.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Central New York region three districts (3, 6%) reported completing a Workforce Development Plan out of forty-eight (48) districts.

**CREATED A WORKFORCE DEVELOPMENT REPORT?
Central New York Region**



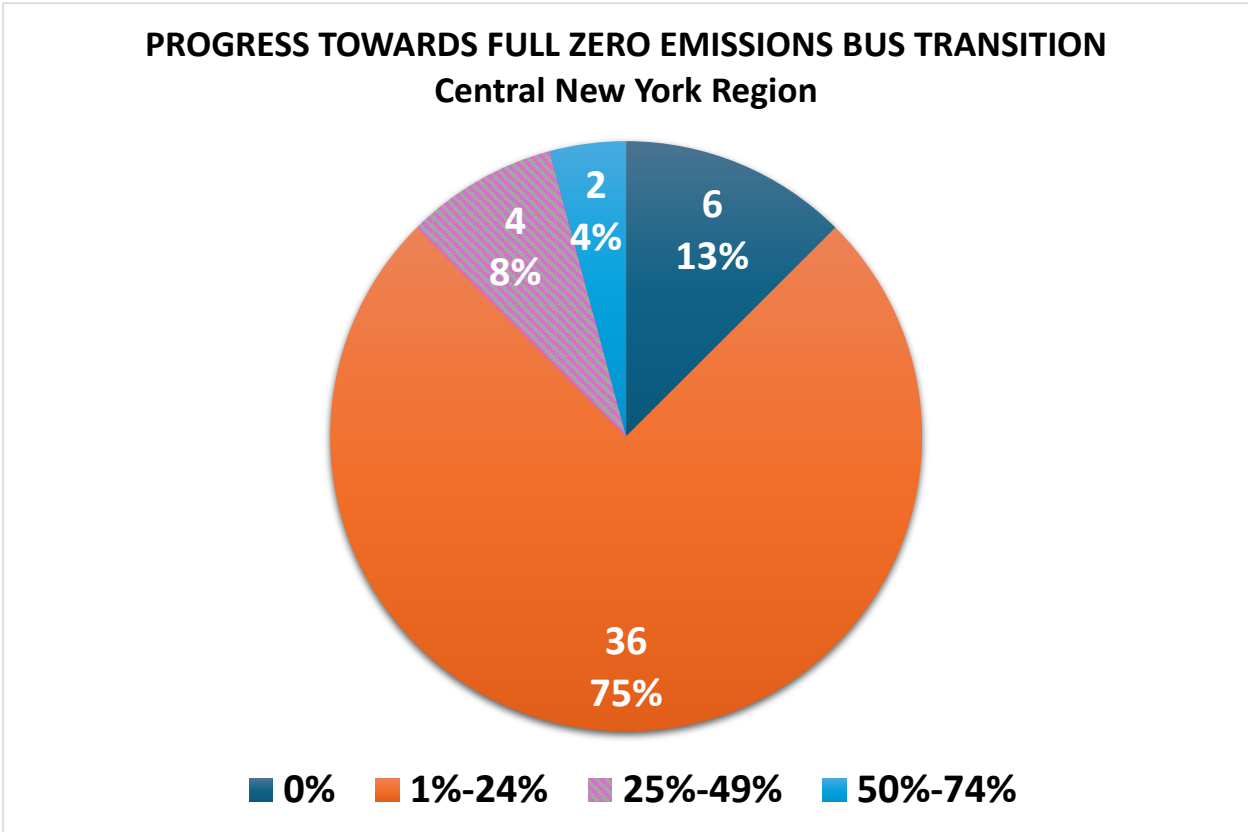
Transition towards Zero Emission Busing

Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- Two (2) districts reported they are 50-74% complete;
- Four (4) districts reported they are 25-49% complete;
- Thirty-six (36) districts reported they are 1-24% complete; and
- Six (6) districts reported making no progress to date (0%).

In total, forty-two districts (42, 87%) have begun the transition to zero-emission busing, while six districts (6, 13%) remain at 0%.



District Comments-Summary

There are forty-nine (49) school districts in Central New York, forty-three (43) of which completed the survey. Several reported progress on the transition, having received grant funding, or were in the process of completing their Fleet Electrification Plans and were plotting out capital improvement projects to prepare for installation of charging stations. Some indicated various obstacles to the transition, foremost among these were the high costs of transitioning, especially in the way of taxes and electricity; communities with subsidized utilities were concerned that electric rates would significantly increase. Others noted that their districts were already experiencing financial hardship and could not afford the investment in buses, charging stations, or capital projects such as new garage facilities, which would be necessary in many cases. Voters consistently rejected these measures, a couple mentioned ideological opposition to electrification of fleets. One district asked, what were districts supposed to do if voters continued to vote down ZEB propositions, preventing them from compliance with the mandate?

Also of major concern was range and battery capacity. Several districts mentioned having conducted route analyses. Cazenovia, for one example, hired Girardin for this study, which found that out of twenty-four routes, nine could not be completed by an electric bus. Other districts reported the same, saying that routes would have to be divided if electric buses were used or that they would have to double the size of their fleets to complete the runs now done by diesel buses. Safety also factored into the comments; respondents mentioned fears of students being stranded in cold weather or when batteries were drained.

Southern Tier Region

Regional Summary and Response Rate

The Southern Tier Labor Market Region contains eight (8) counties—Steuben, Schuyler, Chemung, Tompkins, Tioga, Broome, Chenango, and Delaware. Together, there are sixty-three (63) traditional school districts covering an area of approximately 6,088.1 square miles that were responsible for educating 74,841 school-age children in the 2024-25 school year. NYSED received responses from fifty-four (54) school districts, bringing the overall response rate for the region to about eighty-six (86%) percent, with nine (9) non-responsive districts. Data from NYSERDA shows that five (5, 12.6%) of the districts in the region have a completed Fleet Electrification Plan (FEP), and twenty-two (22, 35%) are underway with their FEP process. Additionally, five (5, 8%) of the districts report having made the initial contact with NYSERDA to begin the process. Currently twenty-nine (29, 46%) of the districts have made no contact with NYSERDA as of this report.

The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

SOUTHERN TIER LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ADDISON CSD	570101	920	163	Submitted	Applied
AFTON CSD	080101	409	86.96	Submitted	Underway
ANDES CSD	120102	69	99.19	Not Submitted	No Contact
ARKPORT CSD	571901	421	65.51	Not Submitted	Underway
AVOCA CSD	570201	369	92.71	Submitted	No Contact
BAINBRIDGE-GUILFORD CSD	080201	753	101	Submitted	Initial Contact Made
BATH CSD	570302	1,324	94.81	Submitted	Underway
BINGHAMTON CITY SD	030200	4,390	10.79	Submitted	No Contact
BRADFORD CSD	570401	232	46.41	Not Submitted	Underway

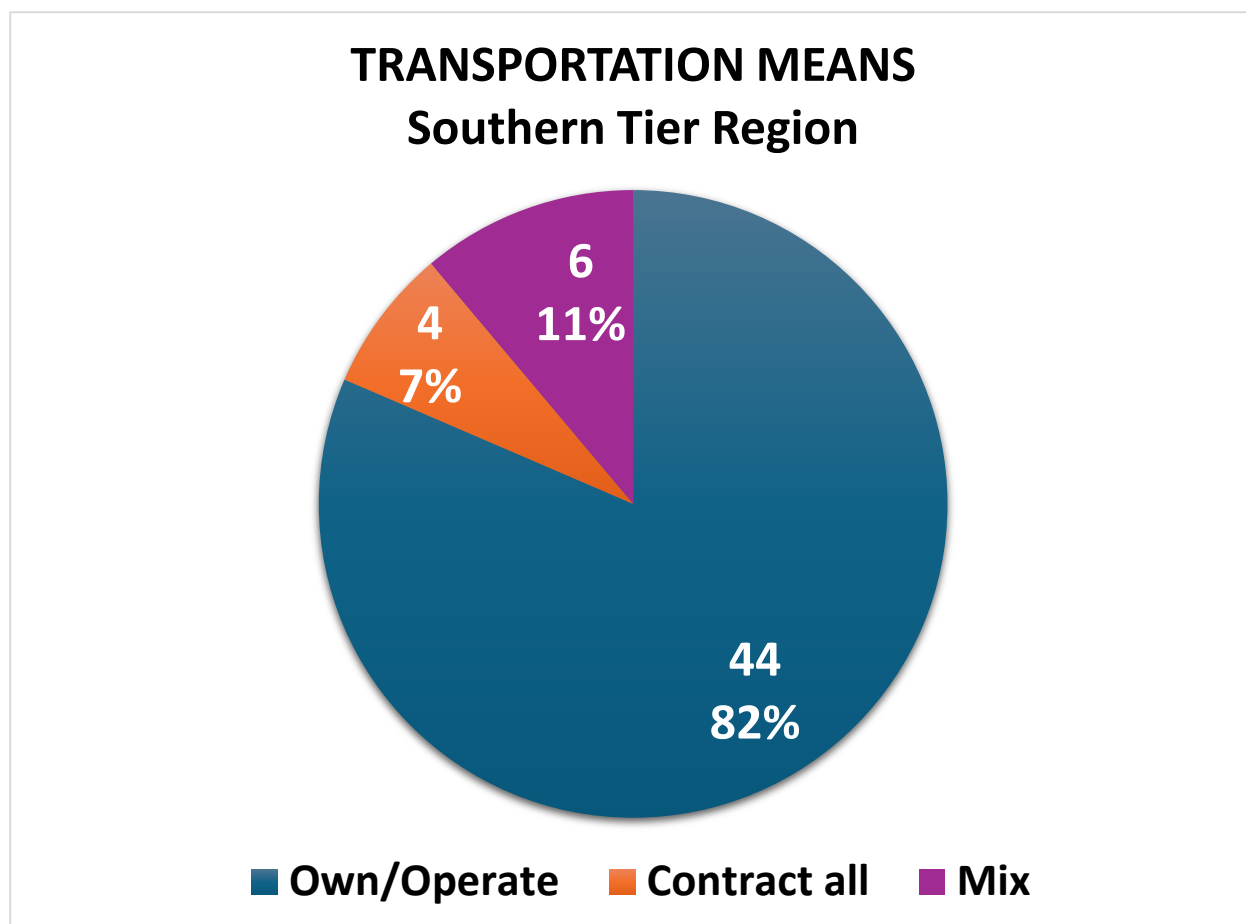
SOUTHERN TIER LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
CAMPBELL-SAVONA CSD	570603	748	83.97	Submitted	No Contact
CANDOR CSD	600301	680	86.64	Submitted	No Contact
CANISTEO-GREENWOOD CSD	571502	914	126.1	Submitted	No Contact
CHARLOTTE VALLEY CSD	120401	295	80.52	Submitted	Underway
CHENANGO FORKS CSD	030101	1,228	75.64	Submitted	No Contact
CHENANGO VALLEY CSD	030701	1,585	25.31	Submitted	Complete
CORNING CITY SD	571000	4,354	233.2	Submitted	No Contact
DELAWARE ACADEMY CSD AT DELHI	120501	706	192.1	Submitted	No Contact
DEPOSIT CSD	031301	461	124.4	Submitted	Underway
DOWNSVILLE CSD	120301	205	141.6	Submitted	Applied
DRYDEN CSD	610301	1,261	93.47	Not Submitted	No Contact
ELMIRA CITY SD	070600	5,066	109.9	Submitted	No Contact
ELMIRA HEIGHTS CSD	070902	979	13.89	Submitted	No Contact
FRANKLIN CSD	120701	190	62.96	Not Submitted	Complete
GREENE CSD	080601	859	126.9	Submitted	Underway
GROTON CSD	610501	719	56.07	Submitted	Complete
HAMMONDSPORT CSD	572901	371	79.97	Submitted	No Contact
HANCOCK CSD	120906	282	119.5	Not Submitted	No Contact
HARPURSVILLE CSD	030501	549	79.94	Submitted	No Contact
HORNELL CITY SD	571800	1,360	36.04	Submitted	Underway
HORSEHEADS CSD	070901	3,543	143.1	Submitted	Initial Contact Made
ITHACA CITY SD	610600	4,848	154.2	Submitted	No Contact
JASPER-TROUPSBURG CSD	572702	358	144.5	Submitted	No Contact
JOHNSON CITY CSD	031502	2,263	23.13	Submitted	Underway
LANSING CSD	610801	1,082	64.36	Submitted	Underway
MAINE-ENDWELL CSD	031101	2,473	50.09	Submitted	No Contact
MARGARETVILLE CSD	121401	281	169.7	Submitted	Underway
NEWARK VALLEY CSD	600402	939	138.4	Submitted	Underway
NEWFIELD CSD	610901	605	59.15	Not Submitted	Complete
NORWICH CITY SD	081200	1,571	105.2	Submitted	Initial Contact Made

SOUTHERN TIER LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ODESSA-MONTOUR CSD	550101	622	86.07	Not Submitted	Underway
OTSELIC VALLEY CSD	081401	248	118	Submitted	No Contact
OWEGO-APALACHIN CSD	600601	1,873	93.34	Not Submitted	No Contact
OXFORD ACADEMY & CSD	081501	661	116.9	Submitted	No Contact
PRATTSBURGH CSD	572301	337	74.2	Submitted	No Contact
ROXBURY CSD	121502	216	84.04	Submitted	No Contact
SHERBURNE-EARLVILLE CSD	082001	1,209	157.9	Submitted	No Contact
SIDNEY CSD	121601	988	79.92	Submitted	Underway
SOUTH KORTRIGHT CSD	121702	276	95	Submitted	No Contact
SOUTH MOUNTAIN-HICKORY COMN SD AT BI	030201		1.59	Submitted	No Contact
SPENCER-VAN ETTEN CSD	600801	749	144.3	Submitted	Underway
STAMFORD CSD	121701	231	45.93	Submitted	No Contact
SUSQUEHANNA VALLEY CSD	030601	1,376	60.44	Submitted	Underway
TIOGA CSD	600903	845	94.25	Submitted	No Contact
TRUMANSBURG CSD	611001	915	78.52	Submitted	Underway
UNADILLA VALLEY CSD	081003	739	123	Submitted	No Contact
UNION-ENDICOTT CSD	031501	3,462	28.56	Submitted	Underway
VESTAL CSD	031601	3,404	48.87	Submitted	Underway
WALTON CSD	121901	771	147.1	Submitted	Complete
WATKINS GLEN CSD	550301	843	141.7	Submitted	Initial Contact Made
WAVERLY CSD	600101	1,481	90.8	Submitted	Initial Contact Made
WAYLAND-COHOCTON CSD	573002	1,223	156.1	Submitted	Underway
WHITNEY POINT CSD	031401	1,299	142.3	Submitted	Underway
WINDSOR CSD	031701	1,411	119.2	Submitted	Underway

Transportation Means

Nearly all school districts in the Southern Tier Region own and operate buses. Forty-four districts (44, 82%) currently own and operate all school buses serving districts' needs; four districts (4, 7%) indicate that all transportation services are contracted out,

and six (6, 11%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.

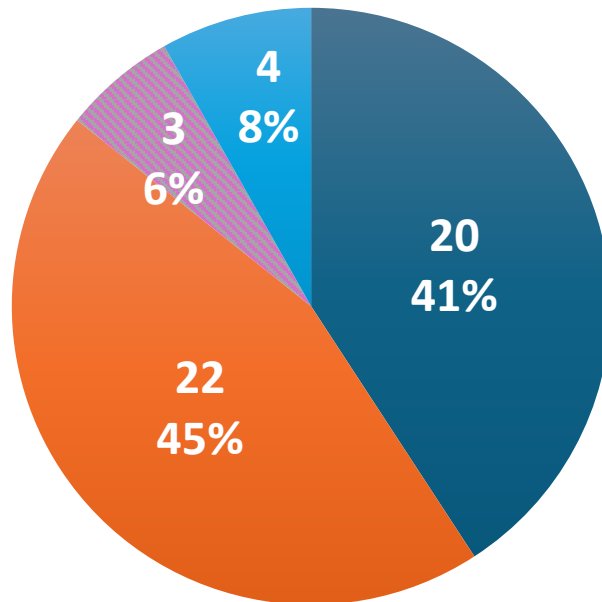


Bus Fleets

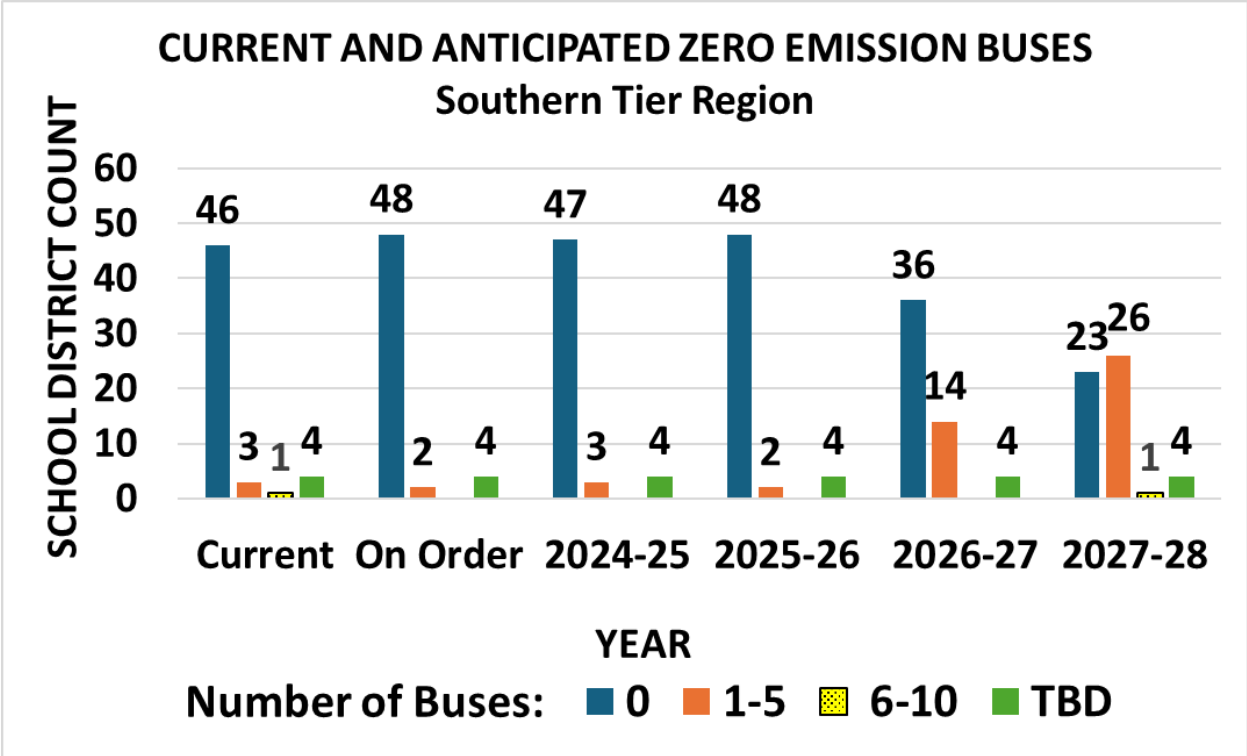
Fifty (50) school districts in the Southern Tier Region provided NYSED with information on their current bus fleet and anticipated future needs. Twenty (20) districts maintain between 1 and 20 buses; twenty-two (22) districts own between 21 and 40 buses; three (3) districts own between 41 and 60 buses; and four (4) districts have fleets of more than 60 vehicles. Of these reported fleets, fifty (50) school districts reported that no zero emission buses are currently owned. Four (4) districts, however, do currently maintain zero emission buses:

- Ithaca City currently operates seven (7, 7.7%) zero emission buses out of a fleet of ninety buses (90) This is an increase of two (2) zero emission buses from last year.
- Downsville currently operates one (1, 7.6%) zero emission bus out of a fleet of fourteen (14) buses.
- Johnson City currently operates four (4, 10%) zero emission buses out of a fleet of forty (40) buses. This is an increase of three (3) zero emission buses from last year.
- Chenango Valley currently operates one (1, 2.7%) zero emission bus out of a fleet of thirty-seven (37) buses.
- Districts in this region report having seven (7) zero emission buses on order. Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Southern Tier Region



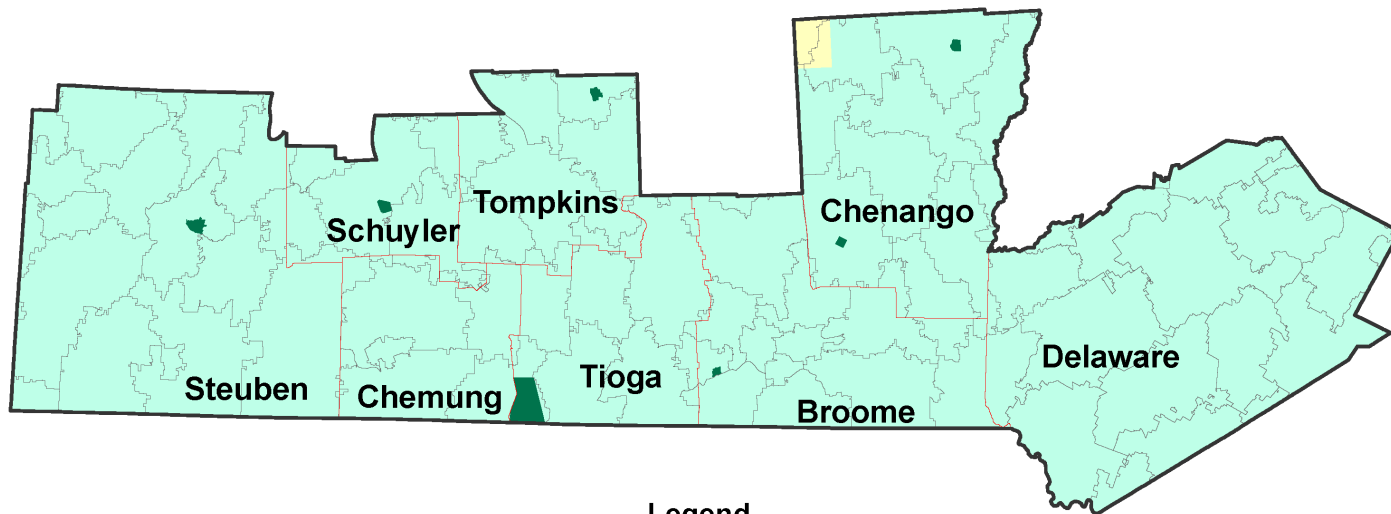
Number of Buses: ■ 1-20 ■ 21-40 ■ 41-60 ■ 61+



Infrastructure Assessment

ELECTRIC SERVICE UTILITIES by NEW YORK STATE LABOR MARKET REGIONS - PUBLIC SCHOOLS SOUTHERN TIER REGION

October, 2024



Legend

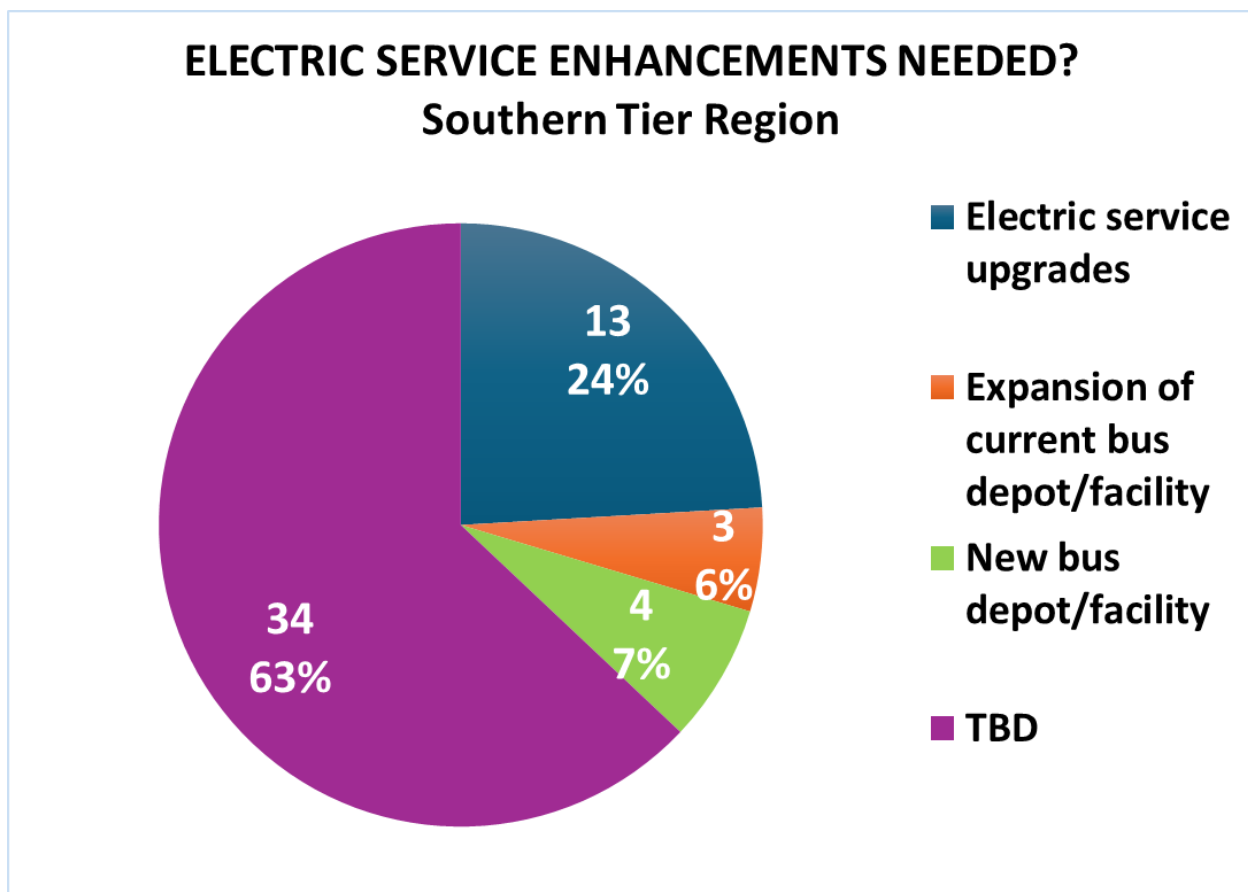
- Municipal Utilities
- NYS Electric and Gas
- National Grid
- Counties
- Southern Tier Region
- School Districts

Map created by the NYS Education Department
Data Source: SEDREF and NYSED INFORMATION AND REPORTING SERVICES

Electric Service

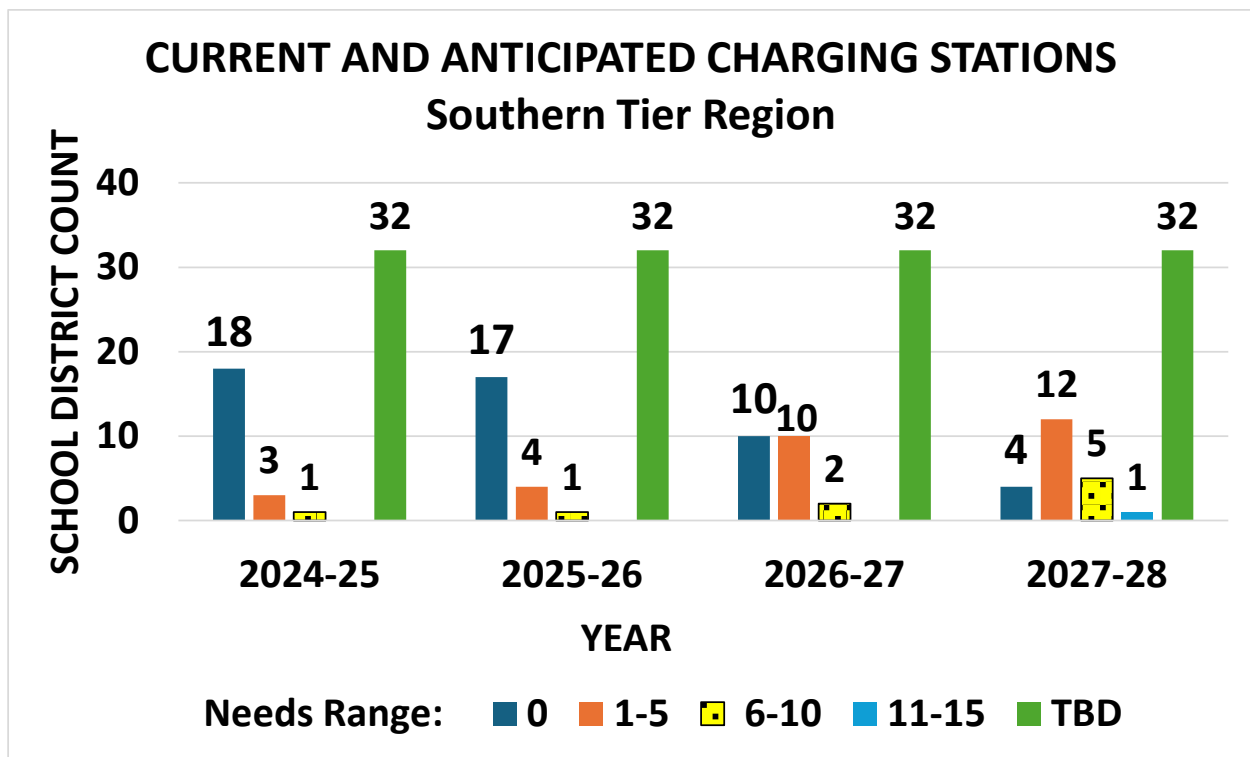
School Districts in the Southern Tier Region primarily receive electricity from one (1) major utility company—NYSEG. However, also as indicated, there are some small utility providers serving a similarly small number of districts.

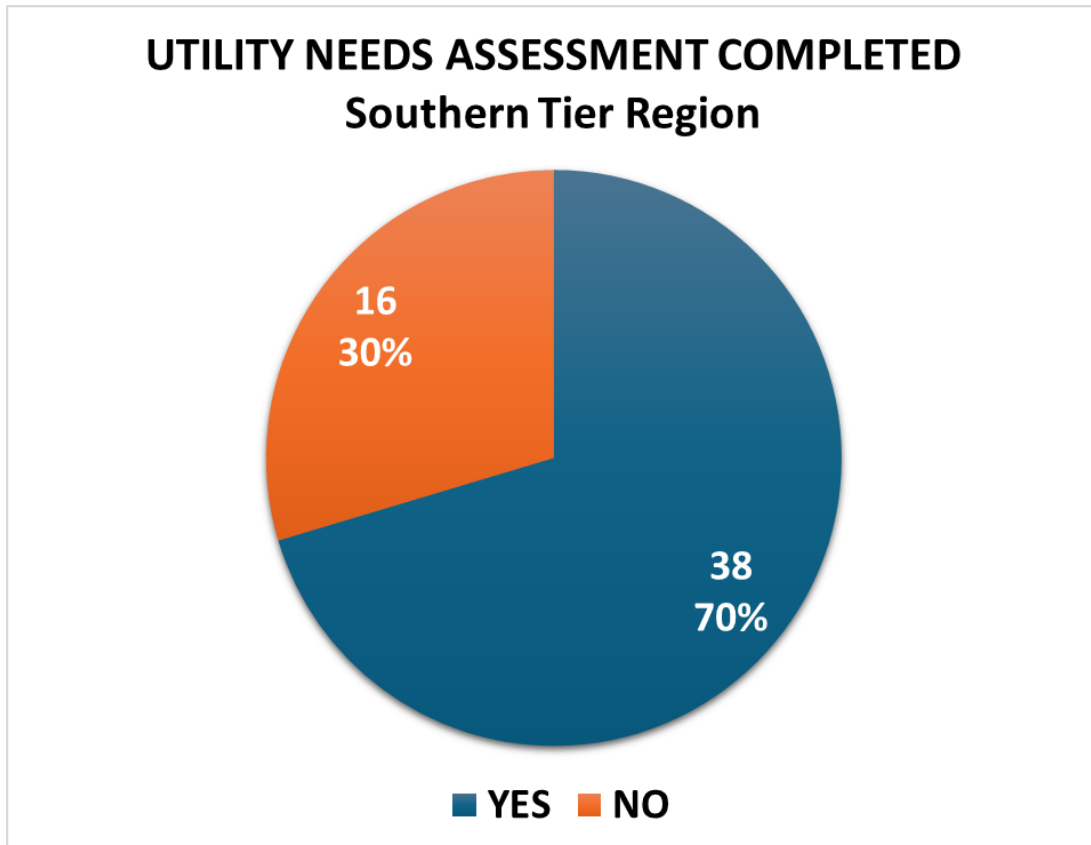
In general, districts in the Southern Tier report that current electric service is sufficient for their needs in 2025-26. However, as evidenced in the graph below, thirteen (13) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Three (3) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing and, four (4) districts reported they will need new bus depot/facilities. A total of thirty-four (34) districts are still assessing their needs.



Charging Stations and Infrastructure

Fifty (50) school districts in the region report that there are no charging stations available in the district, currently. However, three (3) districts report that 1-5 chargers are installed already or are anticipated for 2025-26 and one (1) district reported having 6-10 chargers installed. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least twenty-two (22) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts and needing to wait until formal fleet electrification plans are completed. Based on the data collected from fifty-four (54) districts, thirty-eight (38, 70%) districts have completed their electric utility needs assessment or have a load letter from their utility provider.



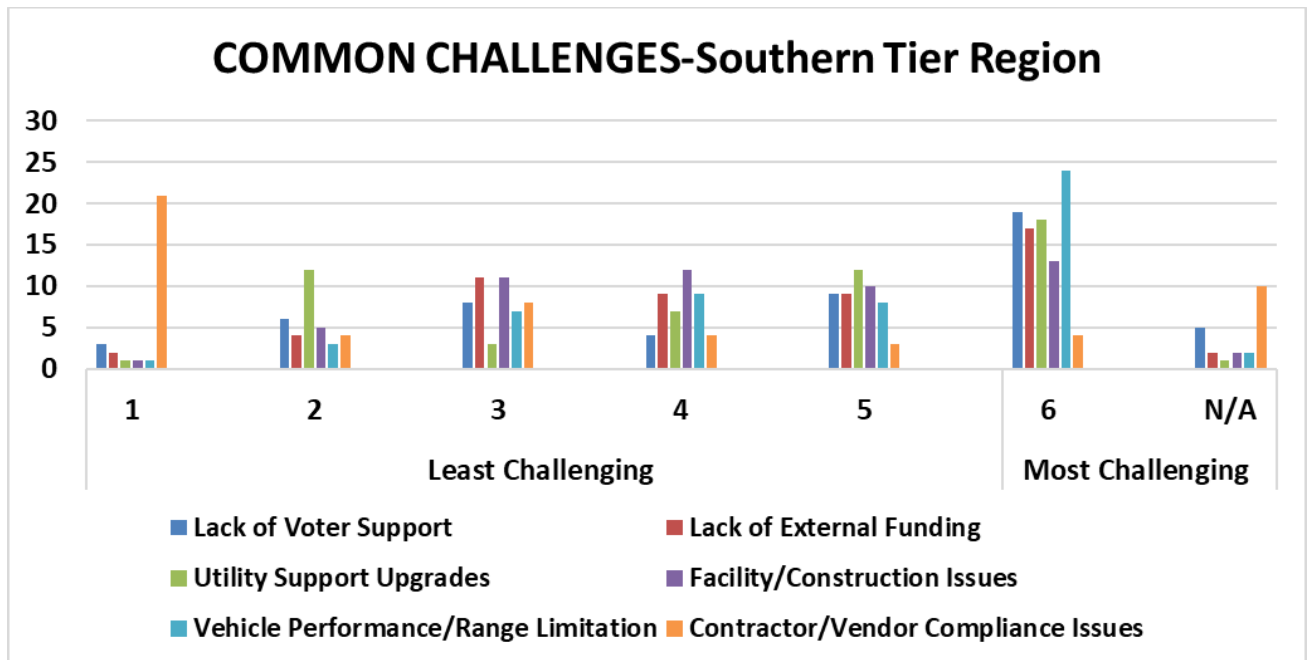


Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

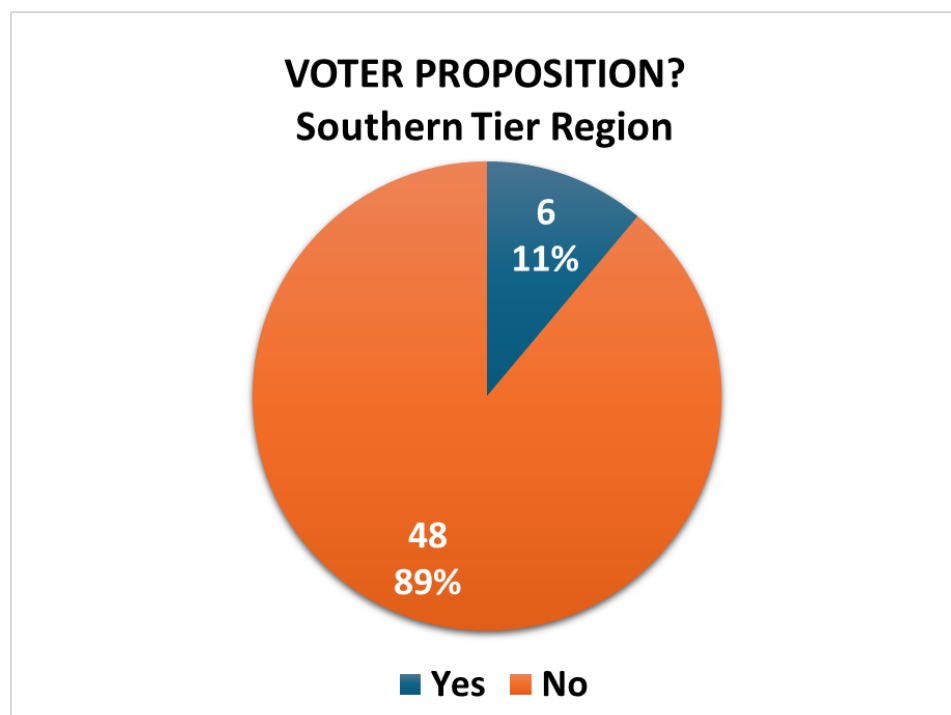
1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Southern Tier region show that Vehicle Performance/Range Limitation, Lack of Voter Support, and Utility Support Upgrades were rated the highest in the most challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



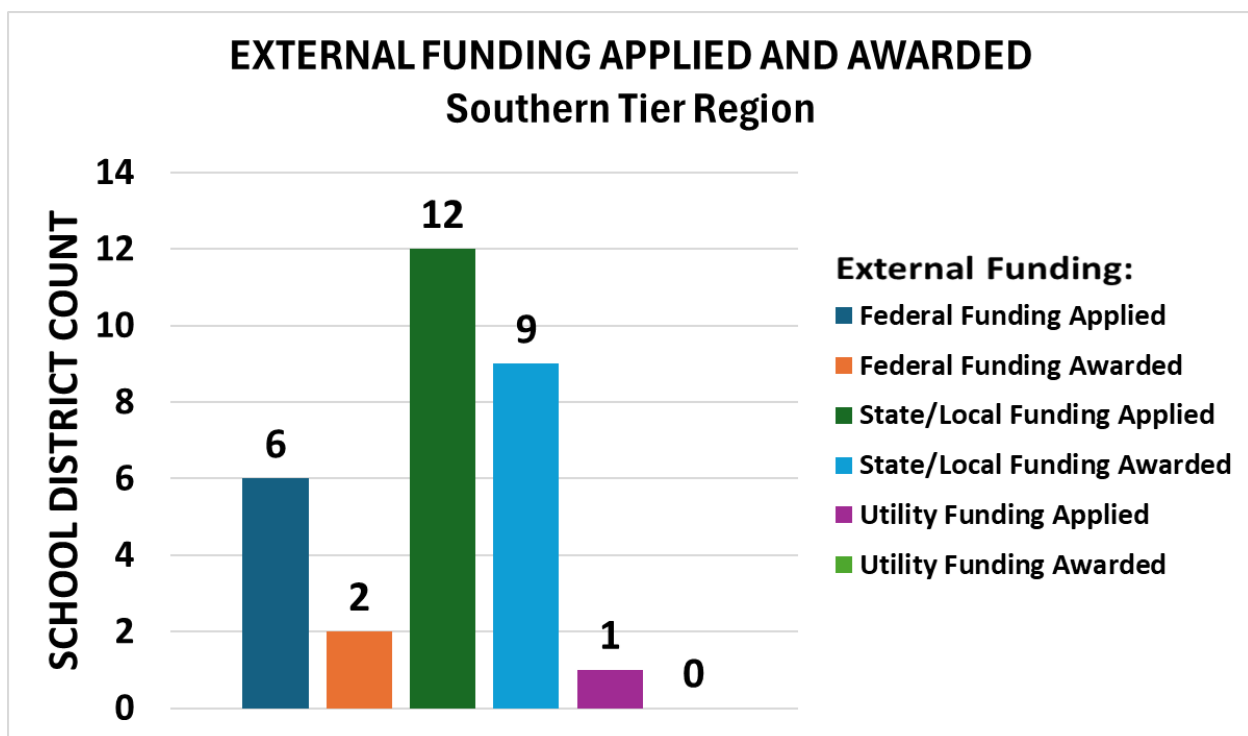
Voter Proposition/Approval

The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data shows that in the Southern Tier region six districts (6, 11%) have put a voter proposition before the voters, and all were approved.



Funding Opportunities

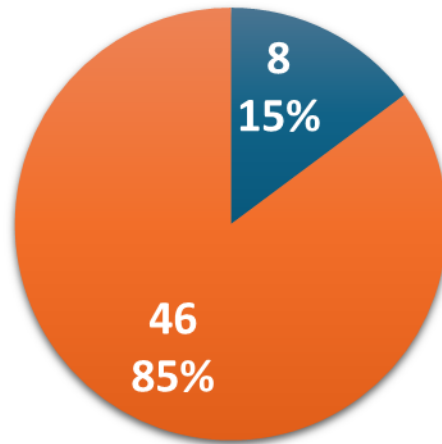
State/Local Funding opportunities were available to many districts and twelve districts (12, 22%) applied for funds and only nine (9) received these funds with a range from a low of \$53,925 to a high of \$2,572,500. The average award was approximately \$248,724. Federal Funding opportunities have been available to the districts and six districts (6, 11%) applied for funds and only two (2) districts received funds of \$400,000 and \$435,000. One (1) district reported applying for Utility Funding but did not receive any funds as of this report.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Southern Tier region eight districts (8, 15%) reported completing a Workforce Development Plan out of the region's fifty-four (54) districts.

CREATED A WORKFORCE DEVELOPMENT REPORT?
Southern Tier Region



■ YES ■ NO

Transition Towards Zero Emission Busing

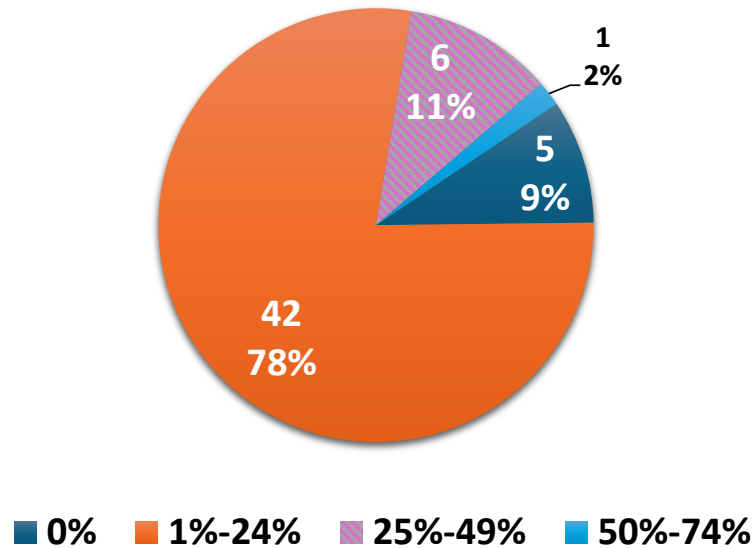
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 50-74% complete;
- Six (6) districts reported they are 25-49% complete;
- Forty-two (42) districts reported they are 1-24% complete; and
- Fourteen (14) districts have not made any progress to date.

In total, forty-nine districts (49, 91%) have begun the transition to zero-emission busing, while five districts (5, 9.3%) remain at 0%.

PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION
Southern Tier Region



District Comments-Summary

The Southern Tier Labor Market Region has sixty-four (64) school districts. Fifty-four (54) of these districts completed the survey and thirty-three (33) provided additional detail in a free-response question. The concern that arose most frequently in these comments was the inadequacy of current garage and storage facilities and electrical infrastructure; the prohibitive cost of making these upgrades up front after first purchasing the busses at \$470,000 each was a common complaint. In several cases, there was not space available to make these upgrades and some utility providers reported insufficient grid support for increased usage. In two instances, the utility provider was a local municipal supplier that offered reasonable rates to residents; fears that not only would the cost of school budgets increase but that utility costs would increase for all had been expressed. These concerns over cost – up front and long term – drove significant opposition in these communities with voters voting down budgets or threatening to if anything related to zero emissions bussing was in the budget. Funding at the outset did not alleviate concerns about cost, especially for those wealthier districts that were not “high priority.” These districts received far less funding from the state and would have to

pass the cost burden onto taxpayers who were already subject to high taxes. Those who contracted out their transportation claimed that RFP proposals were already factoring in increased costs in multiyear contracts, which has increased significantly. Other districts stressed the poverty of residents and their inability to pay anything beyond what was covered by funding. Concerns about the capabilities of ZEBs to complete all routes over hilly terrain and aging transportation infrastructure, along with safety concerns such as the potential for battery fires and student stranding in harsh weather were also voiced.

North Country Region

Regional Summary and Response Rate

The North Country Labor Market Region contains seven (7) counties—Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and St. Lawrence. Together, there are sixty-five (65) traditional school districts covering an area of approximately 11,309.4 square miles that were responsible for educating 53,120 school-age children in the 2024-25 school year. NYSED received responses from fifty-eight (58) school districts, bringing the overall response rate for the region to about eighty-nine percent (89%), with seven (7) non-responsive districts. Data from NYSERDA shows that four (4, 6%) of the districts in the region have a completed Fleet Electrification Plan (FEP), and thirty-six (36, 55%) are underway with their FEP process. Additionally, two (2, 3%) of the districts report having made the initial contact with NYSERDA to begin the process. Currently twenty-three (23, 36%) of the districts have made no contact with NYSERDA as of this report.

The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

NORTH COUNTRY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ALEXANDRIA CSD	220202	446	72.59	Not Submitted	Underway
AUSABLE VALLEY CSD	090201	1,049	274.3	Submitted	Underway
BEAVER RIVER CSD	231301	828	248.3	Submitted	Underway
BEEKMANTOWN CSD	090301	1,905	92.64	Submitted	Initial Contact Made
BELLEVILLE-HENDERSON CSD	220909	470	108.1	Submitted	No Contact
BOQUET VALLEY CSD	151801	366	236.4	Submitted	No Contact
BRASHER FALLS CSD	510101	893	154.7	Submitted	Underway
BRUSHTON-MOIRA CSD	161601	767	108.7	Submitted	Complete
CANTON CSD	510201	978	97.48	Submitted	Underway
CARTHAGE CSD	222201	3,032	189.4	Submitted	Underway

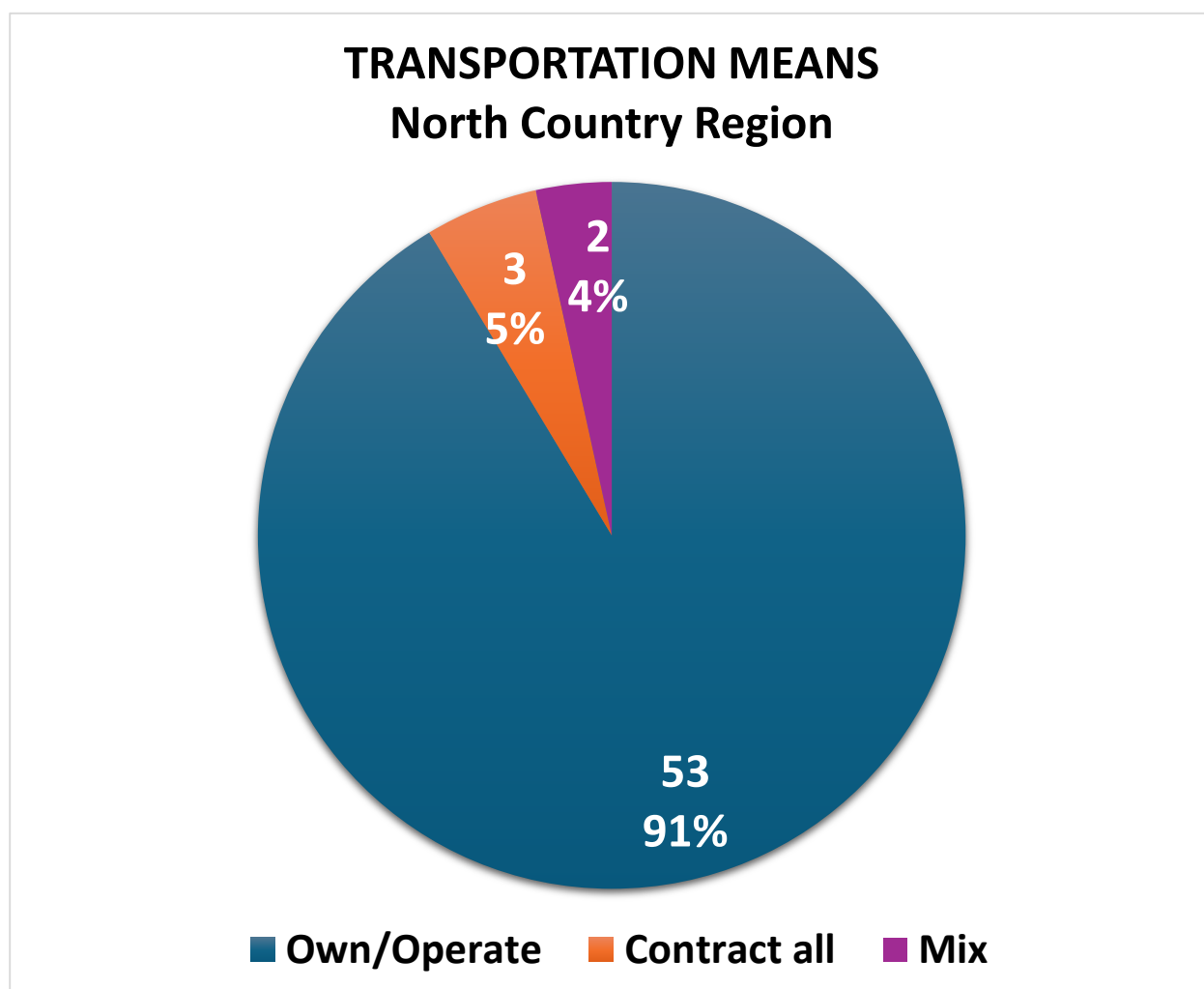
NORTH COUNTRY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
CHATEAUGAY CSD	160801	519	124.2	Submitted	No Contact
CHAZY UFSD	090601	454	44.52	Submitted	Underway
CLIFTON-FINE CSD	510401	232	296.2	Submitted	Underway
COLTON-PIERREPONT CSD	510501	343	258.5	Submitted	Underway
COPENHAGEN CSD	230201	434	88.3	Submitted	Underway
CROWN POINT CSD	150203	294	76.21	Submitted	Underway
EDWARDS-KNOX CSD	513102	465	230.4	Submitted	Underway
GENERAL BROWN CSD	220401	1,304	85.39	Submitted	Complete
GOUVERNEUR CSD	511101	1,354	331.1	Submitted	Underway
HAMMOND CSD	511201	211	100.6	Submitted	No Contact
HARRISVILLE CSD	230301	296	176.9	Submitted	Underway
HERMON-DEKALB CSD	511301	343	91.22	Submitted	Underway
HEUVELTON CSD	512404	475	109.1	Submitted	Underway
INDIAN LAKE CSD	200401	118	265.7	Submitted	No Contact
INDIAN RIVER CSD	220301	3,308	283.3	Submitted	Underway
INLET COMN SD	200501		66.78	Submitted	No Contact
KEENE CSD	150601	170	161.4	Submitted	No Contact
LA FARGEVILLE CSD	221401	423	79.54	Submitted	Underway
LAKE PLACID CSD	151102	532	173.2	Submitted	Underway
LAKE PLEASANT CSD	200601	63	195.8	Submitted	No Contact
LISBON CSD	511602	514	75.94	Submitted	No Contact
LONG LAKE CSD	200701	51	386.6	Submitted	No Contact
LOWVILLE ACADEMY & CSD	230901	1,212	324.6	Submitted	No Contact
LYME CSD	221301	317	65.72	Submitted	Initial Contact Made
MADRID-WADDINGTON CSD	511901	589	118.4	Submitted	No Contact
MALONE CSD	161501	2,026	366.2	Submitted	No Contact
MASSENA CSD	512001	2,382	134.5	Submitted	Complete
MINERVA CSD	150801	101	135.6	Submitted	No Contact
MORIAH CSD	150901	634	76.26	Submitted	Underway
MORRISTOWN CSD	512101	292	82.32	Submitted	Underway
NEWCOMB CSD	151001	47	252.3	Submitted	No Contact

NORTH COUNTRY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
NORTHEASTERN CLINTON CSD	090501	1,186	124	Submitted	No Contact
NORTHERN ADIRONDACK CSD	090901	780	378.6	Not Submitted	Underway
NORWOOD-NORFOLK CSD	512201	852	87.07	Submitted	Underway
OGDENSBURG CITY SD	512300	1,298	16.87	Submitted	Underway
PARISHVILLE-HOPKINTON CSD	512501	321	186.5	Submitted	Underway
PERU CSD	091101	1,724	132.9	Not Submitted	Underway
PISECO COMN SD	200101		270.6	Not Submitted	No Contact
PLATTSBURGH CITY SD	091200	1,760	2.82	Submitted	No Contact
POTSDAM CSD	512902	1,196	95.53	Submitted	Underway
RAQUETTE LAKE UFSD	200702		92.22	Not Submitted	No Contact
SACKETS HARBOR CSD	221001	411	63.56	Submitted	Underway
SALMON RIVER CSD	161201	1,311	127.3	Submitted	Underway
SARANAC CSD	091402	1,489	178.2	Not Submitted	Underway
SARANAC LAKE CSD	161401	1,036	602.1	Submitted	Underway
SCHROON LAKE CSD	151401	218	329.7	Submitted	No Contact
SOUTH JEFFERSON CSD	220101	1,717	213.6	Submitted	Underway
SOUTH LEWIS CSD	231101	994	338.1	Submitted	Underway
ST REGIS FALLS CSD	161801	165	239	Not Submitted	No Contact
THOUSAND ISLANDS CSD	220701	761	193.6	Submitted	Underway
TICONDEROGA CSD	151501	688	136.2	Submitted	Underway
TUPPER LAKE CSD	160101	683	279.9	Submitted	No Contact
WATERTOWN CITY SD	222000	3,940	46	Submitted	No Contact
WELLS CSD	200901	123	269.4	Submitted	Underway
WILLSBORO CSD	151701	230	66.72	Submitted	Complete

Transportation Means

Nearly all school districts in the North Country Region own and operate buses. Fifty-three (53) districts, or ninety-one percent (91%) of respondents, currently own and operate all school buses serving districts' needs; three (3, 5%) districts indicate that all transportation services are contracted out, and two (2, 4%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more

densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.



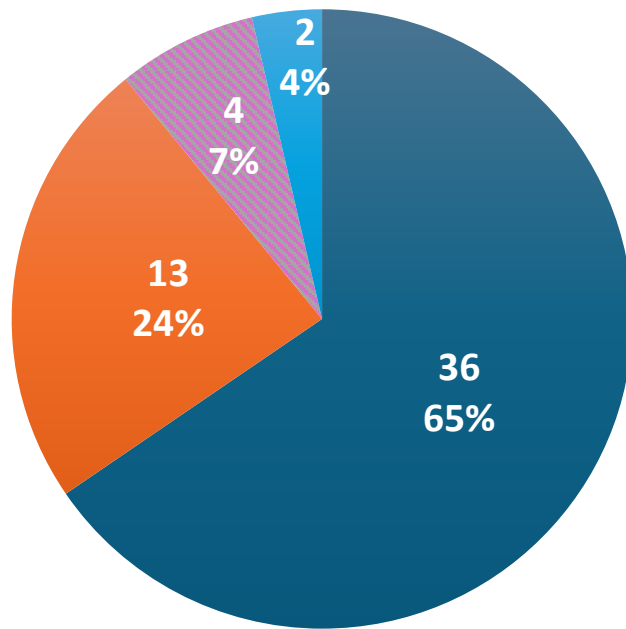
Bus Fleets

Fifty-five (55) school districts in the North Country Region provided NYSED with information on their current bus fleet and anticipated future needs. Thirty-six (36) districts maintain between 1 and 20 buses; thirteen (13) districts own between 21 and 40 buses; four (4) districts own between 41 and 60 buses; and two (2) districts have fleets of more than 60 vehicles. Of these reported fleets, fifty (50) school districts reported that no zero emission buses are currently owned. Five (5) districts, however, do currently maintain zero emission buses currently:

- Alexandria currently operates four (4, 23.5%) zero emission buses out of a fleet of seventeen buses (17) This is an increase of two (2) buses from the previous year.
- Brushton-Moira currently operates one (1, 7.1%) zero emission bus out of a fleet of fourteen buses (14).
- Norwood-Norfolk currently operates one (1, 4.1%) zero emission bus out of a fleet of twenty-four buses (24).
- Carthage reported currently operating one (1, 1.3%) zero emission bus out of a fleet of seventy-five (75).
- Salmon River currently operates two (2, 3.7%) zero-emission buses out of a fleet of fifty-four buses (54).
- Malone reported currently operating four (4, 8.5%) zero emission bus out of a fleet of forty-seven (47).
- Districts in this region report seven (7) zero emission buses currently on order.

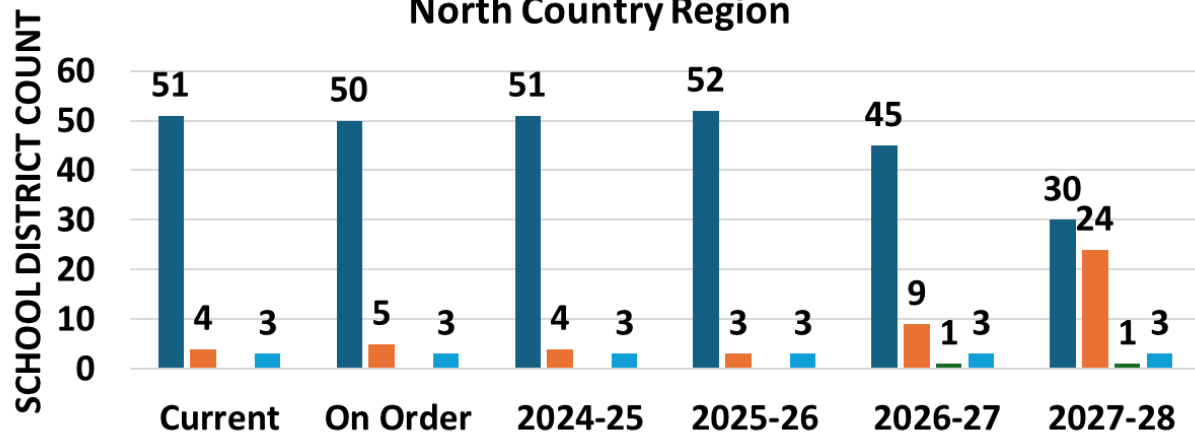
Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- North Country Region



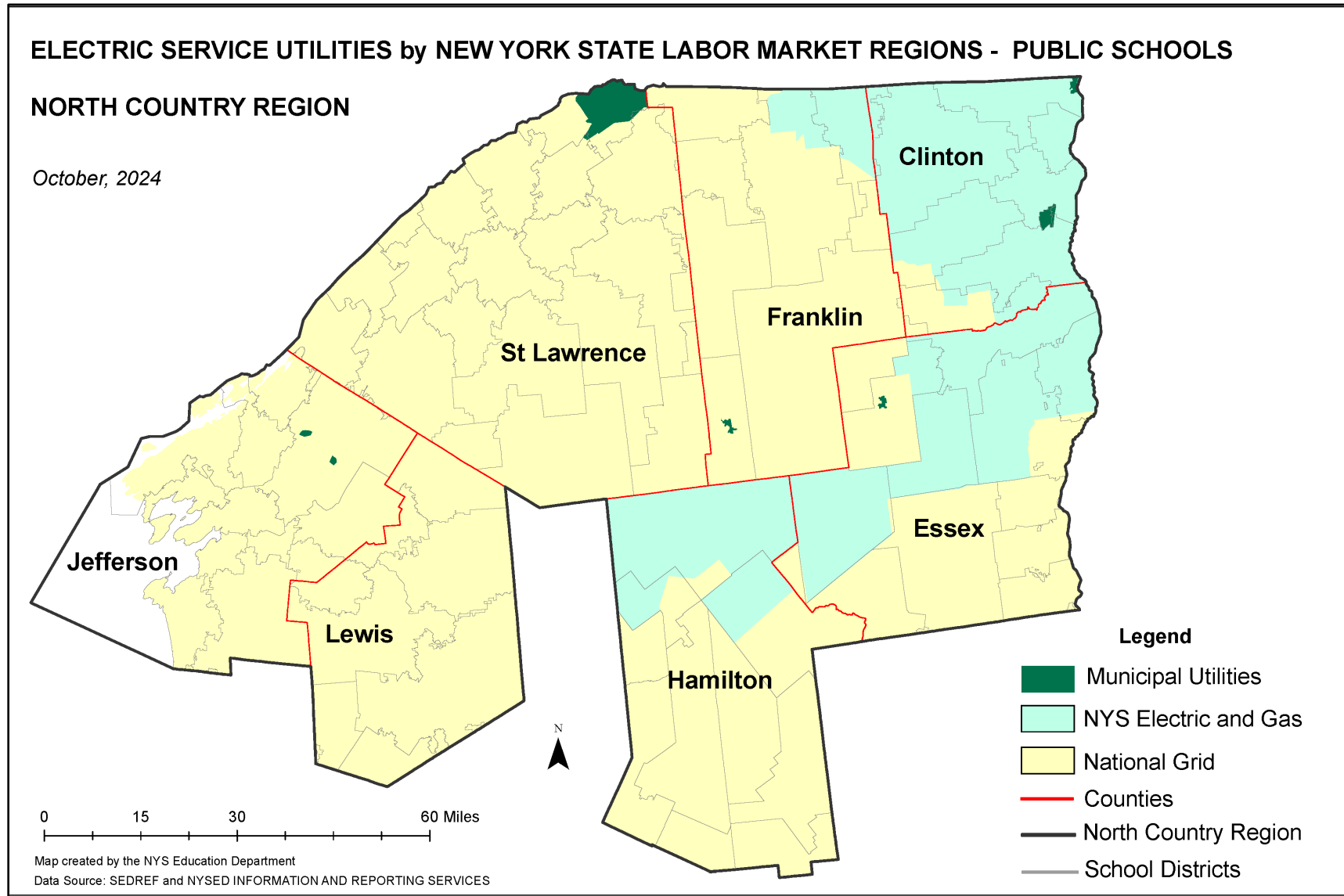
Number of Buses: ■ 1-20 ■ 21-40 ■ 41-60 ■ 61+

CURRENT AND ANTICIPATED ZERO EMISSION BUSES North Country Region



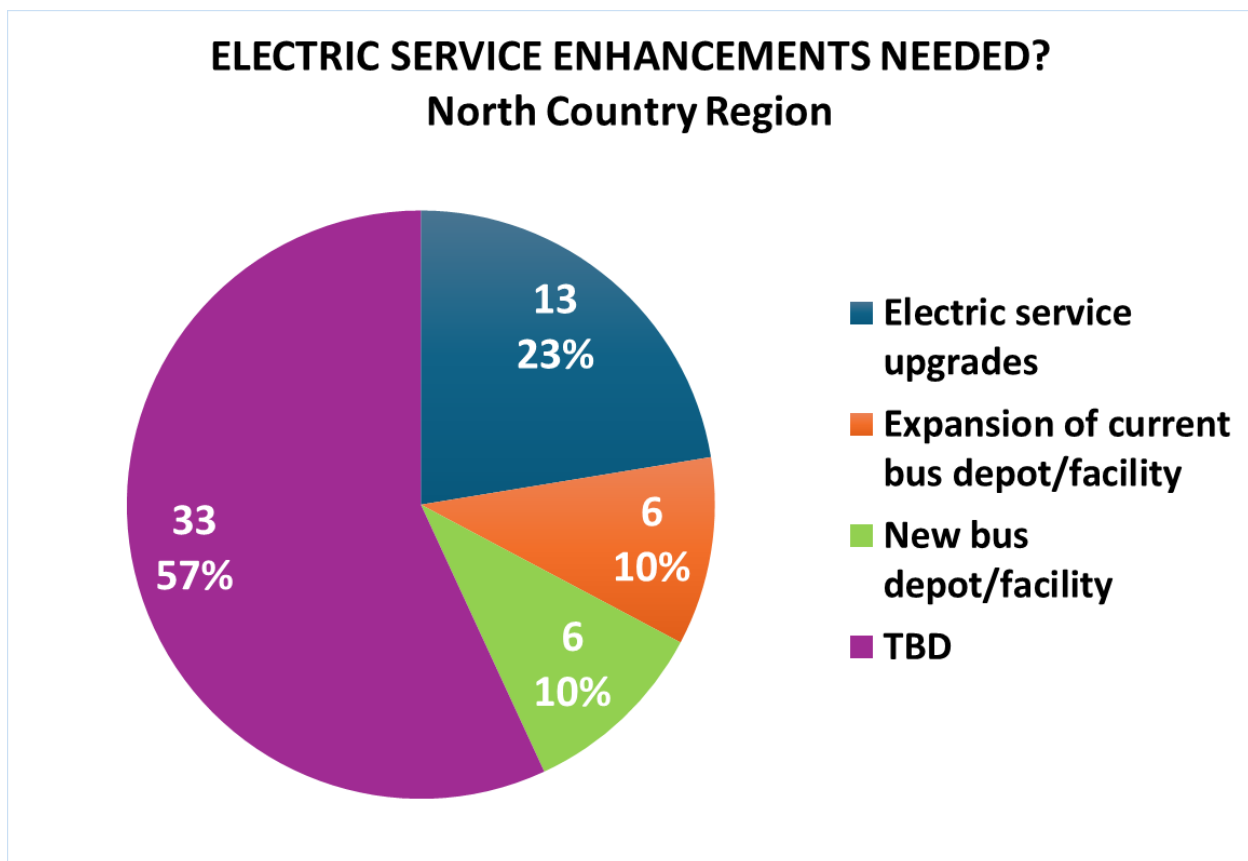
YEAR
Number of Buses: ■ 0 ■ 1-5 ■ 11-15 ■ TBD

Infrastructure Assessment



Electric Service

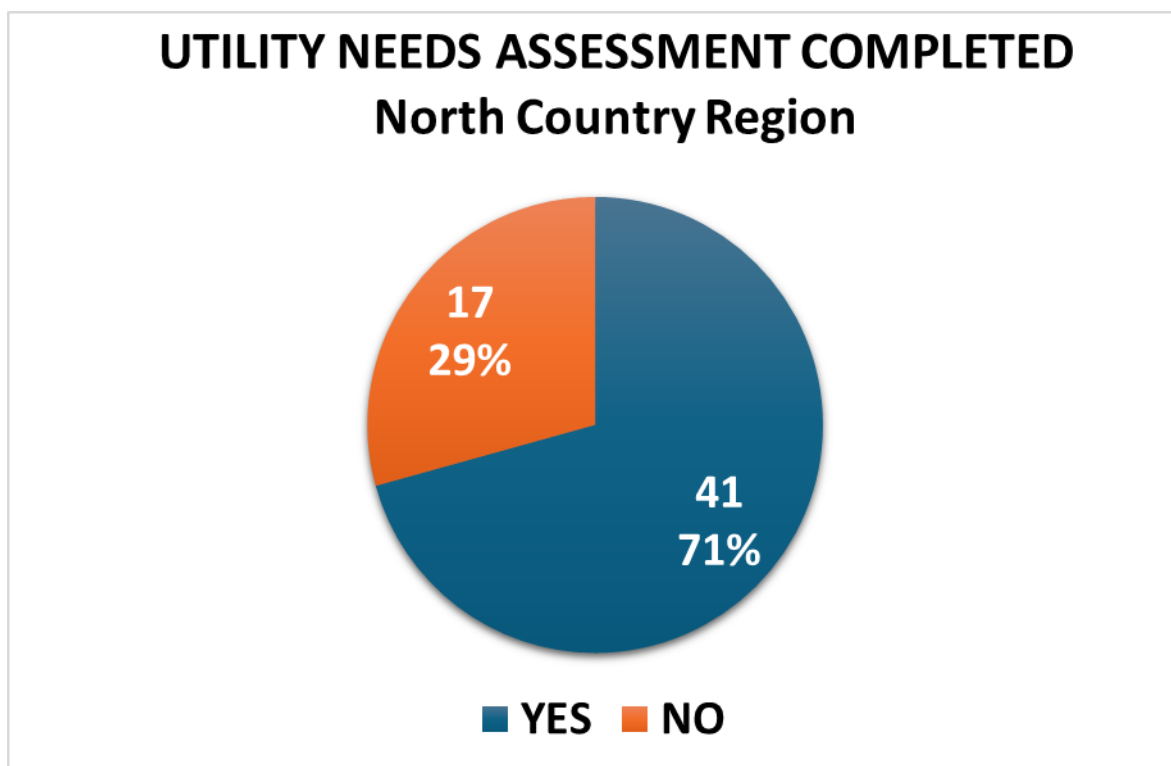
School Districts in the North Country Region primarily receive electricity from two (2) major utility companies—NYSEG and National Grid. However, also as indicated, there are some small utility providers serving a similarly small number of districts. In general, districts in the North Country report that current electric service is sufficient for their needs in 2025-26. However, as evidenced in the graph below, thirteen (13) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, six (6) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. Six (6) districts report needing a new bus depot/facility. A total of thirty-three (33) districts are still assessing their needs.

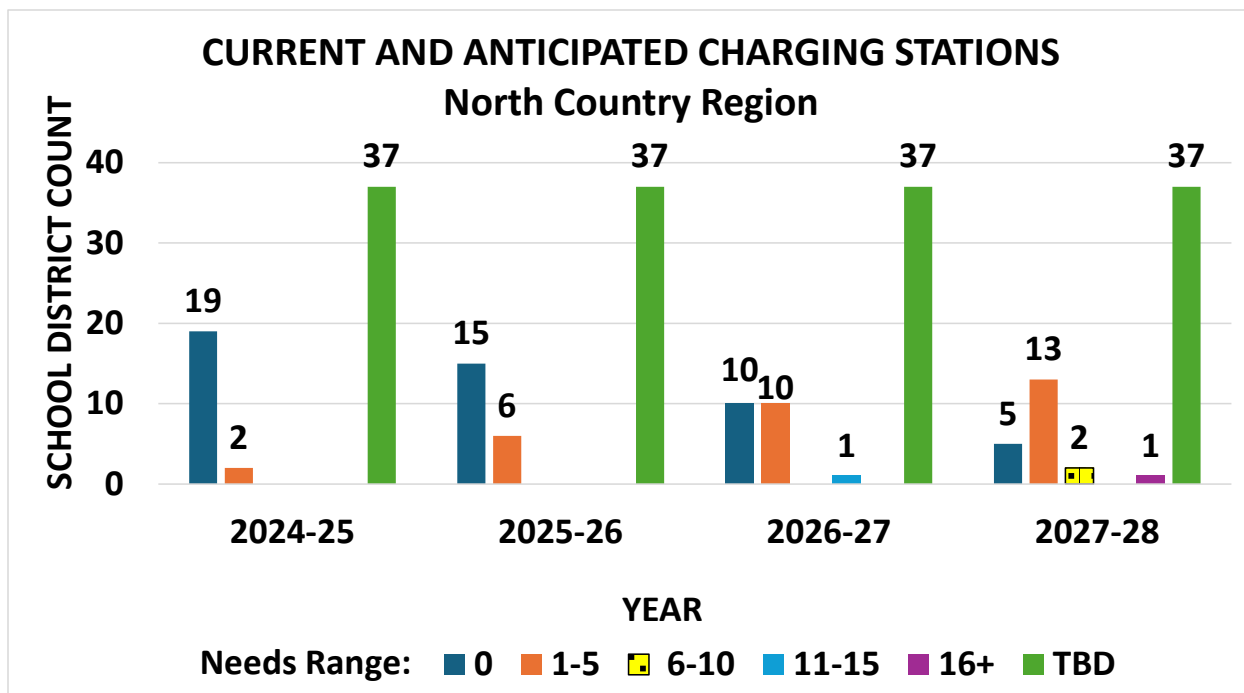


Charging Stations and Infrastructure

Fifty-six (56) school districts in the region report that there are no charging stations available in the district, currently. However, two (2) districts report that 1-5 chargers are installed already or are anticipated for 2025-26. Mirroring the data around bus acquisition,

districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least twenty-one (21) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts and lack of voter approval for zero emission busing. Based on the data collected from fifty-eight (58) districts, forty-one districts (41, 71%) have completed their electric utility needs assessment or have a load letter from their utility provider.



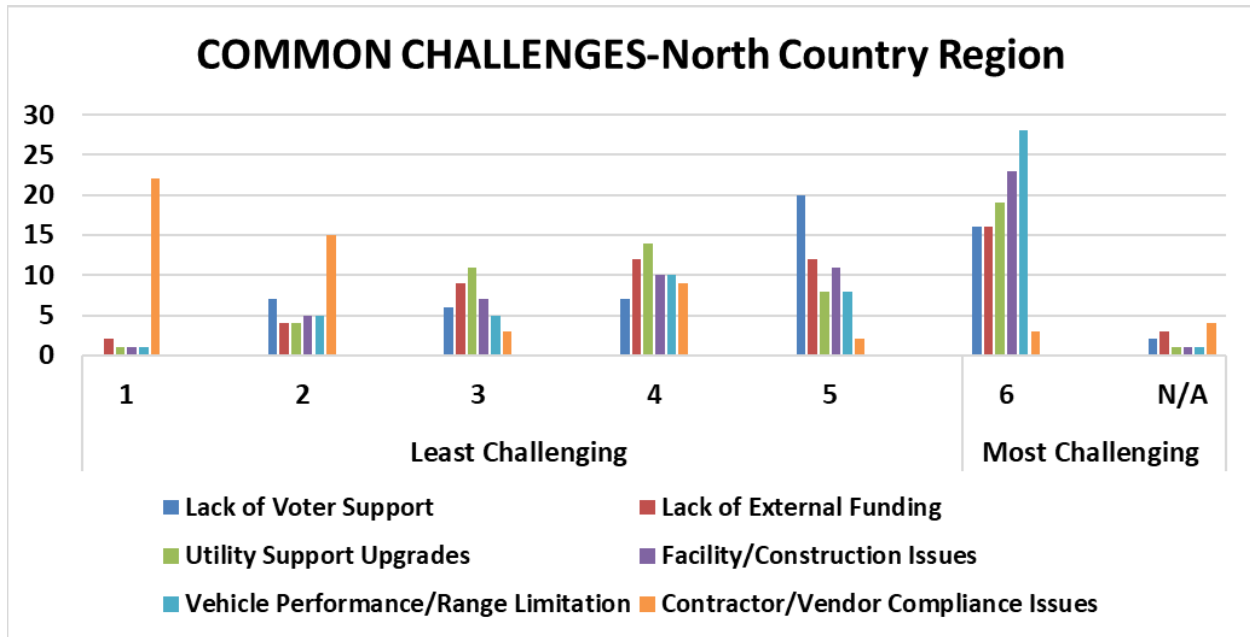


Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

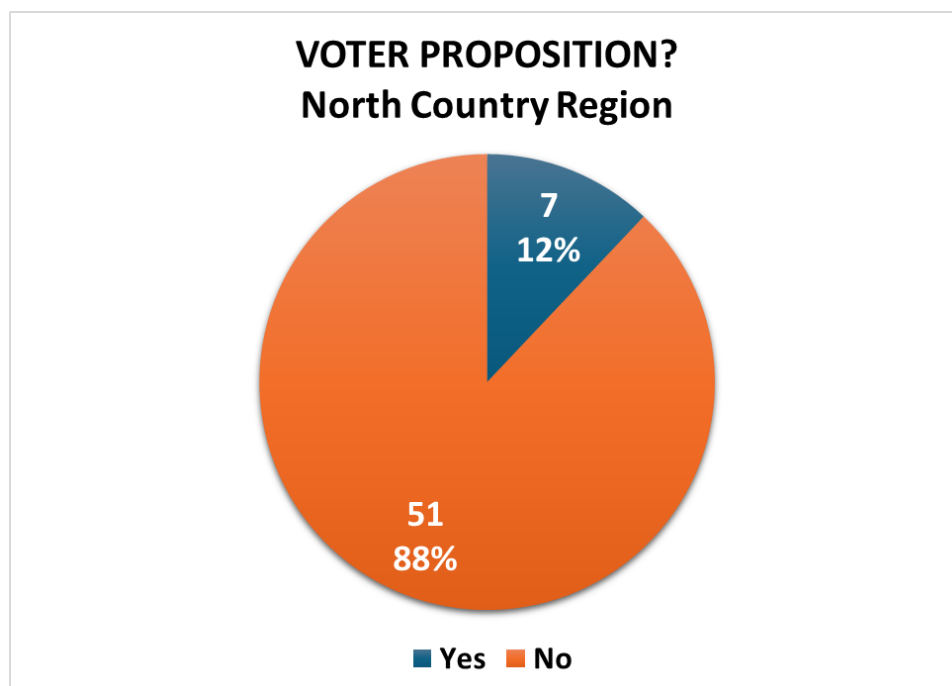
1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the North Country region show that Vehicle Performance/Range Limitation, Facility Construction issues, and Utility Support upgrades were rated the highest in the most challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



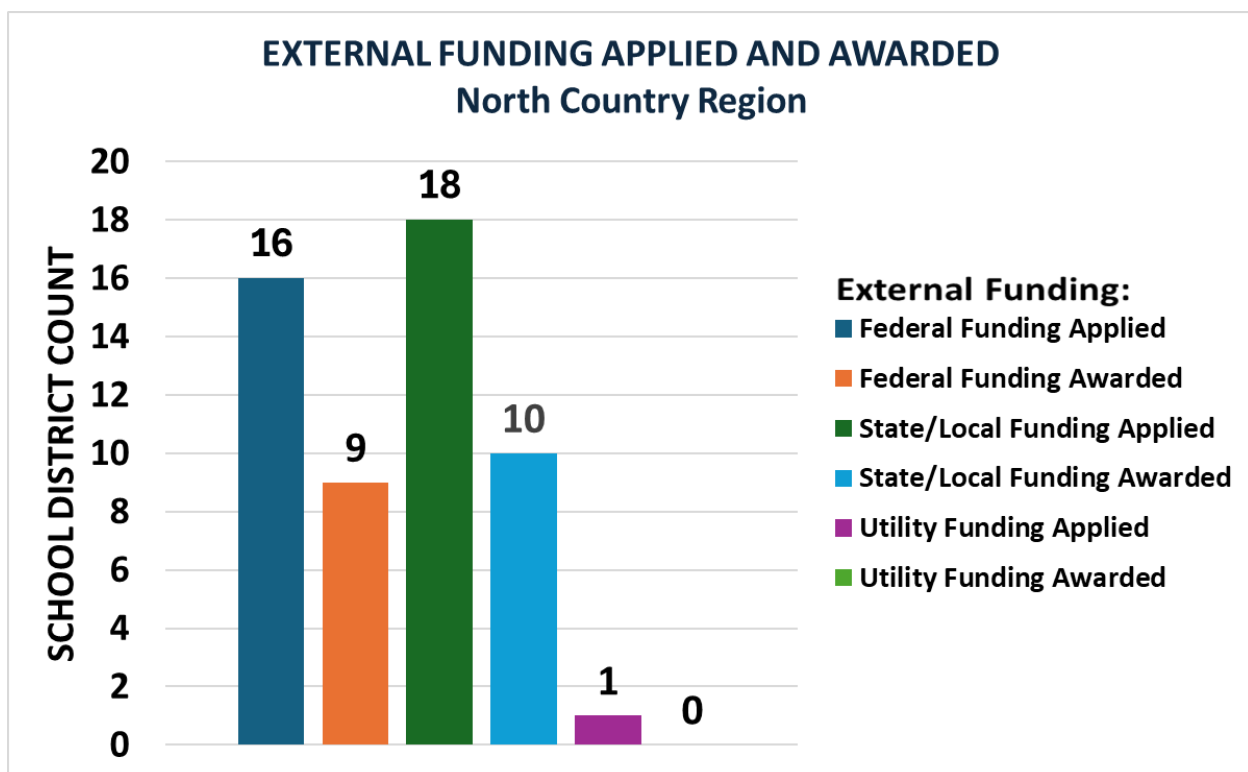
Voter Proposition/Approval

The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data show that in the North Country region seven (7, 12%) districts have put a voter proposition before the voters, and only three (3) were approved.



Funding Opportunities

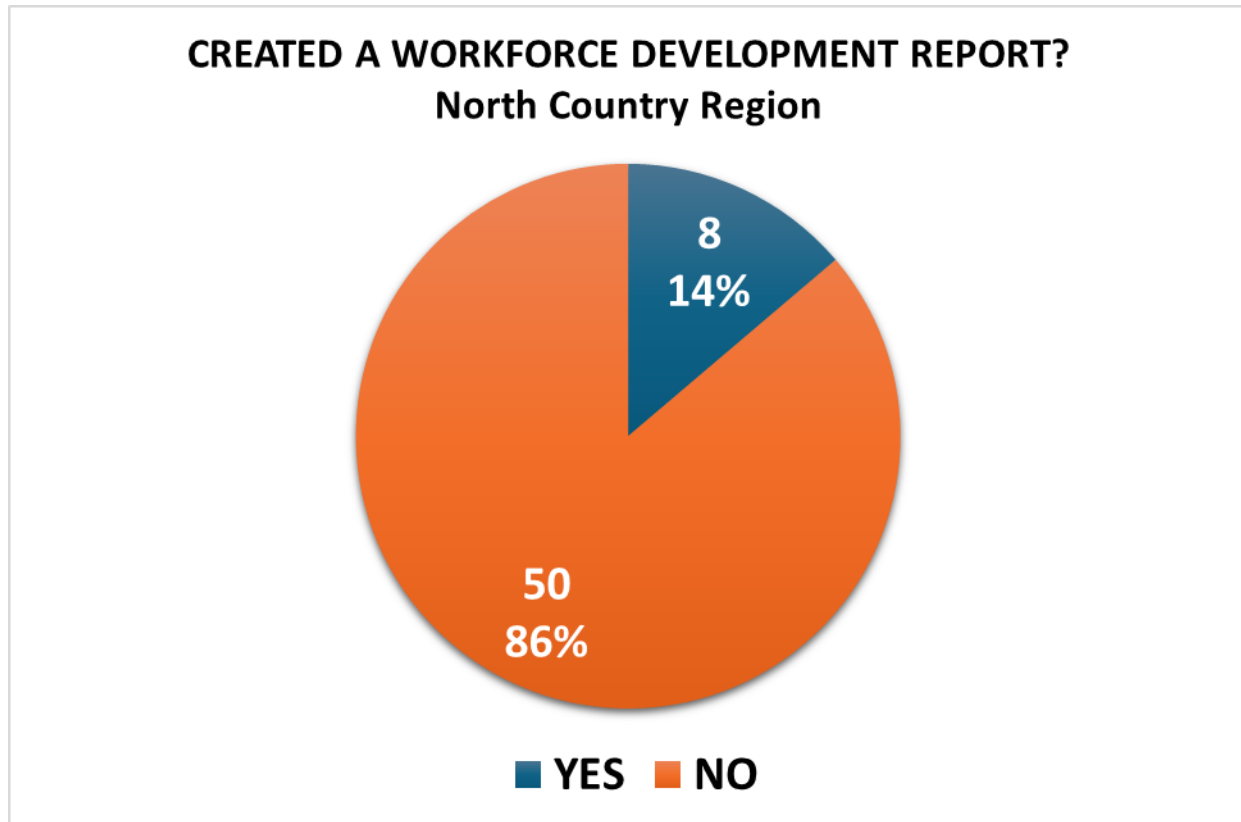
State/Local Funding opportunities were available to many school districts, and eighteen districts (18, 31%) in the region applied for and received these funds with a range from a low of \$50,000 to a high of \$700,000. The average award was approximately \$253,831. Federal Funding opportunities have been available to the districts and sixteen districts (16, 28%) applied for and received funds with a low of \$50,000 to a high of \$4,345,000. The average Federal award was approximately \$479,211. One (1) district reported applying for Utility Funding and received no funds.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In

the North Country region eight districts (8, 14%) out of fifty-eight (58) reported completing a Workforce Development Plan.



Transition towards Zero Emission Busing

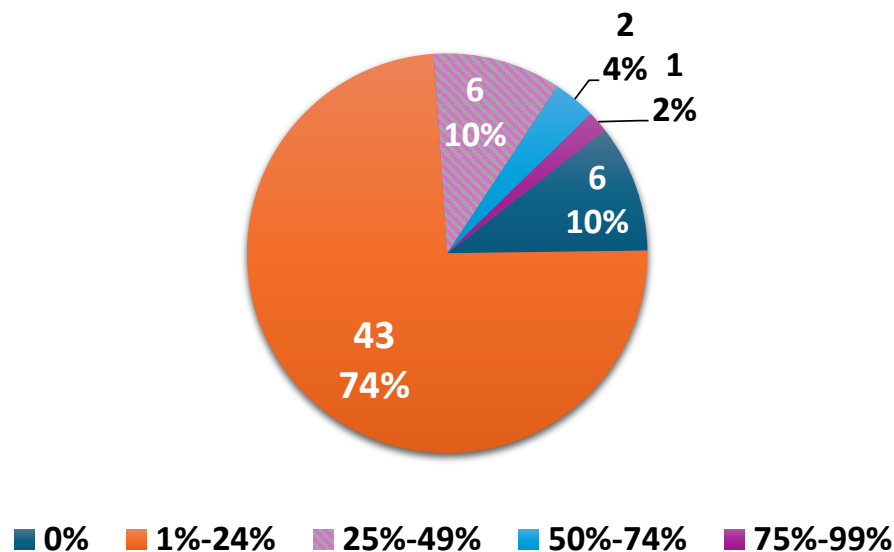
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 75-99% complete;
- Two (2) districts reported they are 50-74% complete;
- Six (6) districts reported they are 25-49% complete;
- Forty-three (43) districts reported they are 1-24% complete; and
- Six (6) districts reported they have not made any progress to date.

In total, fifty-two districts (52, 90%) have begun the transition to zero-emission busing, while six districts (6, 10%) remain at 0%.

PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION North Country Region



District Comments-Summary

The North Country Labor Market Region has sixty-five (65) school districts, out of which fifty-eight (58) completed the survey and forty-one (41) left additional comments. This region faces many obstacles in transitioning to ZEB busing due to geography, weather, staffing, and poverty. While some districts reported support for the state mandate and were making progress – planning facilities upgrades, completing FEPs, and purchase of buses – many found insurmountable problems with a mandate described as “financially unsustainable and logistically impractical.” Costs were a major concern, particularly due to uncertainties surrounding funding over the long term. Fears of increased electricity rates for the entire community with municipal providers were also prominent. But by far the greatest concerns were with battery range and a geographical environment not hospitable to electrification. Extreme cold detracted from battery performance and fears of student safety and stranding were common complaints.

Staffing shortages came up in many of the comments. Districts were already short-staffed and worried that there would not be enough specialized mechanics with the training to service electric buses. Voter opposition is fierce, both for reasons of cost and

ideology, according to the comments. More than twenty percent of districts that left comments reported that they would not be complying with the mandate.

Mohawk Valley Region

Regional Summary and Response Rate

The Mohawk Valley Labor Market Region contains six (6) counties—Fulton, Herkimer, Montgomery, Oneida, Otsego, and Schoharie. Together, there are fifty-four (54) traditional school districts covering an area of approximately 5,392.5 square miles that were responsible for educating 61,301 school-age children in the 2024-25 school year. NYSED received responses from fifty-two (52) school districts, bringing the overall response rate for the region to about ninety-six percent (96%), with two (2) non-responsive districts. Data from NYSERDA shows that four districts (4, 7%) in the region have a completed Fleet Electrification Plan (FEP), and thirty-three (33, 61%) are underway with their FEP process. Additionally, four districts (4, 7%) report having made the initial contact with NYSERDA to begin the process. Currently eleven districts (11, 20%) have made no contact with NYSERDA as of the time of reporting. The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

MOHAWK VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ADIRONDACK CSD	410401	1,097	360.5	Submitted	Underway
AMSTERDAM CITY SD	270100	3,560	77.44	Submitted	Complete
BROADALBIN-PERTH CSD	171102	1,563	87.55	Not Submitted	Underway
CAMDEN CSD	410601	1,915	303.4	Submitted	Underway
CANAJOHARIE CSD	270301	794	98.26	Submitted	Complete
CENTRAL VALLEY CSD AT ILION-MOHAWK	212101	1,914	55.1	Submitted	Applied
CHERRY VALLEY-SPRINGFIELD CSD	472202	406	137.2	Submitted	Underway
CLINTON CSD	411101	1,146	38.03	Submitted	Initial Contact Made
COBLESKILL-RICHMONDVILLE CSD	541102	1,478	181.2	Submitted	Underway
COOPERSTOWN CSD	471701	768	98.3	Submitted	Underway

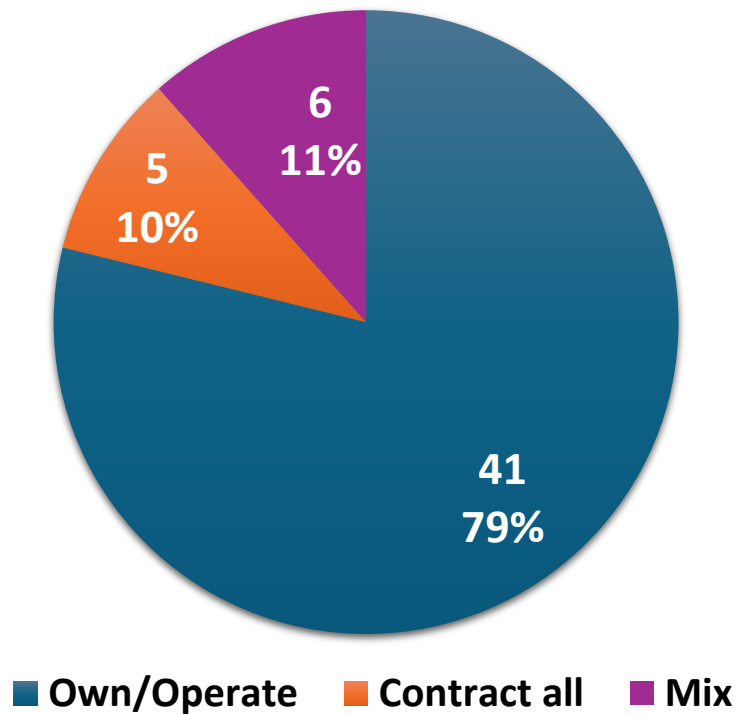
MOHAWK VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
DOLGEVILLE CSD	211003	762	175.9	Submitted	Underway
EDMESTON CSD	470501	370	84.78	Submitted	Initial Contact Made
FONDA-FULTONVILLE CSD	270601	1,179	85.52	Submitted	Underway
FORT PLAIN CSD	270701	625	56.64	Submitted	Underway
FRANKFORT-SCHUYLER CSD	210402	850	39.54	Submitted	No Contact
GILBERTSVILLE-MOUNT UPTON CSD	470202	302	62.49	Submitted	Underway
GILBOA-CONESVILLE CSD	540801	240	134.8	Submitted	Underway
GLOVERSVILLE CITY SD	170500	2,342	88.83	Submitted	Underway
HERKIMER CSD	210601	1,027	22.43	Submitted	No Contact
HOLLAND PATENT CSD	412201	1,160	114.4	Submitted	Underway
JEFFERSON CSD	540901	141	70.13	Submitted	Complete
JOHNSTOWN CITY SD	170600	1,396	55.13	Submitted	Underway
LAURENS CSD	470801	275	28.17	Submitted	Underway
LITTLE FALLS CITY SD	210800	1,005	57.41	Submitted	Underway
MAYFIELD CSD	170801	773	49.5	Submitted	Underway
MIDDLEBURGH CSD	541001	581	179.7	Submitted	Underway
MILFORD CSD	471101	323	58.41	Submitted	Underway
MORRIS CSD	471201	307	66.63	Submitted	Underway
MOUNT MARKHAM CSD	212001	969	96.44	Not Submitted	No Contact
NEW HARTFORD CSD	411501	2,466	27.54	Submitted	No Contact
NORTHVILLE CSD	170901	398	142.9	Submitted	Underway
NY MILLS UFSD	411504	521	2.65	Submitted	Initial Contact Made
ONEONTA CITY SD	471400	1,679	21.77	Submitted	No Contact
OPPENHEIM-EPHRATAH-ST. JOHNSVILLE CS	271201	667	117.7	Submitted	Underway
ORISKANY CSD	412901	539	24.38	Submitted	Underway
OTEGO-UNADILLA CSD	471601	693	83.23	Submitted	No Contact
POLAND CSD	211103	467	458.8	Submitted	Initial Contact Made
REMSEN CSD	411701	381	68.39	Submitted	Underway
RICHFIELD SPRINGS CSD	472001	402	87.85	Submitted	Underway

MOHAWK VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ROME CITY SD	411800	4,990	99.07	Submitted	Underway
SAUQUOIT VALLEY CSD	411603	883	38.97	Submitted	Underway
SCHENEVUS CSD	470901	233	65.99	Submitted	Underway
SCHOHARIE CSD	541201	808	78.74	Submitted	Underway
SHARON SPRINGS CSD	541401	264	47.49	Submitted	Underway
SHERRILL CITY SD	412000	1,738	95.19	Submitted	No Contact
TOWN OF WEBB UFSD	211901	219	511.2	Submitted	No Contact
UTICA CITY SD	412300	9,075	15.48	Submitted	No Contact
VAN HORNESVILLE-OWEN D YOUNG CSD	211701	159	65.97	Submitted	No Contact
WATERVILLE CSD	411902	730	67.46	Submitted	Underway
WEST CANADA VALLEY CSD	210302	637	107.2	Submitted	No Contact
WESTMORELAND CSD	412801	775	42.91	Submitted	Applied
WHEELERVILLE UFSD	170301	103	53.78	Submitted	Complete
WHITESBORO CSD	412902	2,898	42.36	Submitted	Underway
WORCESTER CSD	472506	308	61.52	Submitted	Underway

Transportation Means

Nearly all school districts in the Mohawk Valley Region own and operate buses. Forty-one (41, 79%) districts currently own and operate all school buses serving districts' needs; five (5, 10%) districts indicate that all transportation services are contracted out; and six (6, 11%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.

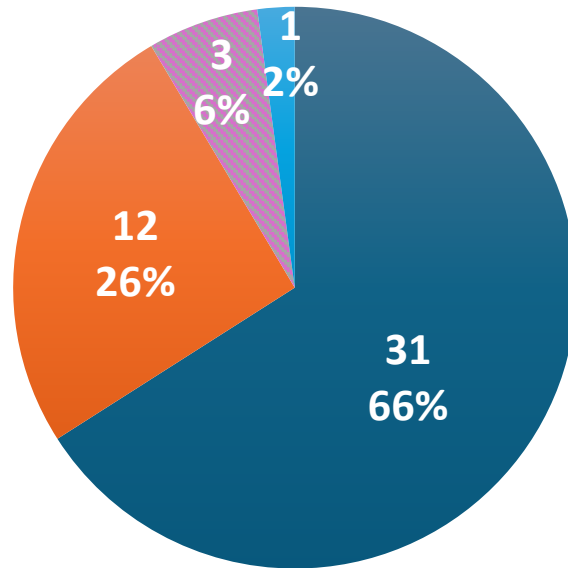
TRANSPORTATION MEANS Mohawk Valley Region



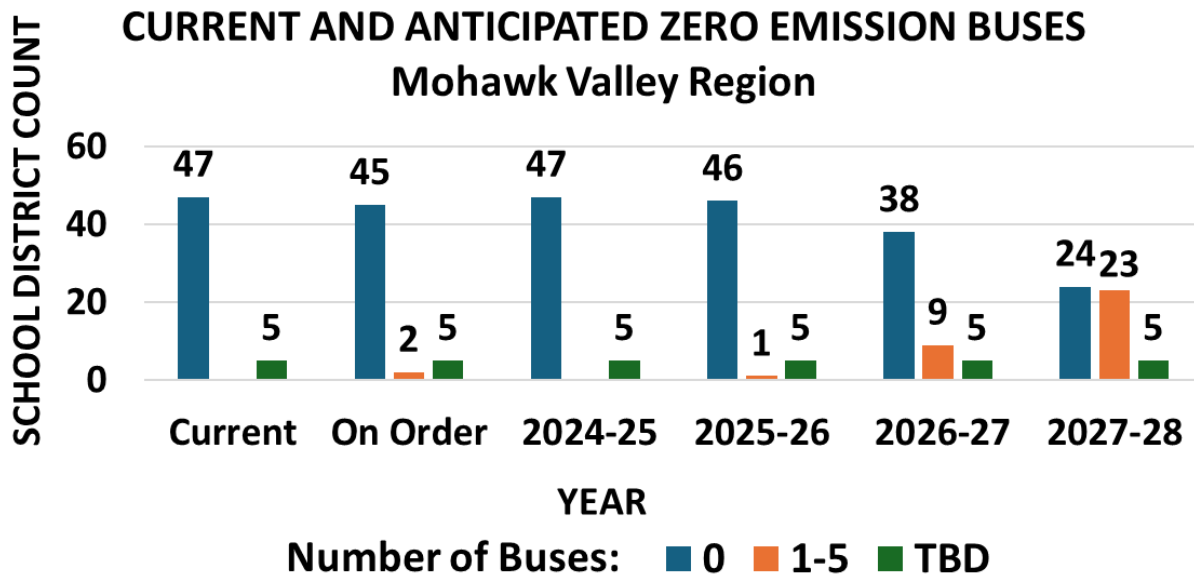
Bus Fleets

Forty-seven (47) school districts in the Mohawk Valley Region provided NYSED with information on their current bus fleet and anticipated future needs. Thirty-one (31) districts maintain between 1 and 20 buses; twelve (12) districts own between 21 and 40 buses; and three (3) districts own between 41 and 60 buses, and one (1) district owns 60+ buses. None of the respondent school districts in the region currently own any zero-emission buses. In the Mohawk Valley Region, the districts report having two (2) zero emission buses on order. Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Mohawk Valley Region



Number of Buses: ■ 1-20 ■ 21-40 ■ 41-60 ■ 61+

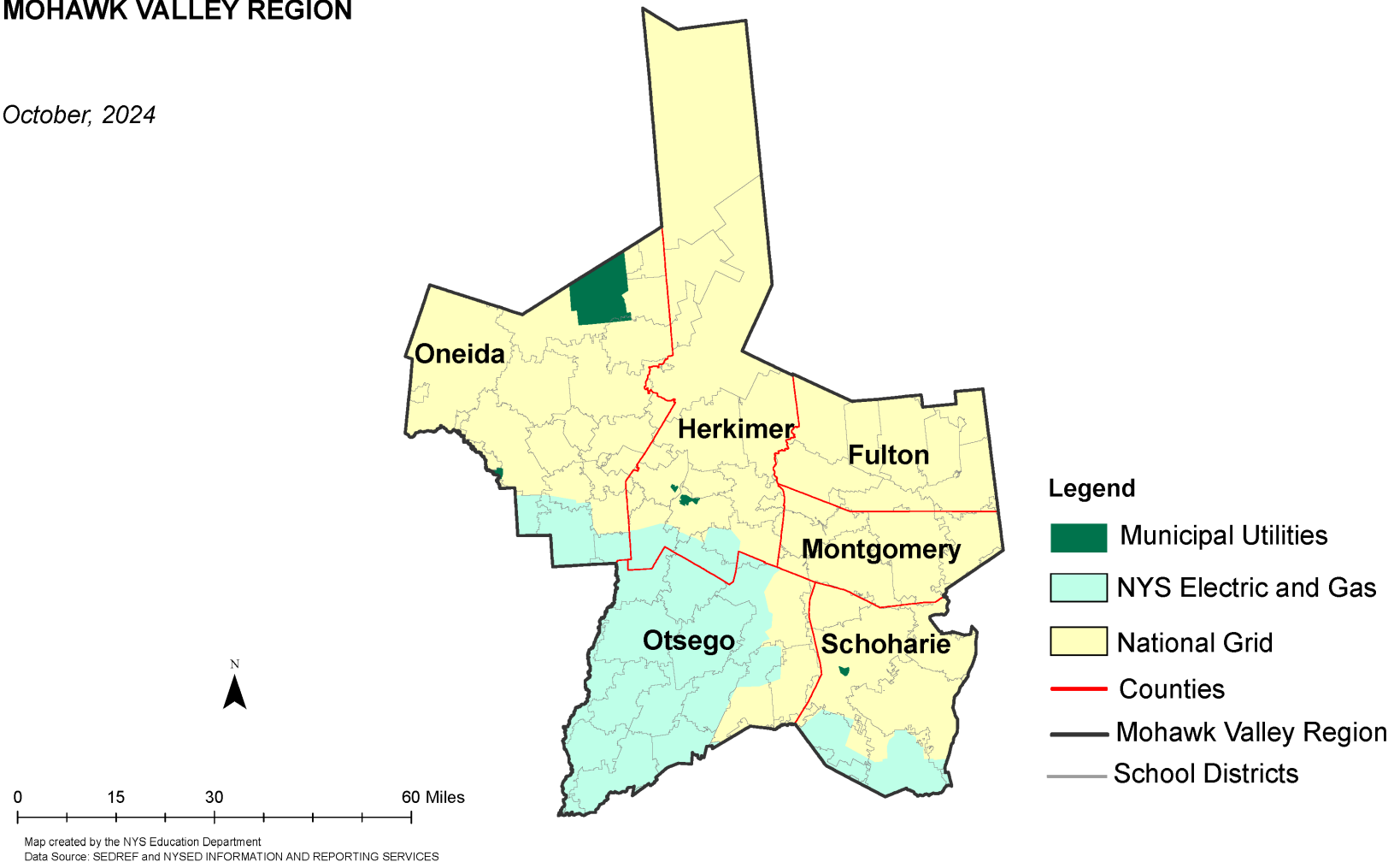


Infrastructure Assessment

ELECTRIC SERVICE UTILITIES by NEW YORK STATE LABOR MARKET REGIONS - PUBLIC SCHOOLS

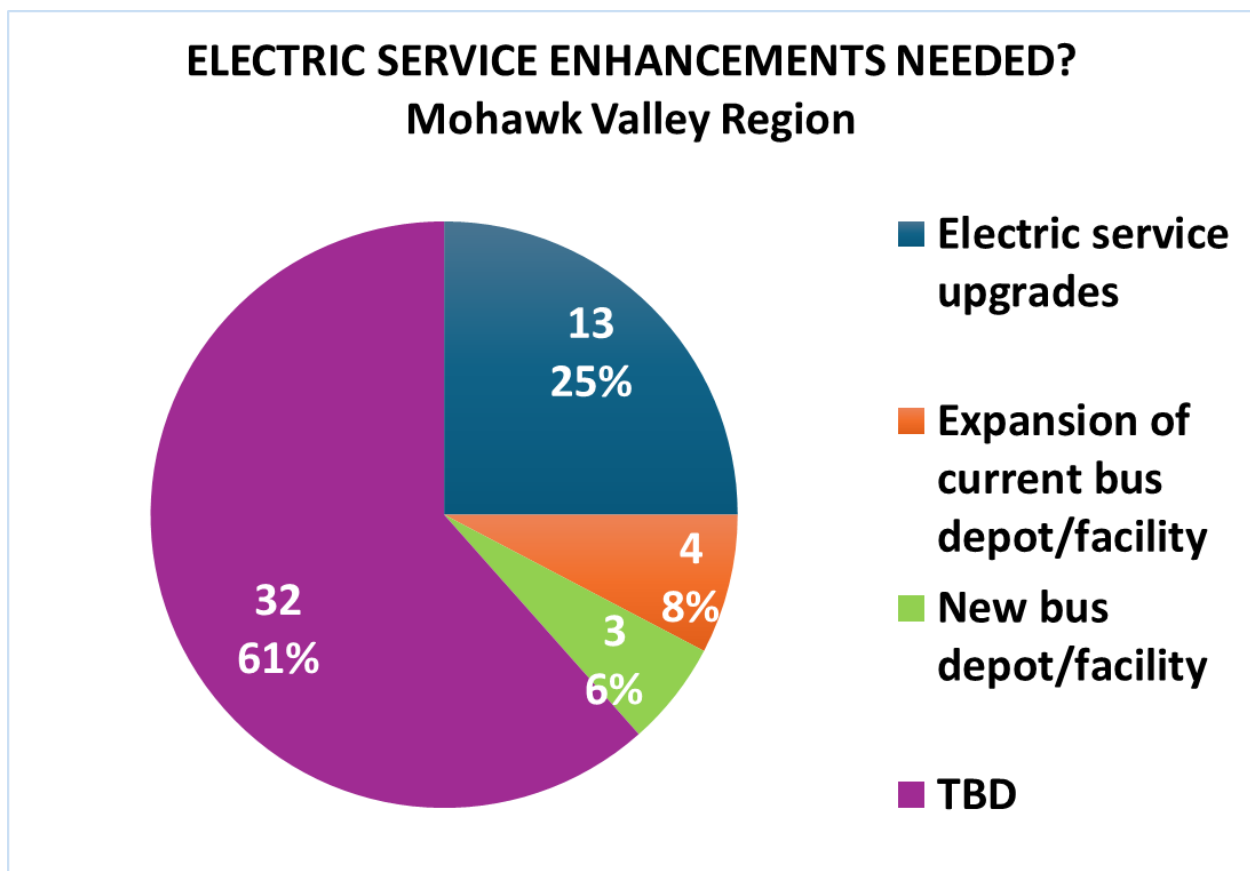
MOHAWK VALLEY REGION

October, 2024



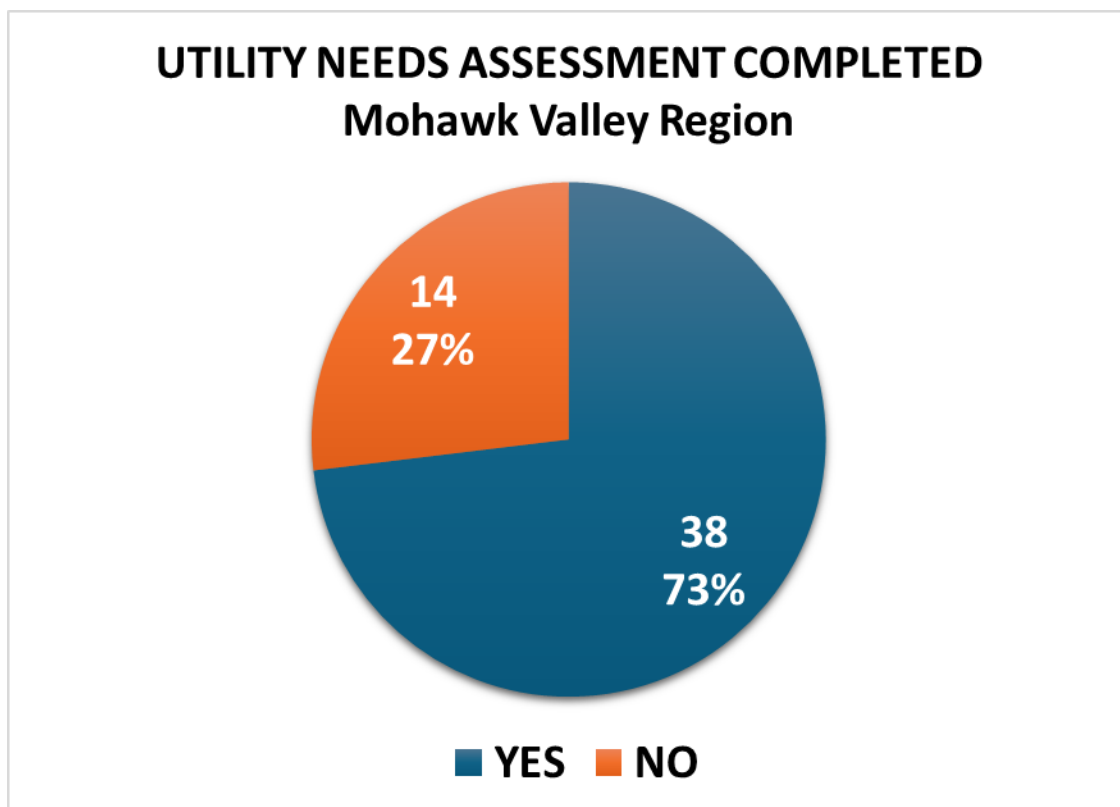
Electric Service

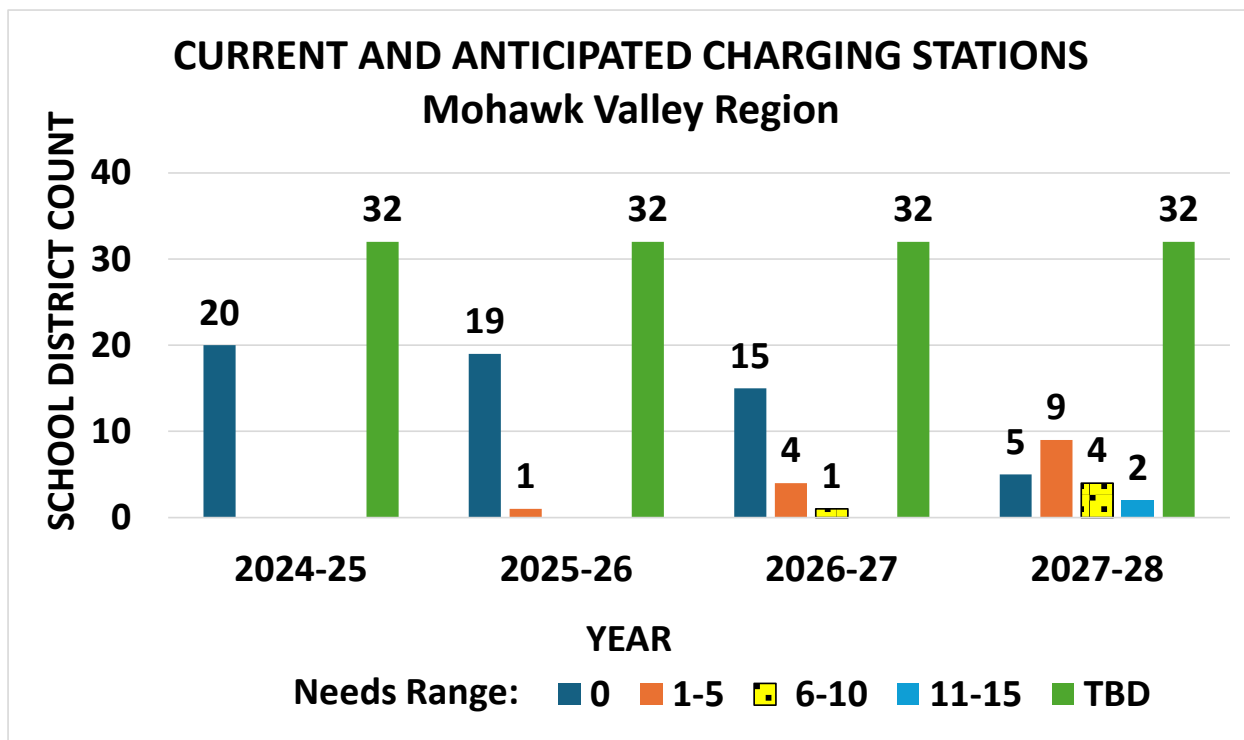
School Districts in the Mohawk Valley Region primarily receive electricity from two major utility companies—NYSEG and National Grid. However, also as indicated, there are some small utility providers serving a similarly small number of districts. In general, districts in the Mohawk Valley report that current electric service is sufficient for their needs in 2025-26. However, as evidenced in the graph below, thirteen (13) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, four (4) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. Three (3) districts reported needing new bus depot/facilities. A total of thirty-two (32) districts are still assessing their needs.



Charging Stations and Infrastructure

Fifty-two (52) school districts in the region that responded to the survey report said that there are no charging stations available in the district, currently. Twenty (20) districts reported the need for a charging station in the future. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least twenty (20) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts, voter support for zero emission busing and needing to wait until formal fleet electrification plans are completed. Based on the data collected from fifty-two (52) districts, thirty-eight (38, 73%) districts have completed their electric utility needs assessment or have a load letter from their utility provider.





Challenges

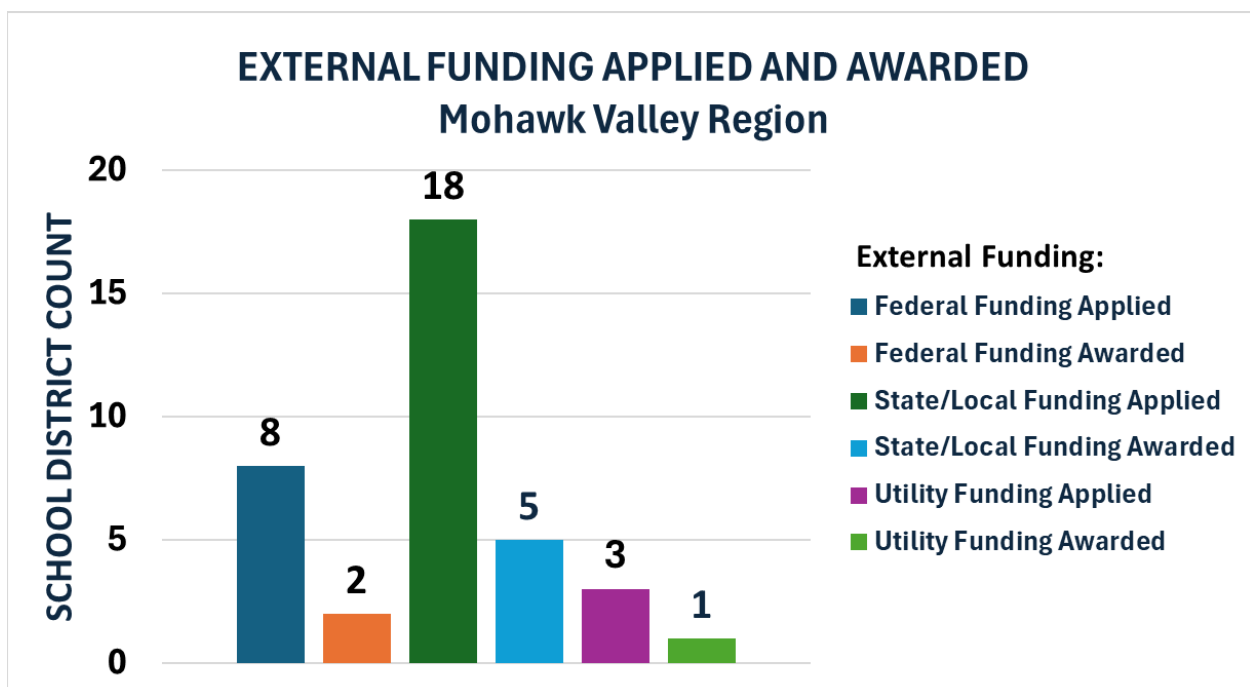
Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Mohawk Valley region show that Vehicle Performance and Range Limitation, Utility Support upgrades, and Lack of External Funding were rated the highest in the most challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.

Funding Opportunities

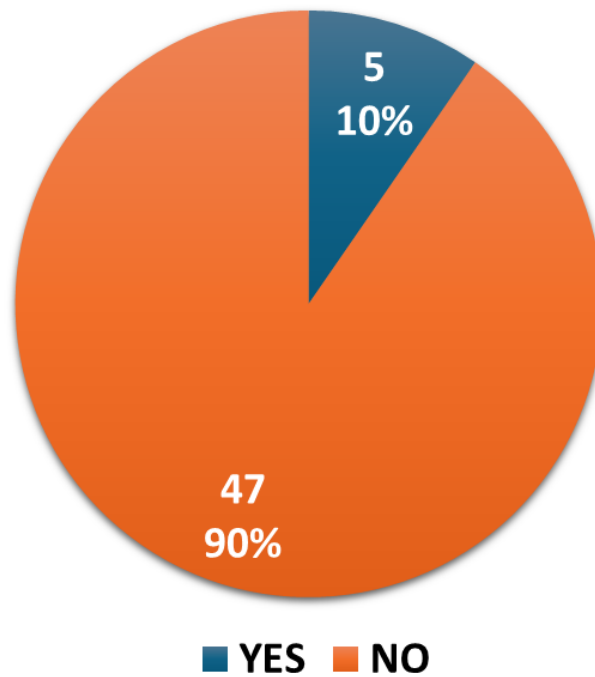
State/Local Funding opportunities were available to many districts and eighteen districts (18, 35%) applied for funds and only five (5) received these funds with a range from a low of \$34,901 to a high of \$450,000. The average award was approximately \$342,900. Federal Funding opportunities have been available to the districts. Eight districts (8, 15%) applied for funds and only two (2) districts received funds—one in the amount of \$200,000 and the other for \$1,125,000. One (1) district applied for Utility Funding and received \$34,901.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Mohawk Valley region five districts (5, 10%) reported completing a Workforce Development Plan out of fifty-two (52) districts.

CREATED A WORKFORCE DEVELOPMENT REPORT?
Mohawk Valley Region



Transition Towards Zero Emission Busing

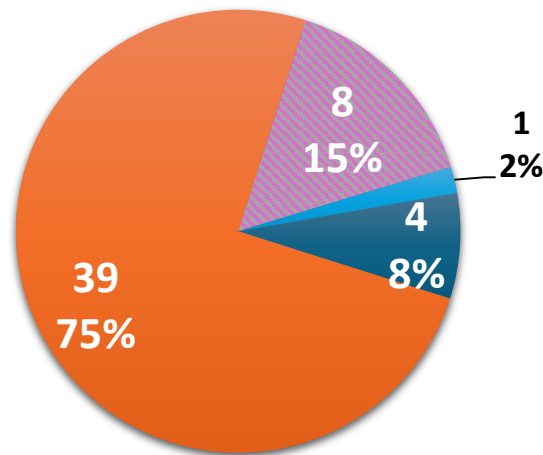
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 50-74% complete;
- Eight (8) districts reported they are 25-49% complete;
- Thirty-nine (39) districts reported they are 1-24% complete; and
- Four (4) districts have not yet made any progress toward transition.

In total, forty-eight districts (48, 92.3%) have begun the transition to zero-emission busing, while four districts (4, 7.7%) remain at 0%.

PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION
Mohawk Valley Region



■ 0%
 ■ 1%-24%
 ■ 25%-49%
 ■ 50%-74%

District Comments-Summary

Fifty-four (54) school districts comprise the Mohawk Valley Labor Market region. Out of those, fifty-one (51) completed the survey and thirty-five (35) left comments. Most districts reported that they had completed or were working on Fleet Assessment reports with National Grid and FEPs with NYSERDA, and some had applied for NYSERDA grants for bus purchases. Cost, however, posed a significant challenge for the many small rural districts in this Labor Market Region—many comments stressed the poverty of their districts and inability to meet the mandate. Wheelerville UFSD, which had a K-12 enrollment of one hundred (100) students in the 2023-24 school year, reported that with an annual budget of just over \$5 million, the first phase of transitioning their fleet would cost \$3,956,100, covering costs for two buses and charging stations, excluding “expenses for architecture, engineering, legal services, bonds, or sitework.” Canajoharie reported that for their district “[t]his mandate is unattainable. Period. The cost to get this moving and keep going will destroy the local tax base and cause reductions in programs and staff to our district.” Many districts reported inadequate garage facilities and electrical infrastructure to install and operate charging stations; and the costs for these upgrades as well as bus purchases were deemed out of reach by voters who opposed the state

mandate. The range of electric buses was also a major concern that factored into a lot of the responses; the general feeling was that buses were unreliable in cold weather and hilly areas.

Capital Region

Regional Summary and Response Rate

The Capital Region Labor Market Region contains eight (8) counties—Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington. Together, there are seventy-four (74) traditional school districts covering an area of approximately 4,814.3 square miles that were responsible for educating 129,949 school-age children in the 2024-25 school year. NYSED received responses from sixty-five (65) school districts, bringing the overall response rate for the region to about eighty-eight percent (88%), with nine (9) non-responsive districts. Data from NYSERDA show that two (2, 3%) of the districts in the region have completed a Fleet Electrification Plan (FEP), and thirty-eight (38, 51%) are underway with their FEP process. Additionally, two (2, 3%) of the districts report having made the initial contact with NYSERDA to begin the process. Currently thirty-one (31, 42%) of the districts have made no contact with NYSERDA as of this report. The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

CAPITAL REGION LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ALBANY CITY SD	010100	8,450	21.33	Submitted	No Contact
ARGYLE CSD	640101	475	58.83	Submitted	Underway
AVERILL PARK CSD	491302	2,543	99.62	Submitted	Underway
BALLSTON SPA CSD	521301	3,826	59.38	Submitted	Underway
BERLIN CSD	490101	579	255	Submitted	Underway
BERNE-KNOX-WESTERLO CSD	010201	640	120.2	Submitted	Underway
BETHLEHEM CSD	010306	4,077	44.9	Submitted	Underway
BOLTON CSD	630101	159	21.52	Submitted	Underway
BRUNSWICK CSD (BRITTONKILL)	490202	1,039	67.52	Submitted	Underway
BURNT HILLS-BALLSTON LAKE CSD	520101	3,105	48.38	Submitted	Underway
CAIRO-DURHAM CSD	190301	1,037	116.9	Submitted	No Contact

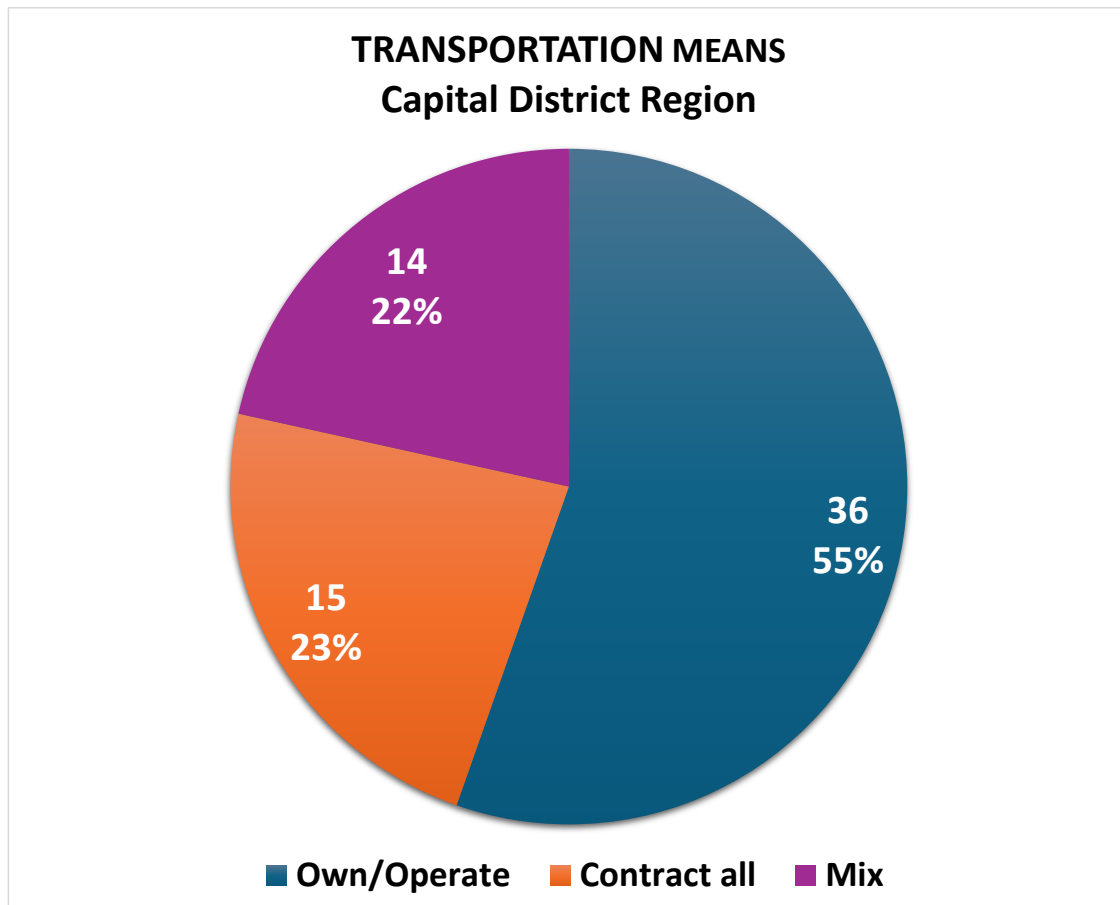
CAPITAL REGION LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
CAMBRIDGE CSD	641610	741	103.8	Submitted	Underway
CATSKILL CSD	190401	1,191	70.91	Submitted	No Contact
CHATHAM CSD	101001	871	129	Submitted	No Contact
COHOES CITY SD	010500	1,847	3.79	Not Submitted	No Contact
CORINTH CSD	520401	1,010	78.08	Submitted	Underway
COXSACKIE-ATHENS CSD	190501	1,093	63.11	Submitted	No Contact
DUANESBURG CSD	530101	615	57.22	Submitted	Underway
EAST GREENBUSH CSD	490301	4,085	72.23	Submitted	Initial Contact Made
EDINBURG COMMON SD	520601	47	74.41	Not Submitted	No Contact
FORT ANN CSD	640502	434	109.2	Submitted	No Contact
FORT EDWARD UFSD	640601	352	2.33	Submitted	No Contact
GALWAY CSD	520701	788	101	Submitted	Underway
GERMANTOWN CSD	100902	420	64.32	Submitted	Underway
GLENS FALLS CITY SD	630300	1,919	4.71	Submitted	No Contact
GLENS FALLS COMN SD	630918	139	0.8	Submitted	No Contact
GRANVILLE CSD	640701	936	80.35	Submitted	Underway
GREEN ISLAND UFSD	010701	211	0.87	Submitted	No Contact
GREENVILLE CSD	190701	1,038	121.7	Not Submitted	Underway
GREENWICH CSD	640801	823	95.61	Submitted	Underway
GUILDERLAND CSD	010802	4,822	50.01	Submitted	Underway
HADLEY-LUZERNE CSD	630801	609	166.6	Submitted	Underway
HARTFORD CSD	641001	339	60.55	Submitted	Underway
HOOSIC VALLEY CSD	491401	843	59.51	Submitted	Underway
HOOSICK FALLS CSD	490501	1,024	69.11	Submitted	No Contact
HUDSON CITY SD	101300	1,470	66.76	Not Submitted	No Contact
HUDSON FALLS CSD	641301	2,015	54.65	Submitted	Underway
HUNTER-TANNERSVILLE CSD	190901	310	163.8	Submitted	Underway
JOHNSBURG CSD	630601	234	195.8	Submitted	No Contact
KINDERHOOK CSD	101401	1,679	74.07	Submitted	No Contact
LAKE GEORGE CSD	630701	580	51.81	Submitted	Underway

CAPITAL REGION LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
LANSINGBURGH CSD	490601	1,950	12.7	Not Submitted	No Contact
MECHANICVILLE CITY SD	521200	1,283	18.44	Not Submitted	Underway
MENANDS UFSD	010615	282	3.07	Submitted	No Contact
NEW LEBANON CSD	101601	394	81.6	Submitted	No Contact
NISKAYUNA CSD	530301	4,315	20.14	Submitted	Underway
NORTH COLONIE CSD	010623	6,145	30.32	Submitted	Underway
NORTH GREENBUSH COMN SD (WILLIAMS)	490801	35	1.53	Submitted	No Contact
NORTH WARREN CSD	630202	454	143.6	Submitted	No Contact
PUTNAM CSD	641401	27	32.65	Submitted	No Contact
QUEENSBURY UFSD	630902	2,939	36.68	Submitted	Underway
RAVENA-COEYMANS-SELKIRK CSD	010402	1,653	84.74	Submitted	Underway
RENSSELAER CITY SD	491200	897	2.97	Submitted	No Contact
ROTTERDAM-MOHONASEN CSD	530515	2,772	8.5	Submitted	Underway
SALEM CSD	641501	505	77.95	Not Submitted	Underway
SARATOGA SPRINGS CITY SD	521800	5,750	107	Submitted	No Contact
SCHALMONT CSD	530501	1,753	70.36	Submitted	Underway
SCHENECTADY CITY SD	530600	8,653	11.34	Submitted	Underway
SCHODACK CSD	491501	842	31.78	Not Submitted	Complete
SCHUYLERVILLE CSD	521701	1,318	75.56	Submitted	No Contact
SCOTIA-GLENVILLE CSD	530202	2,102	36.04	Submitted	Applied
SHENENDEHOWA CSD	520302	9,348	72.52	Submitted	Underway
SOUTH COLONIE CSD	010601	4,884	21.22	Submitted	Underway
SOUTH GLENS FALLS CSD	521401	2,761	61.18	Submitted	Initial Contact Made
STILLWATER CSD	522001	965	50.18	Submitted	No Contact
TACONIC HILLS CSD	100501	932	196.2	Not Submitted	No Contact
TROY CITY SD	491700	3,464	10.45	Submitted	No Contact
VOORHEESVILLE CSD	011003	1,215	38.82	Submitted	Underway
WARRENSBURG CSD	631201	568	88.62	Submitted	Complete
WATERFORD-HALFMOON UFSD	522101	682	6.83	Submitted	No Contact
WATERVLIET CITY SD	011200	1,455	2.22	Submitted	Underway

CAPITAL REGION LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
WHITEHALL CSD	641701	636	121.2	Submitted	Underway
WINDHAM-ASHLAND-JEWETT CSD	191401	264	94.76	Submitted	No Contact
WYNANTSKILL UFSD	490804	291	3.29	Submitted	No Contact

Transportation Means

More than half of school districts in the Capital Region own and operate buses. Thirty-six (36, 55%) districts currently own and operate all school buses serving districts' needs; fifteen (15, 23%) districts indicate that all transportation services are contracted out; and fourteen (14, 22%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.

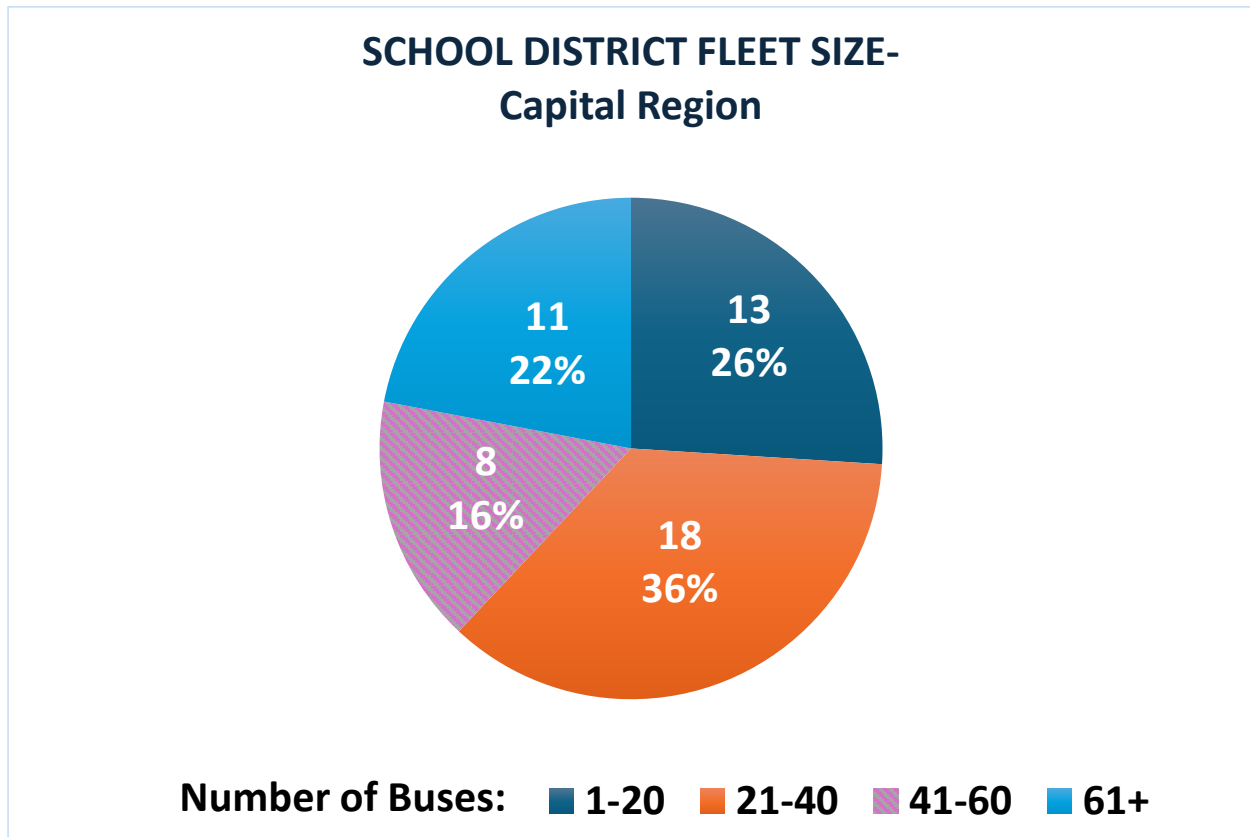


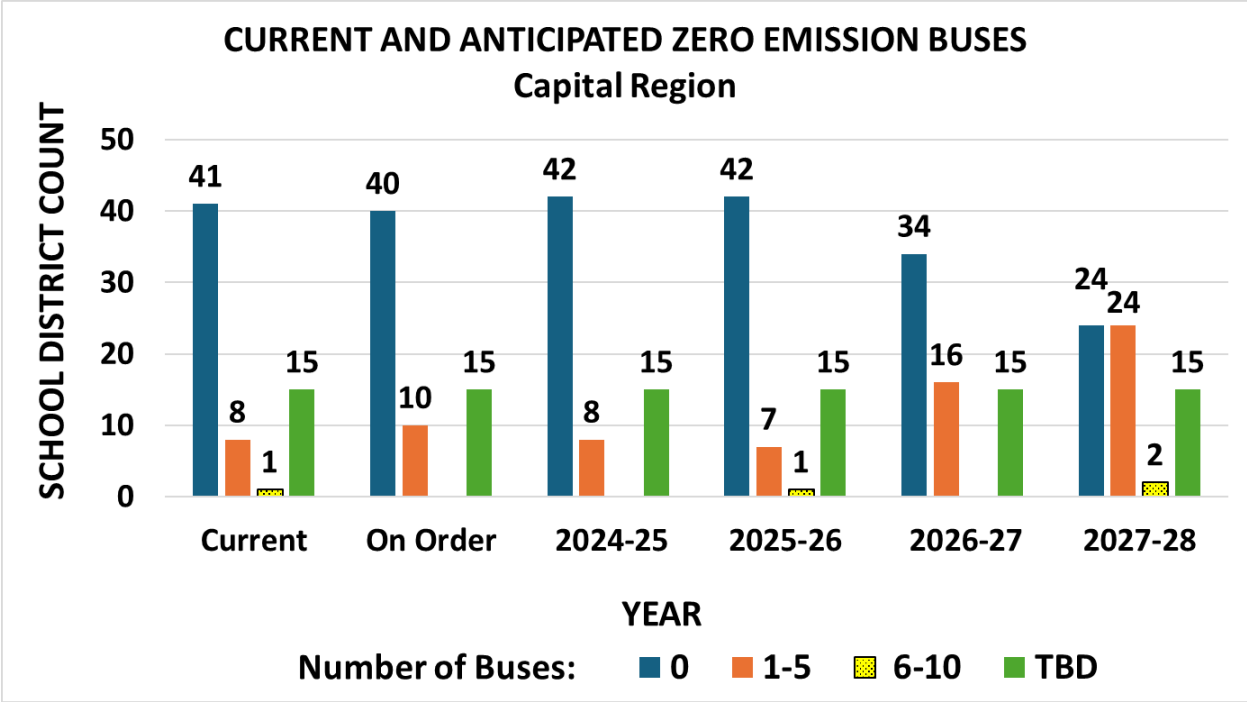
Bus Fleets

Forty-nine (49) school districts in the Capital Region provided NYSED with information on their current bus fleet and anticipated future needs. Thirteen (13) districts maintain between 1 and 20 buses; eighteen (18) districts own between 21 and 40 buses; eight (8) districts maintain a fleet of between 41 and 60 buses; and eleven (11) districts own between 41 and 60 buses. Of these reported fleets, forty-one (41) school districts reported that no zero emission buses are currently owned. Nine (9) districts, however, do currently maintain zero emission buses at this time, this is an increase of seven (7) districts from last year:

- Bethlehem currently operates seven (7, 6.7%) zero emission buses out of a fleet of one hundred-four buses (104).
- Shenendehowa currently operates four (4, 1.9%) zero emission buses out of a fleet of two-hundred and fifteen (215).
- Burnt Hills-Ballston Lake currently operates four (4, 6%) zero emission buses out of a fleet of sixty-six buses (66).
- Guilderland currently operates two (2, 1.8%) zero emission buses out of a fleet of one-hundred and thirteen (113).
- Niskayuna currently operates two (2, 2.1%) zero emission buses out of a fleet of ninety-three (93).
- North Colonie currently operates currently operates two (2, 2.6%) zero emission buses out of a fleet of seventy-eight (78).
- Queensbury currently operates one (1, 1.8%) zero emission bus out of a fleet of fifty-five (55).
- Chatham currently operates one (1, 2.2%) zero emission bus out of a fleet of forty-five (45).
- Lake George currently operates one (1, 5.6%) zero emission bus out of a fleet of eighteen (18).
- In addition, this region reports a total of twenty-seven (27) zero emission buses on order.

Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.



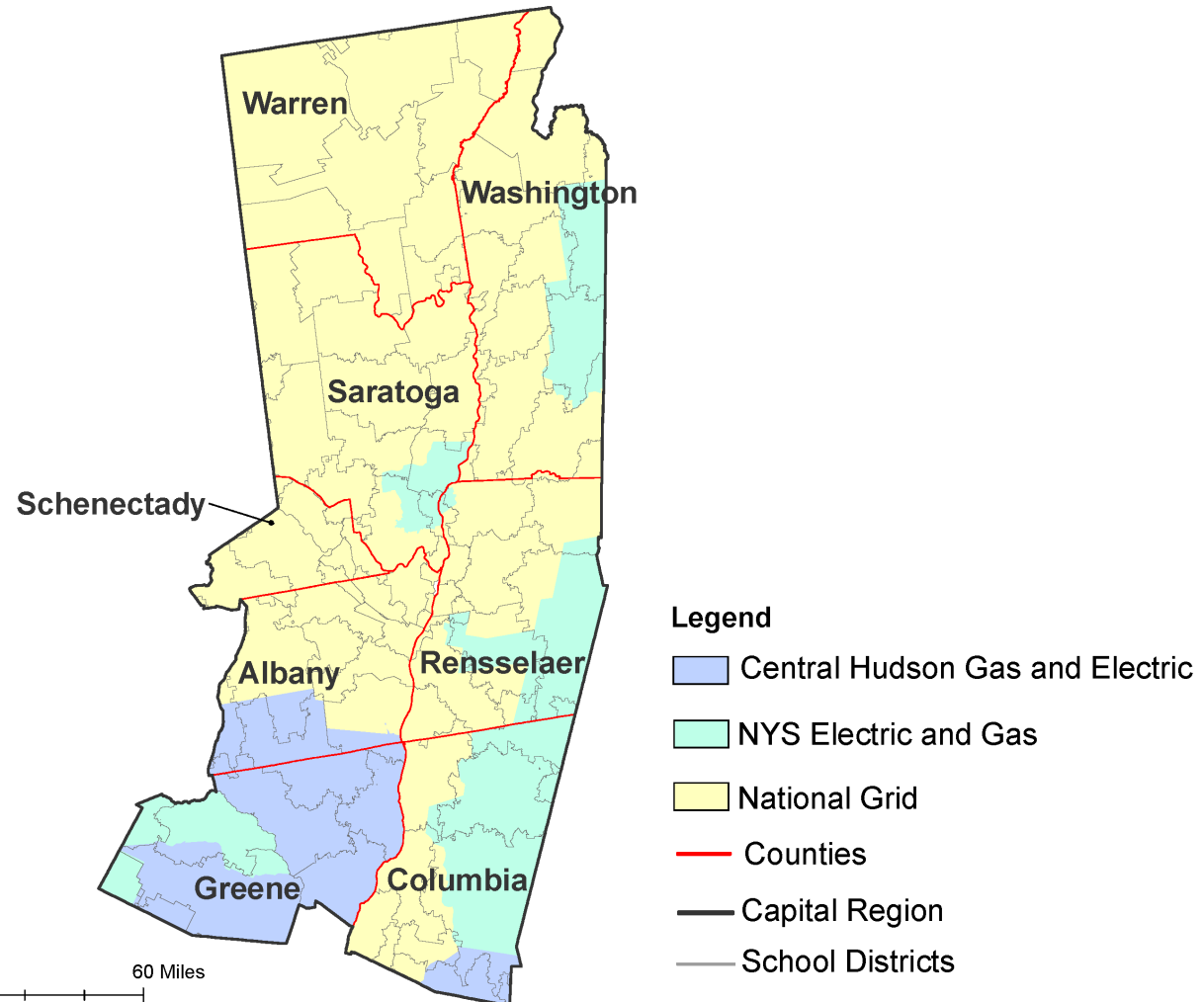


Infrastructure Assessment

ELECTRIC SERVICE UTILITIES by NEW YORK STATE LABOR MARKET REGIONS - PUBLIC SCHOOLS

CAPITAL REGION

October, 2024

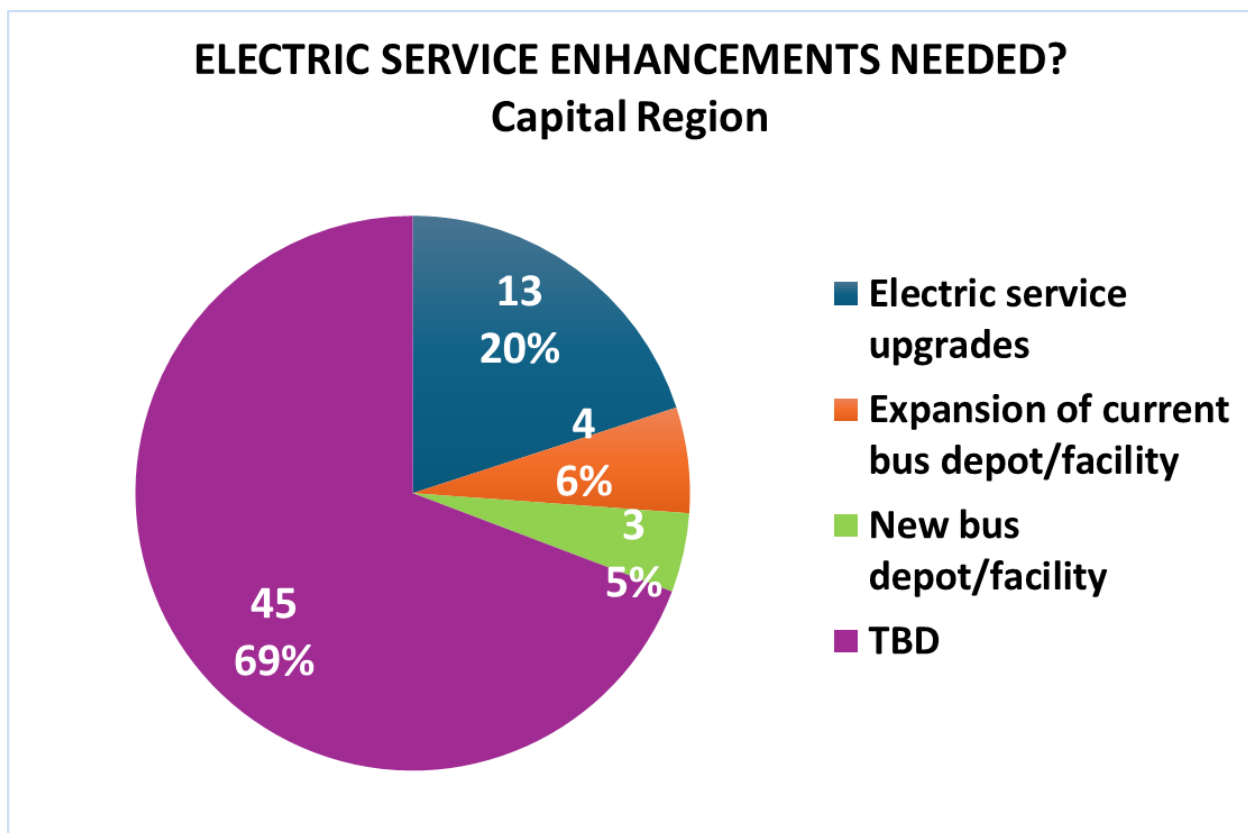


Map created by the NYS Education Department
Data Source: SEDREF and NYSED INFORMATION AND REPORTING SERVICES

Electric Service

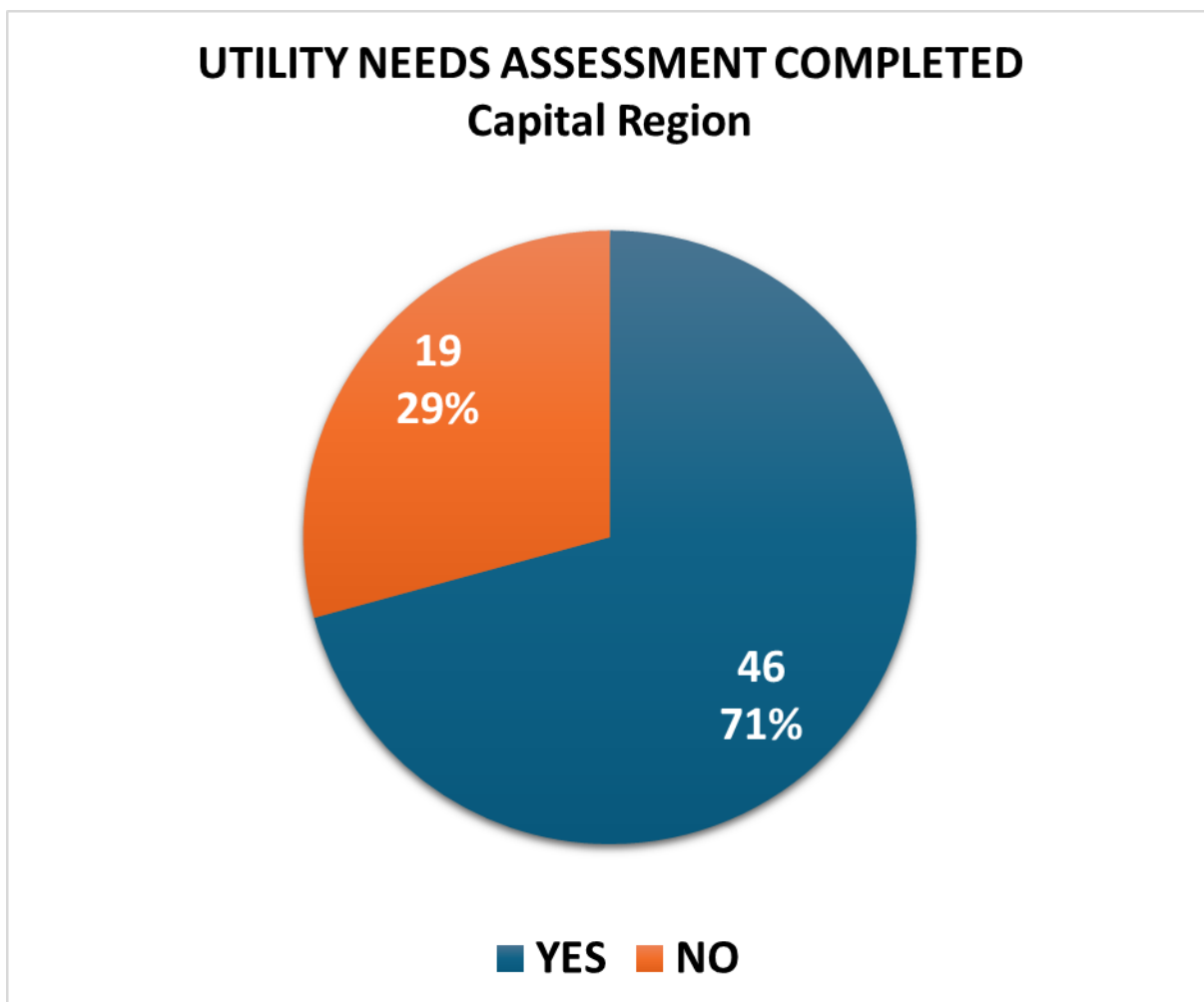
School Districts in the Capital Region primarily receive electricity from three (3) major utility companies—NYSEG, Central Hudson Gas and Electric, and National Grid. However, also as indicated, there are some small utility providers serving a similarly small number of districts.

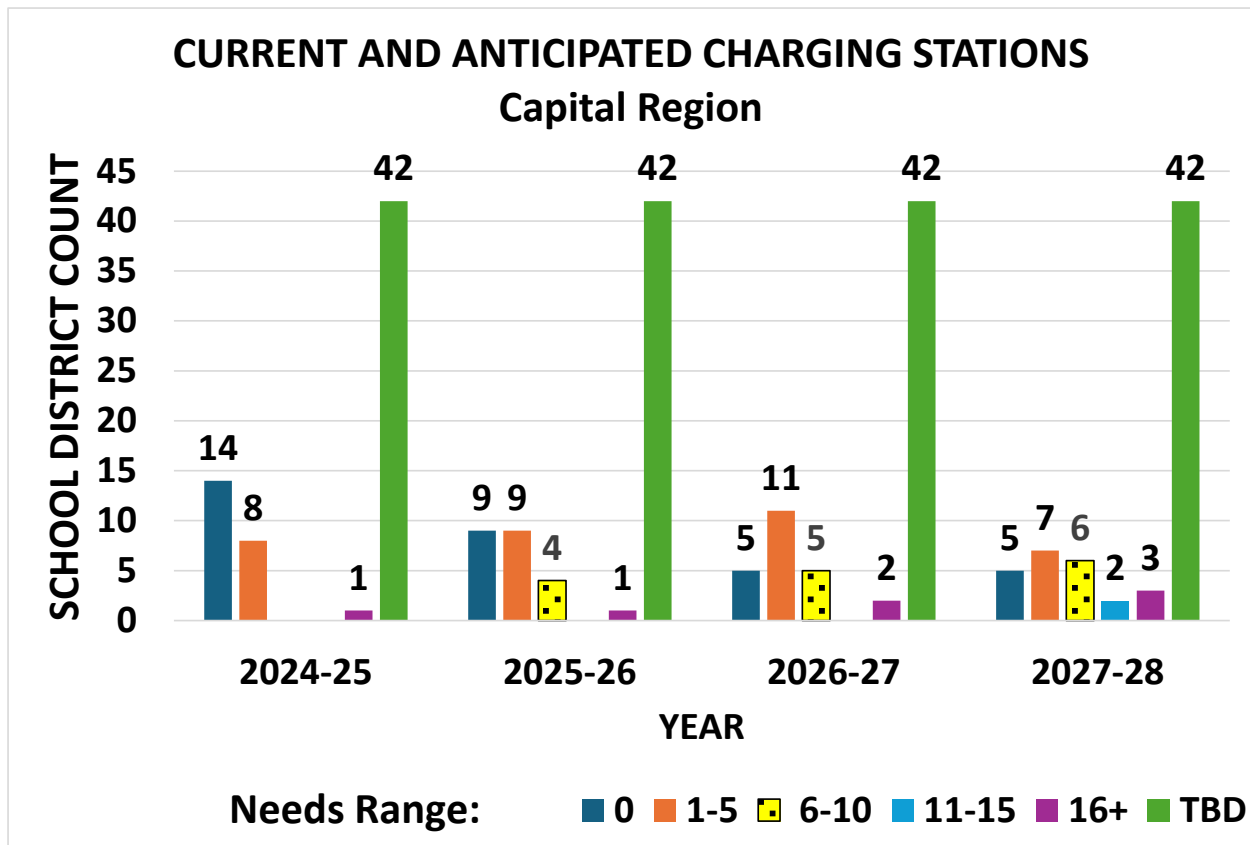
In general, districts in the Capital Region report that current electric service is sufficient for their needs in 2025-26. However, as evidenced in the graph below, thirteen (13) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, four (4) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. Three (3) districts reported needing new bus depot/facilities. A total of forty-five (45) districts are still assessing their needs.



Charging Stations and Infrastructure

Fifty (50) school districts in the region responded to the survey report that there are no charging stations available in the district, currently. However, there are fourteen (14) school districts that either have some charging stations ready for use or anticipate that chargers will be installed during the 2025-26 school year. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2026-27 school year, at least twenty-eight (28) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts, needing to wait until formal fleet electrification plans are completed and financial challenges. Based on the data collected from sixty-five (65) districts, a total of forty-six districts (46, 71%) completed their electric utility needs assessment or have a load letter from their utility provider.





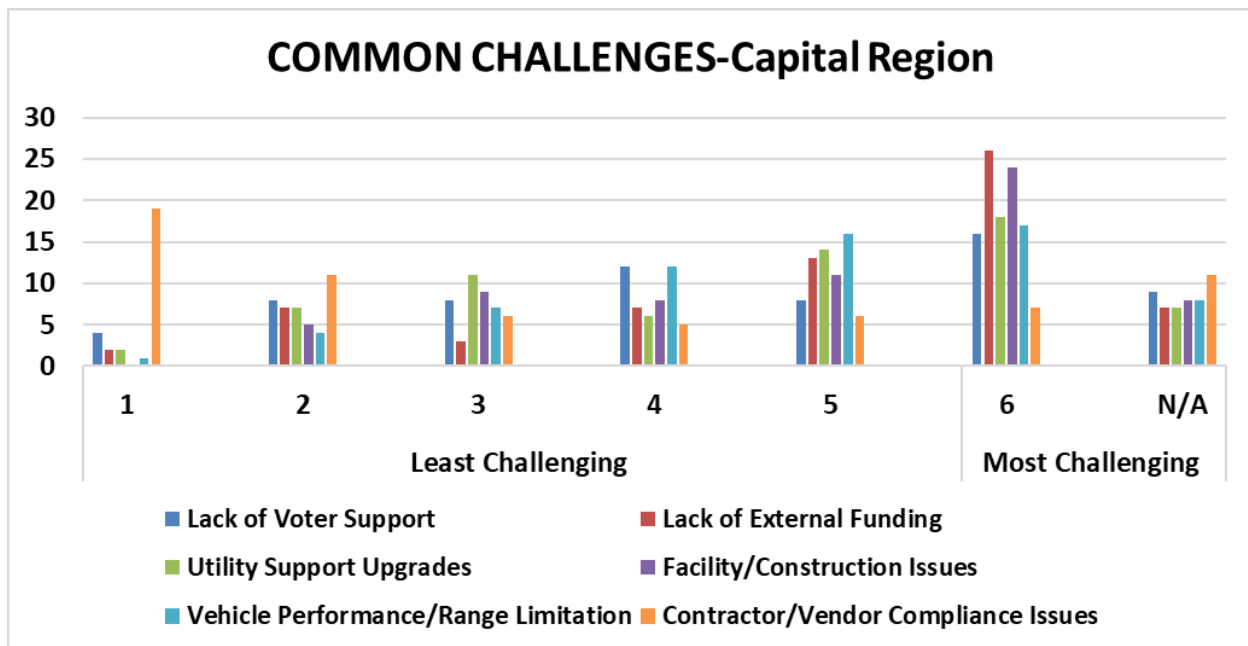
Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Capital region show that Lack of External Funding, Facility/Construction issues, and Utility Support and upgrades rated the highest in the most

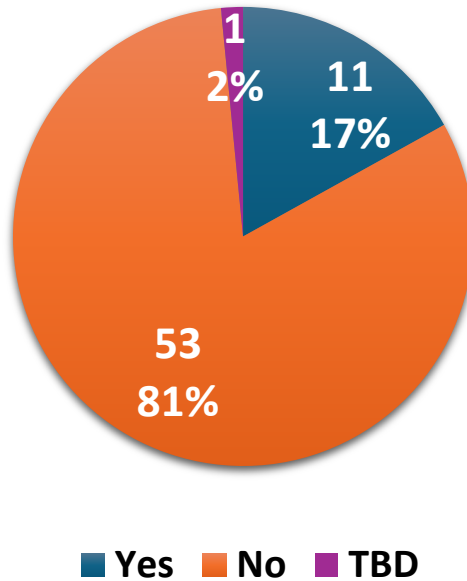
challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



Voter Proposition/Approval

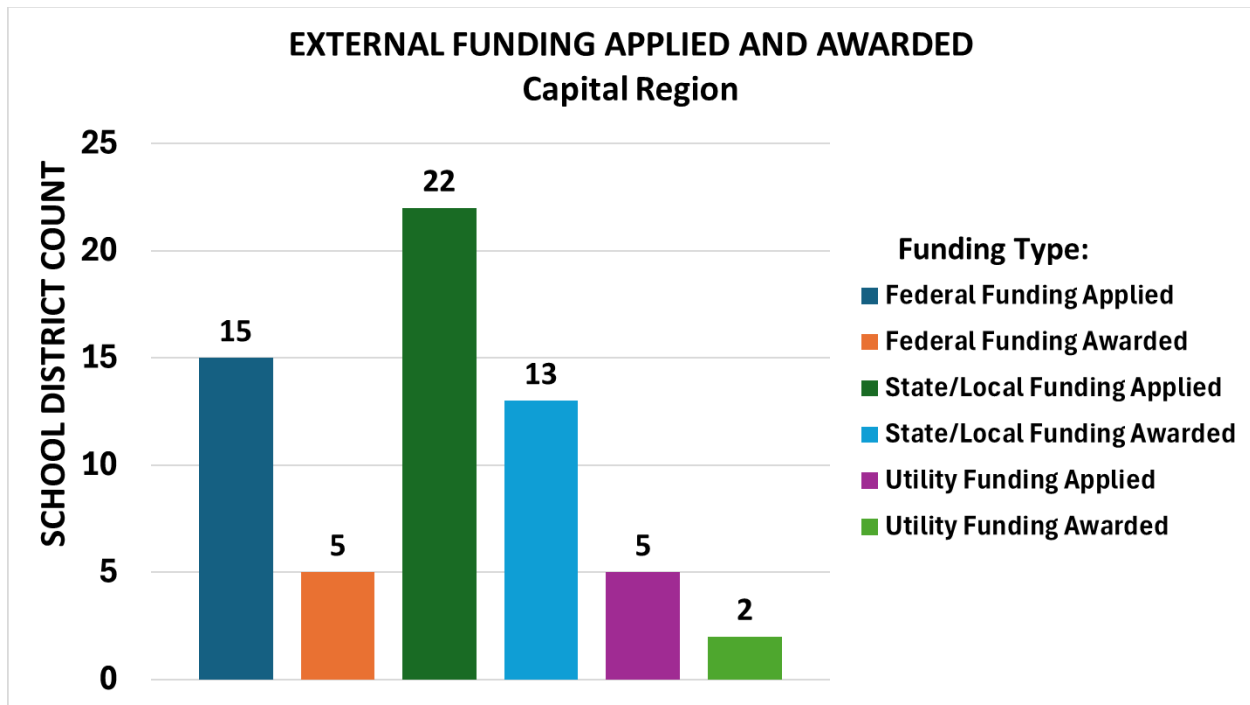
The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data show that in the Capital region eleven districts (11, 17%) have put a voter proposition before the voters, and all were approved.

VOTER PROPOSITION? Capital Region



Funding Opportunities

State/Local Funding opportunities were available to many districts and twenty-two districts (22, 34%) applied for and received these funds with a range from a low of \$48,686 to a high of \$2,323,000. The average award was approximately \$201,875. Federal Funding opportunities have been available to the districts and fifteen districts (15, 23%) applied for and received funds with a low of \$290,000 to a high of \$1,885,000. The average Federal award was approximately \$618,301. Five (5) districts reported applying for Utility Funding and two (2) received funds for the amount of \$34,845 and \$59,186.

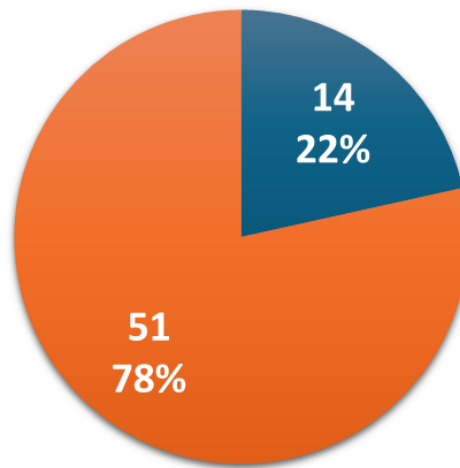


Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Capital region fourteen districts (14, 22%) reported completing a Workforce Development Plan out of sixty-five (65) districts.

CREATED A WORKFORCE DEVELOPMENT REPORT?

Capital Region



■ YES ■ NO

Transition Towards Zero Emission Busing

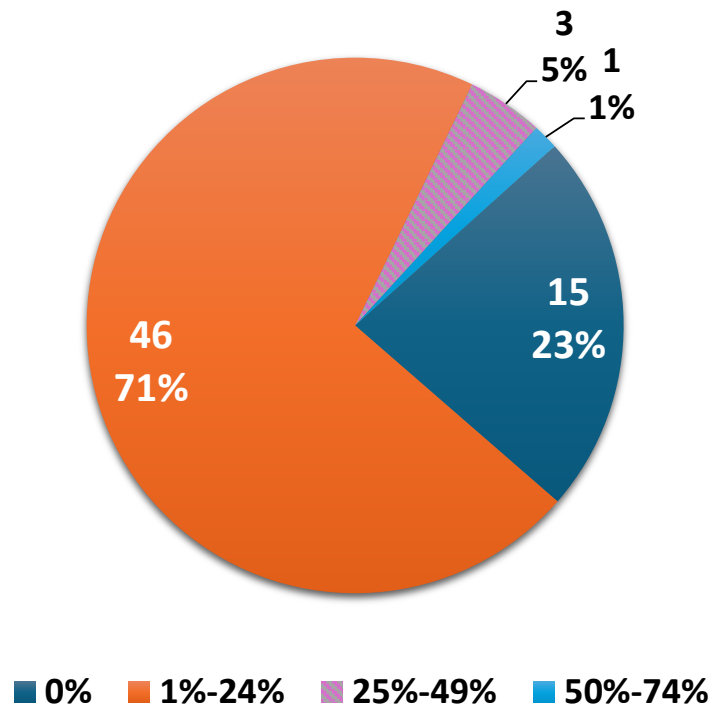
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 50-74% complete;
- Three (3) districts reported they are 25-49% complete;
- Forty-six (46) districts reported they are 1-24% complete; and
- Fifteen (15) districts have not yet made any progress.

In total, fifty districts (50, 77%) have begun the transition to zero-emission busing, while fifteen districts (15, 23%) remain at 0%.

PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION Capital Region



District Comments-Summary

The Capitol Region has seventy-five (75) school districts out of which sixty-three (63) completed the survey. While several districts in the Capitol Region were making progress – working on workforce training of current staff, installing chargers, and purchasing buses with funding from state and federal resources - many districts outlined various obstacles and concerns regarding their transition to zero-emission busing. The greatest concern expressed in the survey was the issue of cost, especially regarding feared increases in property taxes. High costs and what was perceived as inadequate funding over the long term drove voter opposition to the purchase of buses and/or construction of new facilities to house battery charging stations; some questioned the lifespan of both buses and batteries; the replacement costs and methods of disposal without the promise of state or federal aid over the years.

Inadequate electrical grid capacity and electrical infrastructure were the second most common obstacle expressed in the comments. In the case of rural districts,

concerns about range and reliability also factored into district concerns; range was closely linked to matters of safety: the stranding of students in sub-zero temperatures and in mountainous areas; at least one district mentioned fears of fire hazards; the potential for electric buses to catch fire and trap students inside.

Hudson Valley Region

Regional Summary and Response Rate

The Hudson Valley Labor Market Region contains seven (7) counties—Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester. Together, there are one hundred-one (101) traditional school districts covering an area of approximately 4,633.5 square miles that were responsible for educating 306,148 school-age children in the 2024-25 school year. NYSED received responses from eighty-three (83) school districts, bringing the overall response rate for the region to about eighty percent (80%), with twenty (20) non-responsive districts. Data from NYSERDA shows that five (5, 5%) of the districts in the region have a completed Fleet Electrification Plan (FEP), and twenty-six (26, 26%) are underway with their FEP process. Additionally, eleven (11, 11%) of the districts report having made the initial contact with NYSERDA to begin the process. Currently fifty-six (56, 56%) of the districts have made no contact with NYSERDA as of this report. The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

HUDSON VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
ARDSLEY UFSD	660405	2,325	4.2	Submitted	No Contact
ARLINGTON CSD	131601	7,644	115.4	Submitted	Underway
BEACON CITY SD	130200	2,472	26.14	Submitted	No Contact
BEDFORD CSD	660102	3,483	53.7	Not Submitted	Initial Contact Made
BLIND BROOK-RYE UFSD	661905	1,287	3.29	Submitted	No Contact
BREWSTER CSD	480601	2,936	39.88	Submitted	Underway
BRIARCLIFF MANOR UFSD	661402	1,335	8.71	Not Submitted	Underway
BRONXVILLE UFSD	660303	1,584	1.17	Submitted	No Contact
BYRAM HILLS CSD	661201	2,336	20.88	Submitted	Underway
CARMEL CSD	480102	3,651	79.44	Submitted	Underway

HUDSON VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
CHAPPAQUA CSD	661004	3,509	20.25	Submitted	Underway
CHESTER UFSD	440201	911	10.94	Submitted	No Contact
CLARKSTOWN CSD	500101	7,814	28.53	Not Submitted	No Contact
CORNWALL CSD	440301	2,985	38.27	Submitted	No Contact
CROTON-HARMON UFSD	660202	1,555	13.48	Submitted	Underway
DOBBS FERRY UFSD	660403	1,481	2.1	Not Submitted	No Contact
DOVER UFSD	130502	1,317	62.37	Submitted	No Contact
EAST RAMAPO CSD (SPRING VALLEY)	500402	10,424	31.84	Not Submitted	Initial Contact Made
EASTCHESTER UFSD	660301	2,941	4.22	Submitted	No Contact
EDGEMONT UFSD	660406	1,833	2.76	Submitted	No Contact
ELDRED CSD	590801	421	97.41	Submitted	No Contact
ELLENVILLE CSD	622002	1,375	122.6	Submitted	No Contact
ELMSFORD UFSD	660409	1,001	1.86	Submitted	No Contact
FALLSBURG CSD	590501	1,445	36.51	Submitted	No Contact
FLORIDA UFSD	442115	689	23.81	Submitted	No Contact
GARRISON UFSD	480404	194	22.13	Submitted	Initial Contact Made
GOSHEN CSD	440601	2,737	81.09	Submitted	Applied
GREENBURGH CSD	660407	1,564	6.34	Submitted	No Contact
GREENWOOD LAKE UFSD	442111	397	13.89	Submitted	Complete
HALDANE CSD	480401	774	38.52	Submitted	Initial Contact Made
HARRISON CSD	660501	3,792	17.25	Submitted	No Contact
HASTINGS-ON-HUDSON UFSD	660404	1,598	1.8	Submitted	No Contact
HAVERSTRAW-STONY POINT CSD (NORTH RO	500201	7,924	61.22	Submitted	No Contact
HENDRICK HUDSON CSD	660203	2,173	14.31	Submitted	Underway
HIGHLAND CSD	620803	1,526	46.96	Submitted	No Contact
HIGHLAND FALLS CSD	440901	893	25.27	Submitted	No Contact
HYDE PARK CSD	130801	3,286	69.92	Submitted	Underway
IRVINGTON UFSD	660402	1,709	4.94	Submitted	No Contact
KATONAH-LEWISBORO UFSD	660101	2,785	42.74	Submitted	Underway

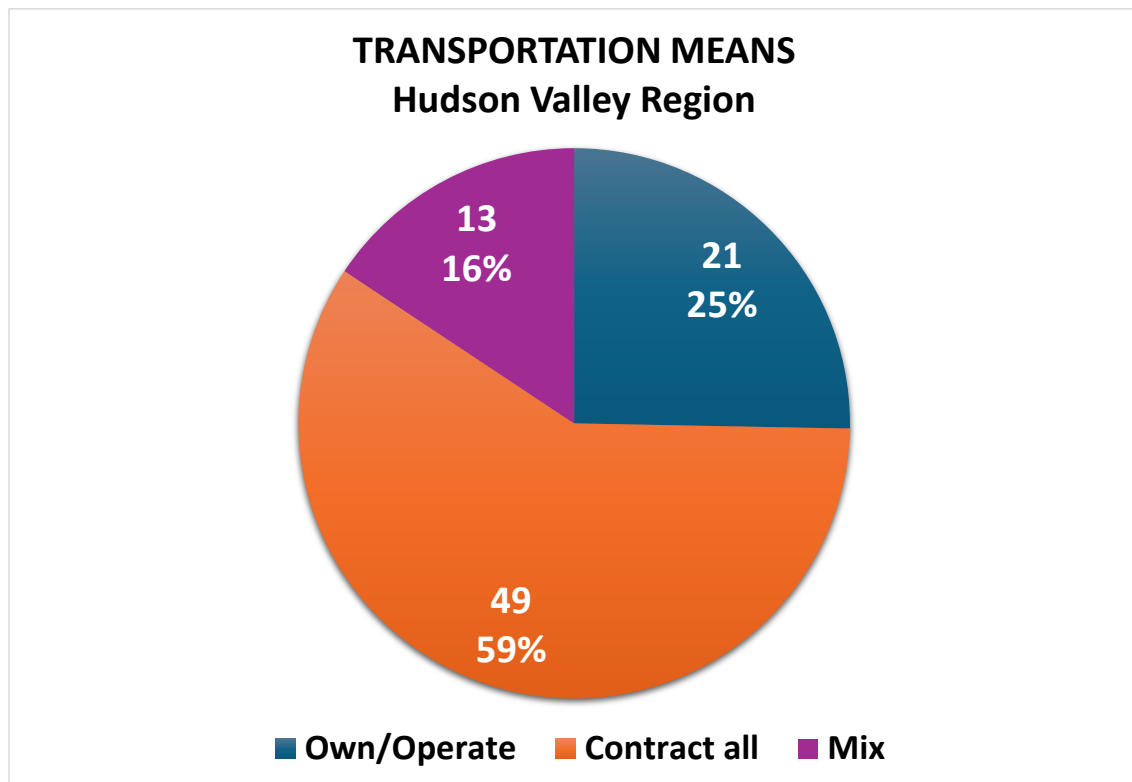
HUDSON VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
KINGSTON CITY SD	620600	5,699	103	Submitted	Underway
KIRYAS JOEL VILLAGE UFSD	441202	167	4.5	Submitted	No Contact
LAKELAND CSD	662401	5,232	24.85	Submitted	Underway
LIBERTY CSD	590901	1,706	82.04	Submitted	No Contact
LIVINGSTON MANOR CSD	591302	385	131.1	Not Submitted	No Contact
MAHOPAC CSD	480101	3,836	31.18	Submitted	Underway
MAMARONECK UFSD	660701	5,493	5.83	Not Submitted	No Contact
MARLBORO CSD	621001	1,849	51.22	Submitted	No Contact
MIDDLETOWN CITY SD	441000	7,164	26.5	Submitted	Underway
MILLBROOK CSD	132201	718	79.82	Submitted	No Contact
MINISINK VALLEY CSD	441101	3,444	115	Submitted	Applied
MONROE-WOODBURY CSD	441201	6,261	64.38	Submitted	Underway
MONTICELLO CSD	591401	2,550	190.1	Submitted	No Contact
MT PLEASANT CSD	660801	1,941	9.18	Submitted	No Contact
MT VERNON SCHOOL DISTRICT	660900	6,507	4.11	Not Submitted	No Contact
NANUET UFSD	500108	2,103	5.19	Not Submitted	No Contact
NEW PALTZ CSD	621101	1,673	78.52	Submitted	Underway
NEW ROCHELLE CITY SD	661100	9,675	11.3	Not Submitted	No Contact
NEWBURGH CITY SD	441600	10,405	33.07	Submitted	No Contact
NORTH SALEM CSD	661301	937	32.14	Submitted	Initial Contact Made
NORTHEAST CSD	131101	612	79.18	Submitted	No Contact
NYACK UFSD	500304	2,820	8.16	Not Submitted	Initial Contact Made
ONTEORA CSD	621201	1,043	314.1	Submitted	Complete
OSSINING UFSD	661401	4,727	10.94	Submitted	Underway
PAWLING CSD	131201	1,044	51.52	Submitted	Underway
PEARL RIVER UFSD	500308	2,148	13.29	Submitted	No Contact
PEEKSKILL CITY SD	661500	3,623	3.07	Submitted	Underway
PELHAM UFSD	661601	2,828	2.33	Submitted	No Contact
PINE BUSH CSD	440401	4,513	107.8	Submitted	Initial Contact Made

HUDSON VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
PINE PLAINS CSD	131301	748	139.5	Not Submitted	No Contact
PLEASANTVILLE UFSD	660809	1,603	2.33	Submitted	No Contact
POCANTICO HILLS CSD	660802	289	8.59	Submitted	No Contact
PORT CHESTER-RYE UFSD	661904	4,392	3.98	Submitted	No Contact
PORT JERVIS CITY SD	441800	2,266	71.36	Submitted	Initial Contact Made
POUGHKEEPSIE CITY SD	131500	3,636	6.02	Not Submitted	Underway
PUTNAM VALLEY CSD	480503	1,498	31.22	Submitted	Underway
RED HOOK CSD	131701	1,532	63.45	Submitted	Complete
RHINEBECK CSD	131801	924	60.84	Submitted	No Contact
RONDOUT VALLEY CSD	620901	1,675	121.4	Submitted	Complete
ROSCOE CSD	591301	186	108.7	Not Submitted	No Contact
RYE CITY SD	661800	2,792	3.07	Not Submitted	No Contact
RYE NECK UFSD	661901	1,424	2.59	Submitted	No Contact
SAUGERTIES CSD	621601	2,287	50.77	Submitted	No Contact
SCARSDALE UFSD	662001	4,692	20.88	Submitted	No Contact
SOMERS CSD	662101	2,475	28.96	Submitted	Initial Contact Made
SOUTH ORANGETOWN CSD	500301	2,729	18.08	Submitted	Underway
SPACKENKILL UFSD	131602	1,556	6.36	Submitted	Complete
SUFFERN CSD	500401	3,791	44.01	Submitted	No Contact
SULLIVAN WEST CSD	591502	994	255.4	Submitted	No Contact
TRI-VALLEY CSD	591201	837	189	Not Submitted	No Contact
TUCKAHOE UFSD	660302	1,065	0.74	Submitted	No Contact
TUXEDO UFSD	441903	175	17.81	Submitted	Initial Contact Made
UFSD-TARRYTOWNS	660401	2,636	2.9	Submitted	No Contact
VALHALLA UFSD	660805	1,426	4.79	Submitted	No Contact
VALLEY CSD (MONTGOMERY)	441301	4,152	78.84	Submitted	Underway
WALLKILL CSD	621801	2,671	55.31	Submitted	No Contact
WAPPINGERS CSD	132101	10,074	87.7	Submitted	Underway
WARWICK VALLEY CSD	442101	3,630	64.98	Submitted	Underway

HUDSON VALLEY LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
WASHINGTONVILLE CSD	440102	3,807	58.98	Not Submitted	No Contact
WHITE PLAINS CITY SD	662200	6,782	9.92	Submitted	Initial Contact Made
YONKERS CITY SD	662300	22,740	17.72	Not Submitted	No Contact
YORKTOWN CSD	662402	3,455	27.67	Submitted	Underway

Transportation Means

About one-quarter of school districts in the Hudson Valley Region own and operate buses. Twenty-one districts (21, 25%) currently own and operate all school buses serving districts' needs; forty-nine districts (49, 59%) indicate that all transportation services are contracted out; and thirteen (13, 16%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.



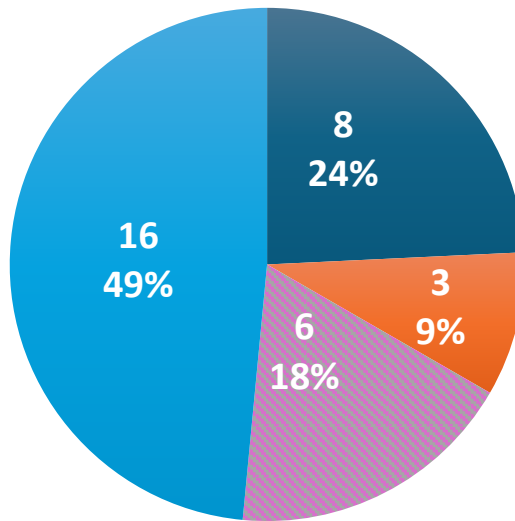
Bus Fleets

Thirty-three (33) school districts in the Hudson Valley Region provided NYSED with information on their current bus fleet and anticipated future needs. Eight (8) districts maintain between 1 and 20 buses; three (3) districts own between 21 and 40 buses; six (6) districts maintain a fleet of between 41 and 60 buses; and sixteen (16) districts own between 41 and 60 buses. Of these reported fleets, twenty-seven (27) school districts reported that no zero emission buses are currently owned. Eight (8) districts, however, do currently maintain zero emission buses currently:

- Croton-Harmon currently operates three (3, 10.6%) zero emission buses out of a fleet of forty-seven (47) buses.
- UFSD of the Tarrytowns currently operates three (3, 5.5%) zero emission bus out of a fleet of fifty-five (55) buses.
- Red Hook currently operates two (2, 4.5%) zero emission buses out of a fleet of forty-four (44) buses.
- Goshen currently operates two (2, 2.4%) zero emission buses out of a fleet of eighty-four (84) buses.
- Katonah-Lewisboro currently operates one (1, 1.1%) zero emission bus out of a fleet of ninety (90) buses.
- Hyde Park currently operates one (1, 1%) zero emission bus out of a fleet of one-hundred and one (101) buses.
- Arlington currently operates one (1, 0.4%) zero emission bus out of a fleet of two-hundred and fifty (250) buses.
- Monticello currently operates one (1, 1.5%) zero emission bus out of a fleet of sixty-five (65) buses.
- This region showed an increase of six (6) zero emission buses from last year.
- Districts in this region report a total of twenty-three (23) new zero emission buses on-order for nine (9) districts.

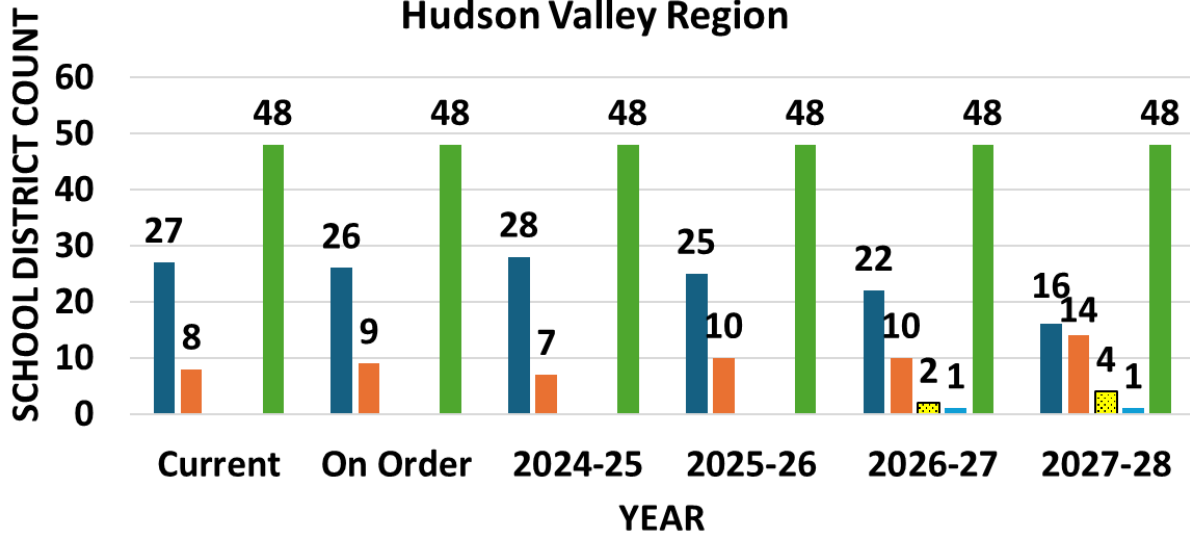
Regionally, districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Hudson Valley Region



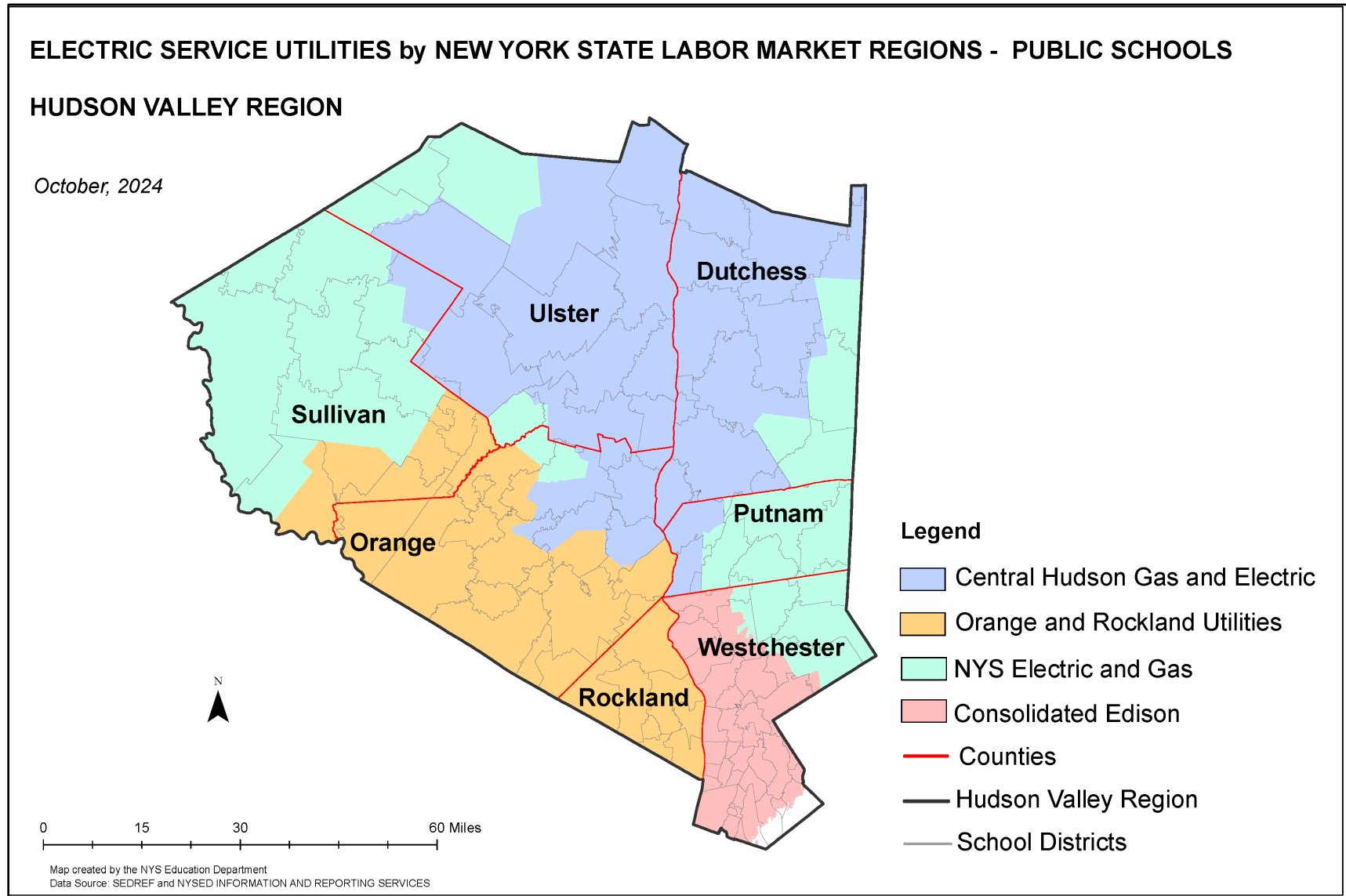
Number of Buses: 1-20 21-40 41-60 61+

CURRENT AND ANTICIPATED ZERO EMISSION BUSES Hudson Valley Region



Number of Buses: 0 1-5 6-10 11-15 TBD

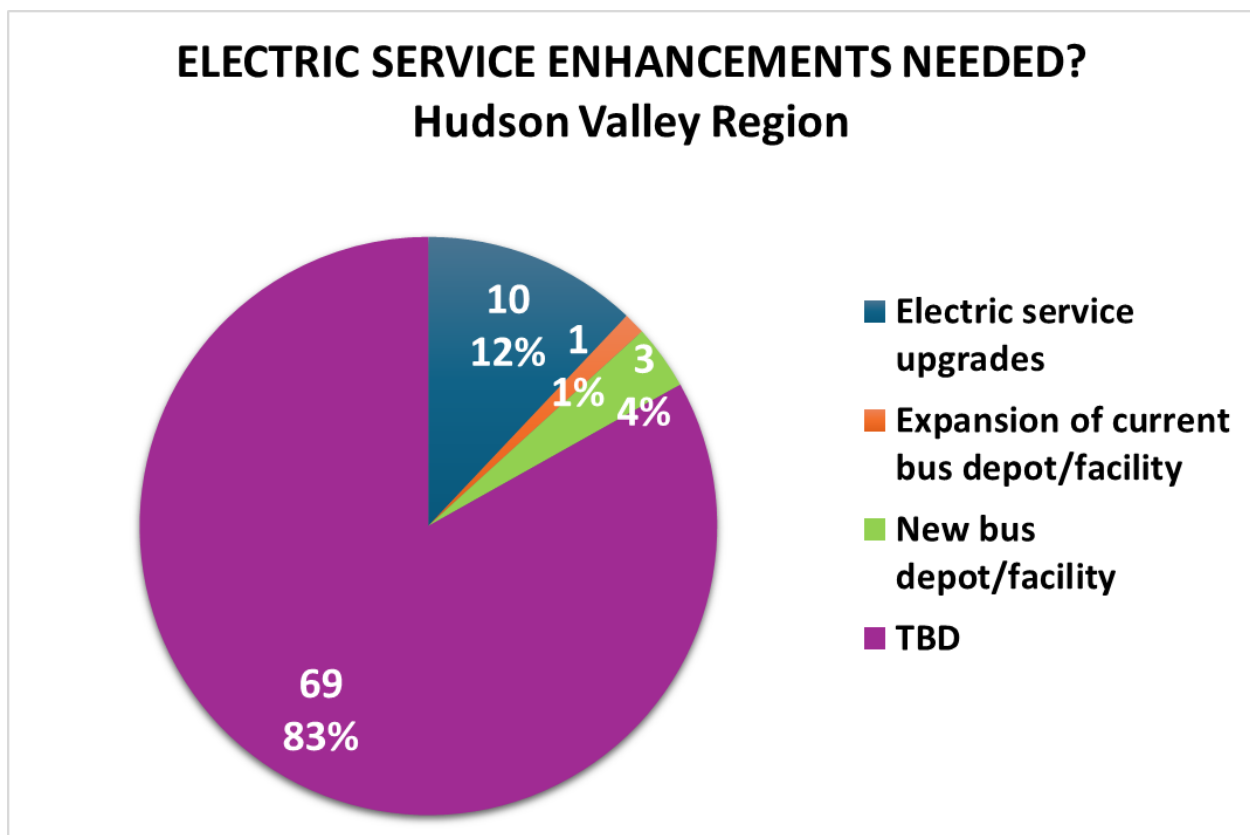
Infrastructure Assessment



Electric Service

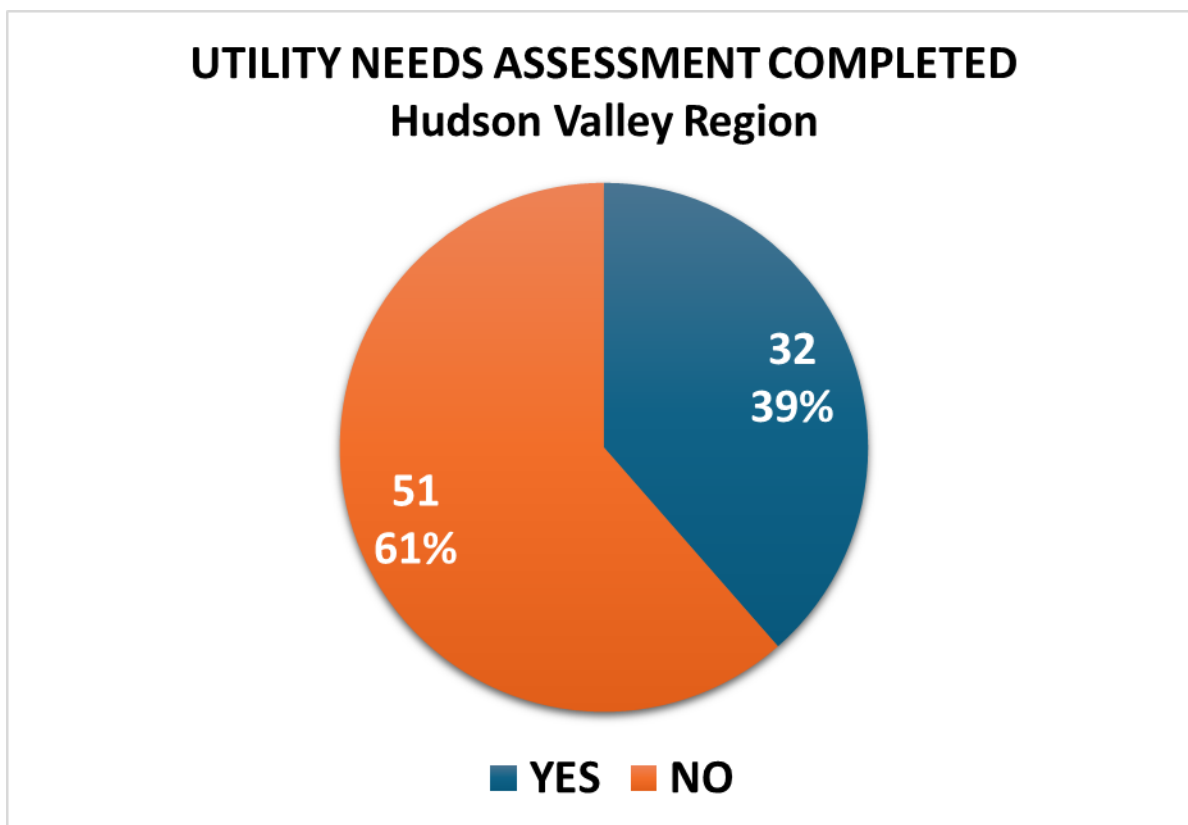
School Districts in the Hudson Valley Region primarily receive electricity from five (5) major utility companies—NYSEG, Central Hudson Gas and Electric, ConEd, NYPA, and Orange and Rockland Utilities. However, also as indicated, there are some small utility providers serving a similarly small number of districts.

In general, districts in the Hudson Valley Region report that current electric service is sufficient for their needs in 2024-25. However, as evidenced in the graph below, ten (10) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, one (1) district reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. Three (3) districts reported needing a new bus depot/facility. A majority, sixty-nine (69) districts are still assessing their needs.



Charging Stations and Infrastructure

Seventy-four (74) school districts in the region responded to the survey report that there are no charging stations available in the district, currently. However, there are fourteen (14) school districts that either have some charging stations ready for use or anticipate that chargers will be installed during the 2025-26 school year. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least twenty (20) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts and needing to wait until formal fleet electrification plans are completed. Based on the data collected from eighty-three (83) districts, a total of thirty-two districts (32, 39%) have completed their electric utility needs assessment or have a load letter from their utility provider.

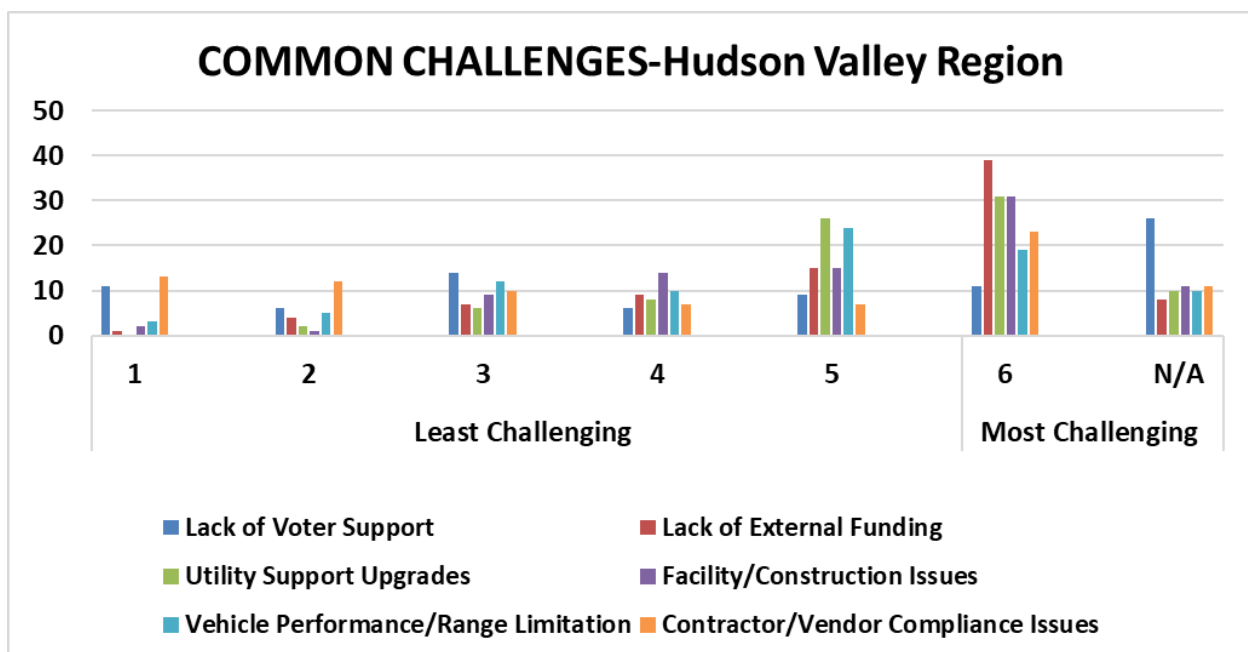


Challenges

Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

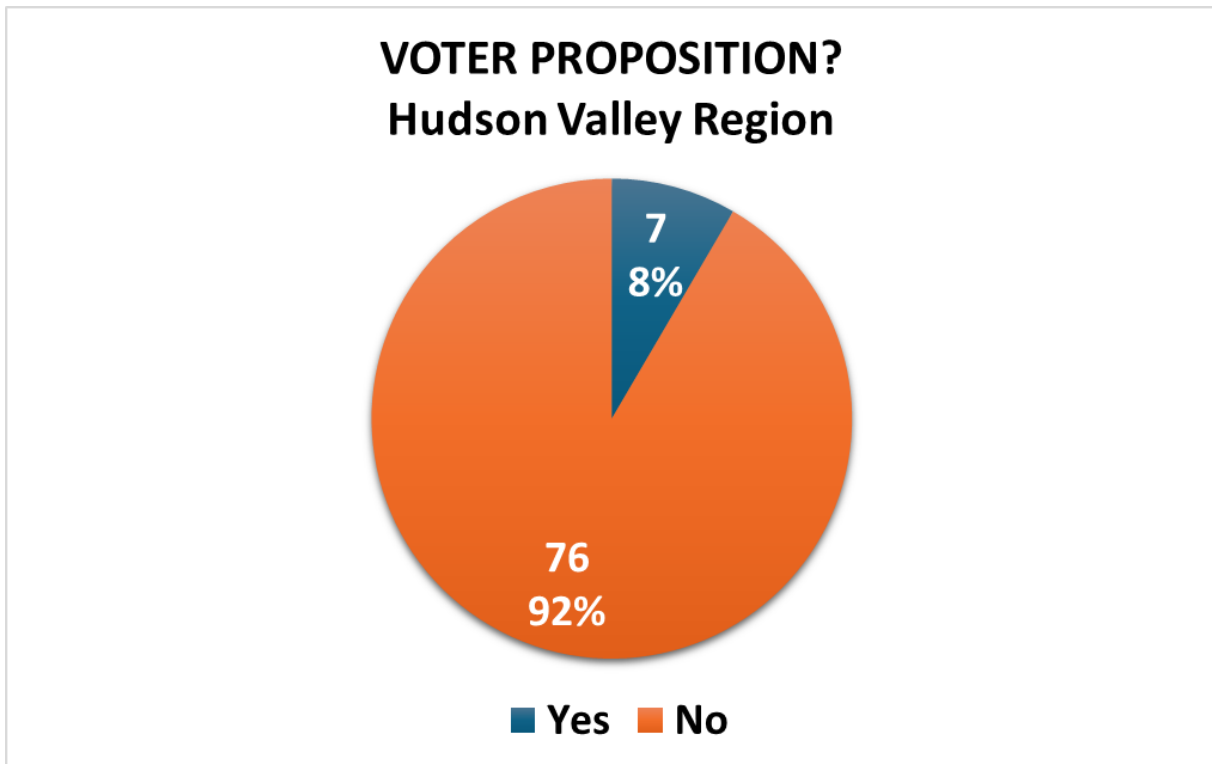
1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Hudson Valley region show that Lack of External Funding, Utility Support upgrades and Facility Construction issues rated the highest in the most challenging section. Whereas Contractor/Vendor Compliance Issues were the least challenging concern.



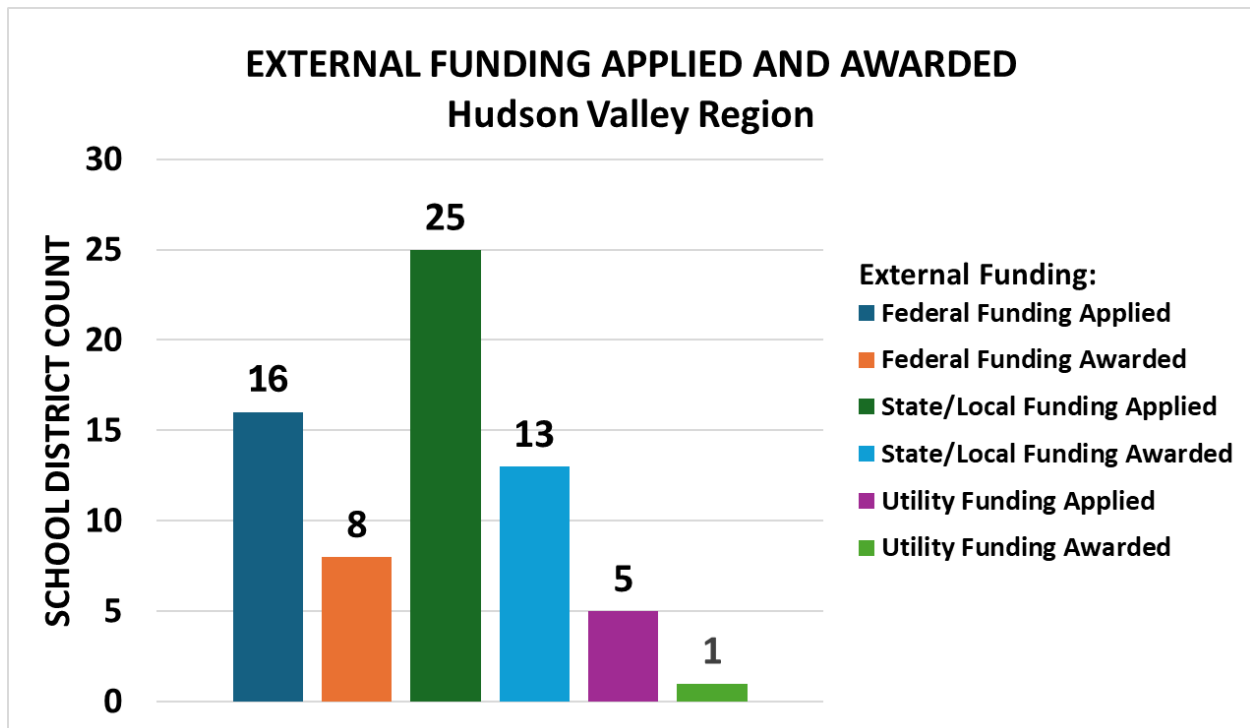
Voter Proposition/Approval

The survey asked if the districts have put a voter proposition for zero emission busing needs before the voters. Data show that in the Hudson Valley region seven districts (7, 8%) have put a voter proposition before the voters, and six (6) were approved.



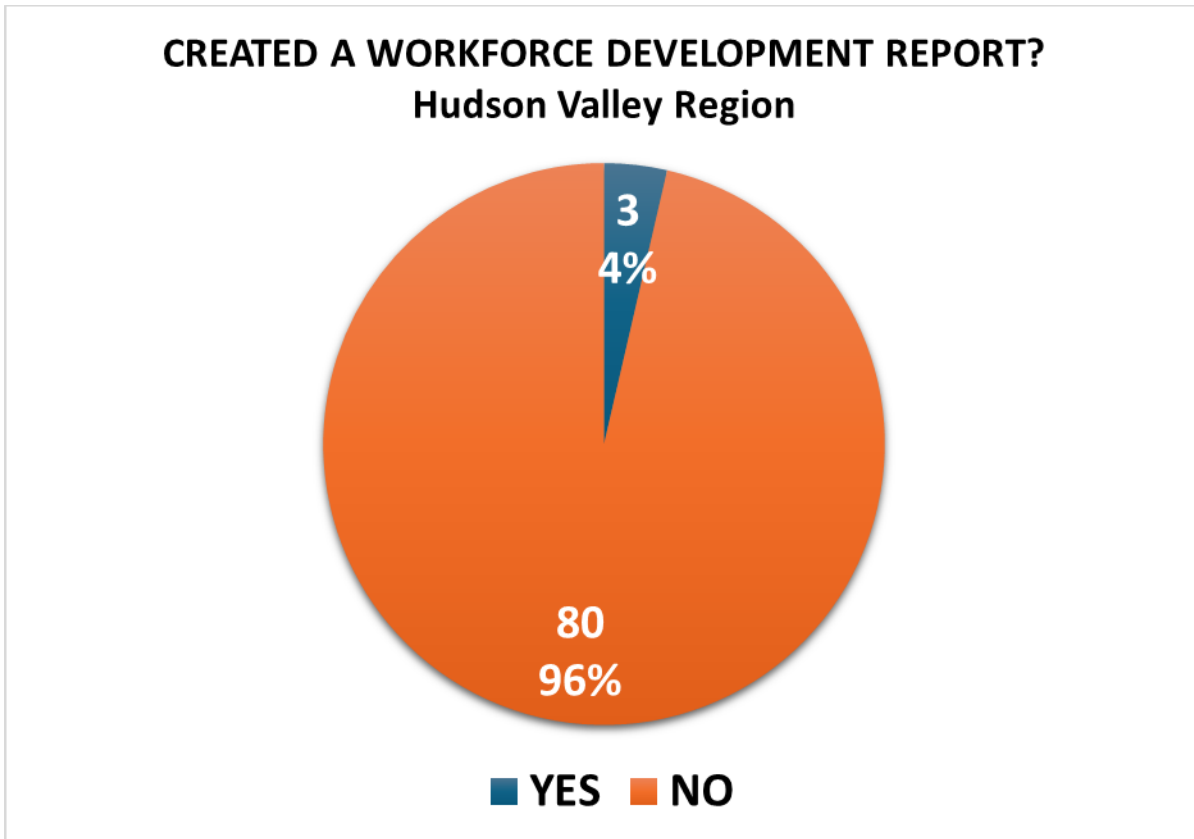
Funding Opportunities

State/Local Funding opportunities were available to many districts and twenty-five districts (25, 30%) applied for funding, however only thirteen (13) districts in the region received funds ranging from a low of \$37,500 to a high of \$3,372,500. The average award was approximately \$467,321 Federal Funding opportunities have been available to the districts and sixteen districts (16, 19%) applied for and received funds with a low of \$373,873 to a high of \$10,000,000. The average Federal award was approximately \$2,165,369. Five (5) districts reported applying for Utility Funding and only one (1) reported they receive funds.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Hudson Valley region three districts (3, 4%) reported completing a Workforce Development Plan out of eighty-three (83) districts.



Transition Towards Zero Emission Busing

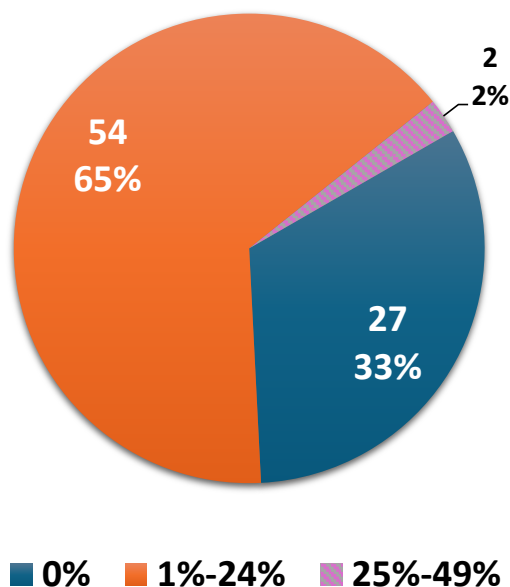
Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- Two (2) districts reported being 25-49% complete;
- Fifty-four (54) districts reported they are 1-24% complete; and
- Twenty-seven (27, 32.5%) districts reported no progress has been made to date.

In total, fifty-six districts (56, 67%) have begun the transition to zero-emission busing, while twenty-seven districts (27, 32.5%) remain at 0%.

PROGRESS TOWARDS FULL ZERO EMISSIONS BUS TRANSITION
Hudson Valley Region



District Comments-Summary

Hudson Valley Labor Market Region has one hundred and eight (108) school districts. Of these, eighty-three (83) completed the survey and fifty-five (55) left comments. Inadequate facilities and electrical infrastructure were the most commonly reported challenges to ZEB transition. Availability of space for expanding garages to house electric charging states poses a significant obstacle for some districts, particularly for those who would need to purchase land to meet make the expansion. Costs were stated to be exorbitant. Affluent districts cited lack of funding and having to bear most of the costs through tax increases. This more than anything else drove voter opposition. Some districts (Hyde Park) reported “significant community opposition” regardless of “substantial grant opportunities.” In one case, the purchase of a single EV bus in 2023 funded by a NYSBIP grant provoked widespread voter anger that threatened passage of the 2024 school budget even though no EV buses were on the ballot. Voters later turned down a proposal for a ZEB initiative even though “after grants and aid the local cost for these buses and chargers would have been approximately \$30,000 per bus.” State aid was then promised for the total cost of these buses, bringing the cost down to nothing,

but “taxpayers once again voted down the proposition.” Some districts expressed support for transitioning to zero emissions but felt the timeline for completion was unrealistic.

Long Island Region

Regional Summary and Response Rate

The Long Island Labor Market Region contains two (2) counties—Nassau and Suffolk. Together, there are one hundred twenty-four (124) traditional school districts covering an area of approximately 1,462.7 square miles that were responsible for educating 405,023 school-age children in the 2024-25 school year. NYSED received responses from one hundred-three (103) school districts, bringing the overall response rate for the region to about eighty-three (83%) percent with twenty-two (21) non-responsive districts. Data from NYSERDA shows that one (1, .08%) of the district in the region has a completed Fleet Electrification Plan (FEP), and twenty (20, 16%) are underway with their FEP process. Additionally, four (4, 3%) of the districts report having made the initial contact with NYSERDA to begin the process. Currently ninety-seven (97, 78%) of the districts have made no contact with NYSERDA as of this report. The table below shows all districts surveyed, whether a response was provided, the reported 2024-25 enrollment count, area in square miles, and the status of a NYSERDA Fleet Electrification Plan (“FEP”), if commissioned:

LONG ISLAND LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
AMAGANSETT UFSD	580303	91	49.5	Submitted	No Contact
AMITYVILLE UFSD	580106	2,679	5.17	Not Submitted	No Contact
BABYLON UFSD	580101	1,489	3.33	Submitted	No Contact
BALDWIN UFSD	280210	4,309	4.77	Submitted	No Contact
BAY SHORE UFSD	580501	5,529	6.3	Not Submitted	No Contact
BAYPORT-BLUE POINT UFSD	580505	1,758	6.02	Submitted	No Contact
BELLMORE UFSD	280207	1,027	4.35	Submitted	No Contact
BELLMORE-MERRICK CENTRAL HS DISTRICT	280253	5,283	13.99	Submitted	Underway
BETHPAGE UFSD	280521	2,957	3.79	Submitted	No Contact
BRENTWOOD UFSD	580512	17,844	14.88	Submitted	No Contact
BRIDGEHAMPTON UFSD	580909	170	14.1	Submitted	No Contact

LONG ISLAND LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
BROOKHAVEN-COMSEWOGUE UFSD	580203	3,448	8.95	Submitted	No Contact
CARLE PLACE UFSD	280411	1,307	1.99	Submitted	No Contact
CENTER MORICHES UFSD	580233	1,394	20.88	Not Submitted	No Contact
CENTRAL ISLIP UFSD	580513	7,663	7.61	Submitted	No Contact
COLD SPRING HARBOR CSD	580402	1,531	13.04	Submitted	No Contact
COMMACK UFSD	580410	5,399	12.59	Submitted	No Contact
CONNETQUOT CSD	580507	5,227	6.47	Submitted	Initial Contact Made
COPIAGUE UFSD	580105	4,579	6.47	Submitted	No Contact
DEER PARK UFSD	580107	3,906	5.81	Submitted	No Contact
EAST HAMPTON UFSD	580301	1,819	39.33	Submitted	Underway
EAST ISLIP UFSD	580503	3,380	14.31	Submitted	No Contact
EAST MEADOW UFSD	280203	7,793	7.84	Submitted	No Contact
EAST MORICHES UFSD	580234	628	16.41	Not Submitted	No Contact
EAST QUOGUE UFSD	580917	381	10.24	Submitted	No Contact
EAST ROCKAWAY UFSD	280219	1,126	1.48	Submitted	No Contact
EAST WILLISTON UFSD	280402	1,571	4.13	Submitted	Underway
EASTPORT-SOUTH MANOR CSD	580912	2,697	41.66	Submitted	Underway
ELMONT UFSD	280216	3,170	4.15	Submitted	No Contact
ELWOOD UFSD	580401	1,933	24.85	Submitted	No Contact
FARMINGDALE UFSD	280522	5,180	8.8	Submitted	No Contact
FIRE ISLAND UFSD	580514	32	0.38	Submitted	Initial Contact Made
FISHERS ISLAND UFSD	581004	54	31.69	Not Submitted	No Contact
FLORAL PARK-BELLEROSE UFSD	280222	1,446	1.5	Not Submitted	No Contact
FRANKLIN SQUARE UFSD	280217	1,738	1.57	Submitted	No Contact
FREEPORT UFSD	280209	6,125	6.59	Submitted	No Contact
GARDEN CITY UFSD	280218	3,932	5	Submitted	Underway
GLEN COVE CITY SD	280100	3,063	6.91	Submitted	No Contact
GREAT NECK UFSD	280407	6,598	14.31	Submitted	No Contact
GREENPORT UFSD	581010	660	5.41	Submitted	No Contact
HALF HOLLOW HILLS CSD	580405	7,203	31.16	Not Submitted	Complete

LONG ISLAND LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
HAMPTON BAYS UFSD	580905	1,996	20.25	Submitted	No Contact
HARBORFIELDS CSD	580406	2,773	5.64	Submitted	No Contact
HAUPPAUGE UFSD	580506	3,112	10.24	Submitted	No Contact
HEMPSTEAD UFSD	280201	5,070	3.39	Submitted	No Contact
HERRICKS UFSD	280409	4,259	4.15	Submitted	Underway
HEWLETT-WOODMERE UFSD	280214	2,652	4.13	Submitted	No Contact
HICKSVILLE UFSD	280517	5,285	6.93	Submitted	No Contact
HUNTINGTON UFSD	580403	3,995	12.95	Submitted	No Contact
ISLAND PARK UFSD	280231	655	1.87	Submitted	No Contact
ISLAND TREES UFSD	280226	2,260	1.99	Submitted	No Contact
ISLIP UFSD	580502	2,652	6.04	Submitted	No Contact
JERICO UFSD	280515	3,231	12.91	Submitted	Underway
KINGS PARK CSD	580805	2,548	14.5	Submitted	Underway
LAWRENCE UFSD	280215	2,156	11.13	Not Submitted	No Contact
LEVITTOWN UFSD	280205	7,062	5.3	Submitted	No Contact
LINDENHURST UFSD	580104	5,560	6.76	Submitted	No Contact
LOCUST VALLEY CSD	280503	1,758	14.1	Submitted	Applied
LONG BEACH CITY SD	280300	3,266	4.81	Submitted	Underway
LONGWOOD CSD	580212	8,787	50.75	Submitted	No Contact
LYNBROOK UFSD	280220	2,725	1.74	Submitted	No Contact
MALVERNE UFSD	280212	1,808	2.23	Submitted	No Contact
MANHASSET UFSD	280406	3,006	4.66	Not Submitted	No Contact
MASSAPEQUA UFSD	280523	6,461	19.5	Submitted	No Contact
MATTITUCK-CUTCHOGUE UFSD	581012	981	23.99	Submitted	No Contact
MERRICK UFSD	280225	1,581	4.24	Submitted	No Contact
MIDDLE COUNTRY CSD	580211	8,985	15.58	Submitted	No Contact
MILLER PLACE UFSD	580208	2,197	13.71	Submitted	Initial Contact Made
MINEOLA UFSD	280410	2,794	2.23	Submitted	Underway
MONTAUK UFSD	580306	271	16.62	Submitted	Underway
MT SINAI UFSD	580207	1,984	7.53	Submitted	No Contact

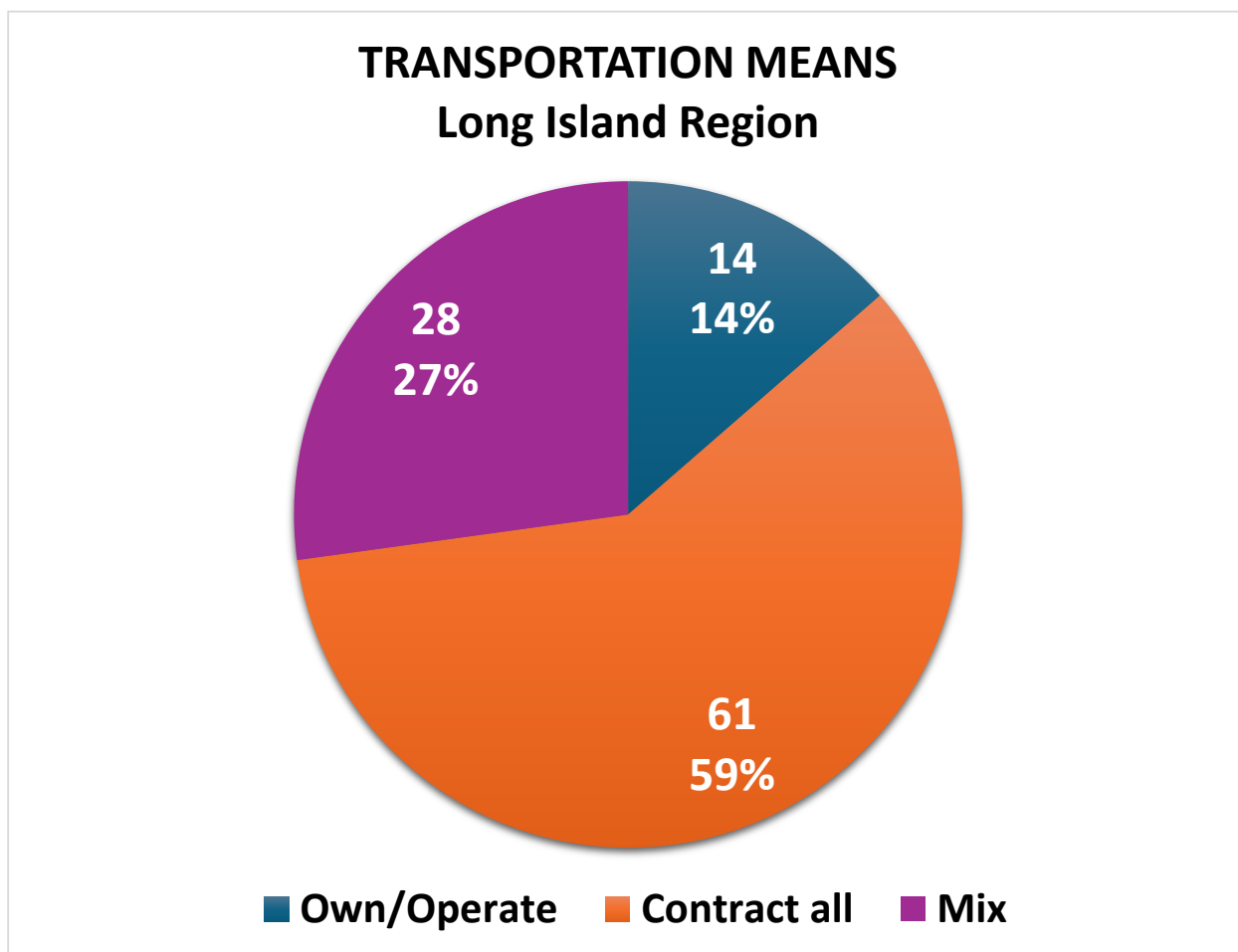
LONG ISLAND LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
NEW HYDE PARK-GARDEN CITY PARK UFSD	280405	1,419	1.55	Submitted	No Contact
NEW SUFFOLK COMN SD	581015		1.63	Not Submitted	No Contact
NORTH BABYLON UFSD	580103	4,463	5.41	Submitted	Underway
NORTH BELLMORE UFSD	280204	2,128	3.18	Submitted	No Contact
NORTH MERRICK UFSD	280229	1,238	2.23	Submitted	No Contact
NORTH SHORE CSD	280501	2,544	6.7	Submitted	No Contact
NORTHPORT-EAST NORTHPORT UFSD	580404	4,293	14.8	Submitted	Underway
OCEANSIDE UFSD	280211	5,179	6.47	Submitted	No Contact
OYSTER BAY-EAST NORWICH CSD	280506	1,309	13.36	Submitted	No Contact
OYSTERPONDS UFSD	581002	64	12.04	Submitted	No Contact
PATCHOGUE-MEDFORD UFSD	580224	7,372	27.73	Submitted	Applied
PLAINEDGE UFSD	280518	2,801	2.97	Submitted	Underway
PLAINVIEW-OLD BETHPAGE CSD	280504	5,406	12.1	Submitted	No Contact
PORT JEFFERSON UFSD	580206	857	7.42	Submitted	No Contact
PORT WASHINGTON UFSD	280404	5,230	13.04	Not Submitted	Underway
QUOGUE UFSD	580903	76	6.04	Not Submitted	No Contact
REMSENBURG-SPEONK UFSD	580901	119	7.63	Submitted	No Contact
RIVERHEAD CSD	580602	5,414	68.56	Submitted	No Contact
ROCKVILLE CENTRE UFSD	280221	3,276	3.07	Submitted	No Contact
ROCKY POINT UFSD	580209	2,580	9.12	Submitted	Initial Contact Made
ROOSEVELT UFSD	280208	3,026	1.63	Submitted	No Contact
ROSLYN UFSD	280403	3,329	5.3	Submitted	No Contact
SACHEM CSD	580205	11,556	24.49	Submitted	Underway
SAG HARBOR UFSD	580305	891	22.26	Submitted	Underway
SAGAPONACK COMN SD	580910	13	8.82	Submitted	No Contact
SAYVILLE UFSD	580504	2,443	6.32	Submitted	No Contact
SEAFORD UFSD	280206	2,184	3.5	Submitted	No Contact
SEWANHAKA CENTRAL HS DISTRICT	280252	7,727	8.77	Not Submitted	No Contact
SHELTER ISLAND UFSD	580701	165	26.14	Not Submitted	No Contact
SHOREHAM-WADING RIVER CSD	580601	1,932	14.44	Submitted	No Contact

LONG ISLAND LABOR MARKET REGION					
SCHOOL DISTRICT	BEDS CODE	2024-25 ENROLLMENT	AREA (sq mi)	NYSED SURVEY RESPONSE	NYSERDA FEP
SMITHTOWN CSD	580801	7,437	30.38	Submitted	No Contact
SOUTH COUNTRY CSD	580235	3,798	34.57	Submitted	No Contact
SOUTH HUNTINGTON UFSD	580413	5,670	7.99	Submitted	Underway
SOUTHAMPTON UFSD	580906	1,219	51.18	Submitted	No Contact
SOUTHOLD UFSD	581005	637	23.51	Submitted	No Contact
SPRINGS UFSD	580304	652	37.52	Submitted	No Contact
SYOSSET CSD	280502	6,980	11.66	Submitted	No Contact
THREE VILLAGE CSD	580201	5,432	28.3	Not Submitted	No Contact
TUCKAHOE COMMON SD	580913	224	11.53	Not Submitted	No Contact
UNIONDALE UFSD	280202	5,776	7.14	Submitted	No Contact
VALLEY STREAM 13 UFSD	280213	1,904	2.97	Submitted	No Contact
VALLEY STREAM 24 UFSD	280224	1,036	1.23	Submitted	No Contact
VALLEY STREAM 30 UFSD	280230	1,349	1.04	Not Submitted	No Contact
VALLEY STREAM CENTRAL HS DISTRICT	280251	4,547	5.24	Submitted	Underway
WAINSCOTT COMN SD	580302	19	7.76	Not Submitted	No Contact
WANTAGH UFSD	280223	2,710	3.69	Not Submitted	No Contact
WEST BABYLON UFSD	580102	3,597	6.04	Submitted	Underway
WEST HEMPSTEAD UFSD	280227	1,597	2.97	Submitted	No Contact
WEST ISLIP UFSD	580509	3,696	9.65	Submitted	No Contact
WESTBURY UFSD	280401	4,329	3.9	Not Submitted	No Contact
WESTHAMPTON BEACH UFSD	580902	1,625	16.17	Submitted	No Contact
WILLIAM FLOYD UFSD	580232	9,386	11.45	Not Submitted	No Contact
WYANDANCH UFSD	580109	2,380	2.5	Submitted	No Contact

Transportation Means

Less than a quarter of school districts in the Long Island Region reported they own and operate buses. Fourteen districts (14, 14%) currently own and operate all school buses serving districts' needs; sixty-one districts (61, 59%) indicate that all transportation services are contracted out; and twenty-eight, (28, 27%) indicate a mix of both. This is consistent with the NYSED's observation that, statewide, student transportation in more

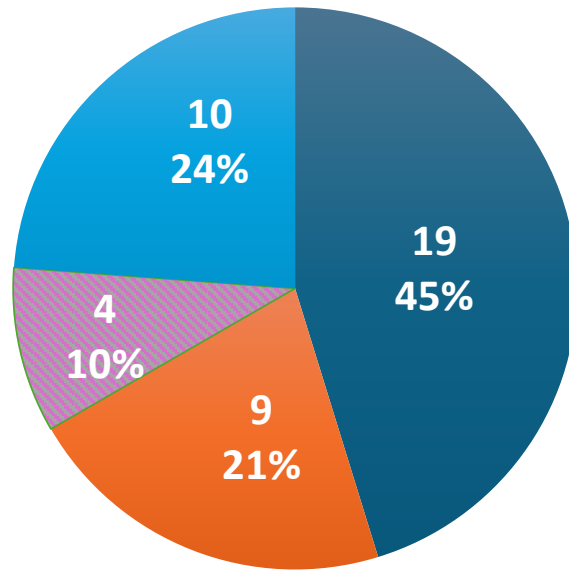
densely populated areas is generally contracted out to a third-party vendor, while districts in the more sparsely populated regions own and operate buses internally.



Bus Fleets

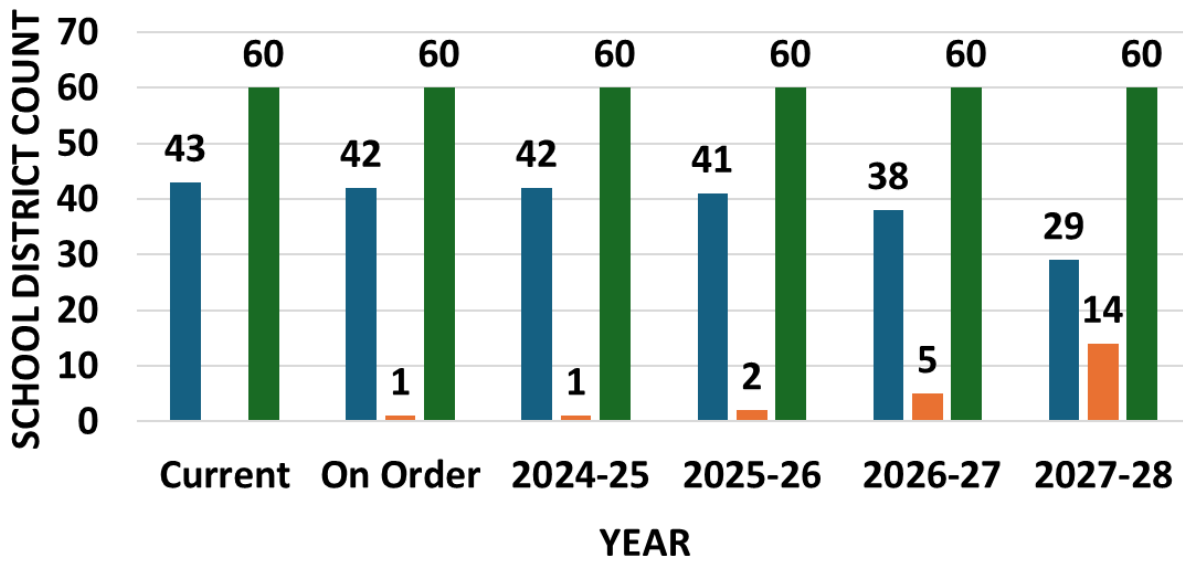
Forty-two (42) school districts in the Long Island Region provided NYSED with information on their current bus fleet and anticipated future needs. Nineteen (19) districts maintain between 1 and 20 buses; nine (9) districts own between 21 and 40 buses; four (4) districts maintain a fleet of between 41 and 60 buses; and ten (10) districts own greater than sixty (60) buses. At this time there is no school district that reports owning zero-emission buses in the region. Districts that own/operate bus fleets internally anticipate accelerating zero emission bus acquisitions during the statutory transition period of 2027 through 2035.

SCHOOL DISTRICT FLEET SIZE- Long Island Region



Number of Buses: ■ 1-20 ■ 21-40 ■ 41-60 ■ 61+

CURRENT AND ANTICIPATED ZERO EMISSION BUSES Long Island Region

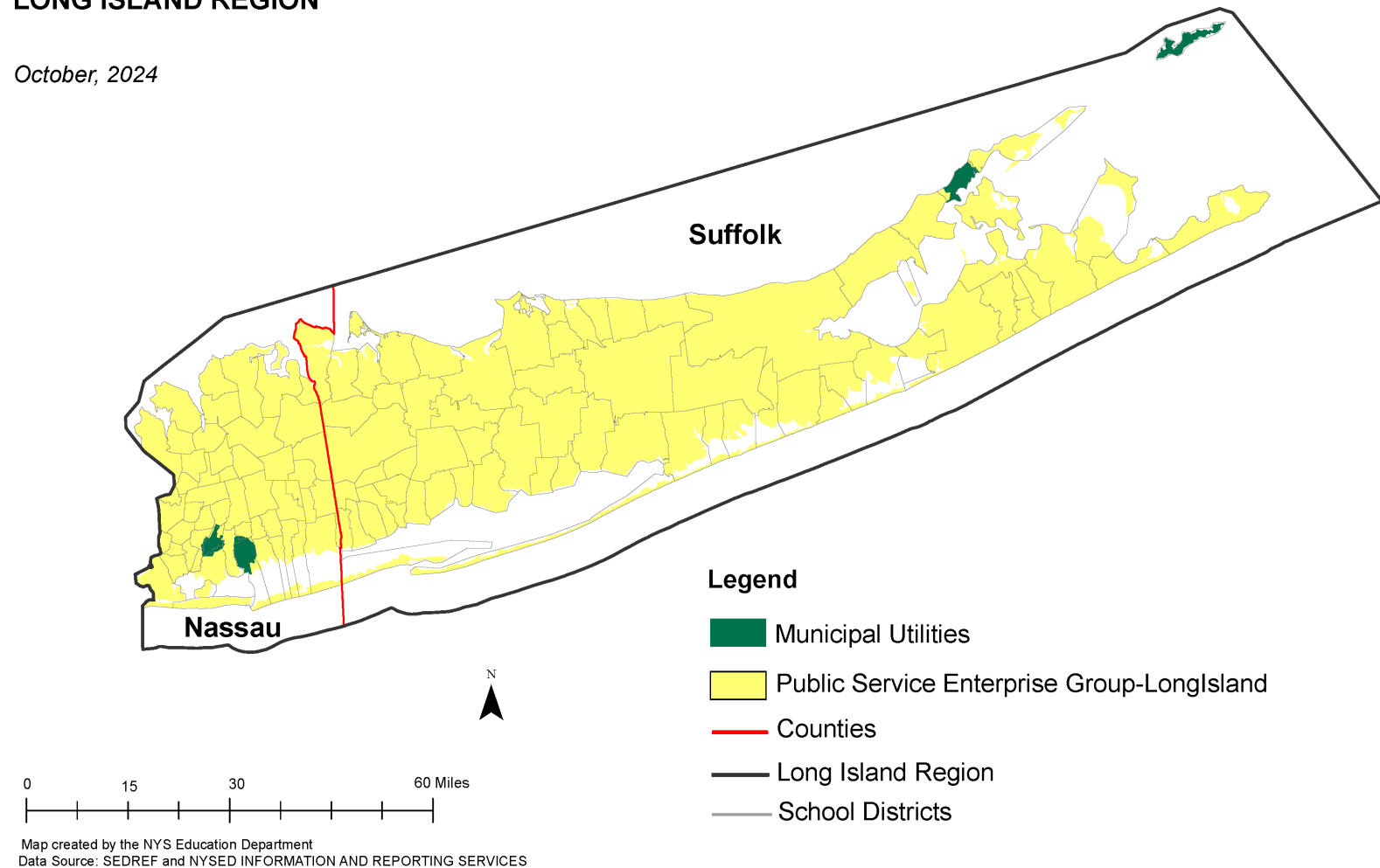


Number of Buses: ■ 0 ■ 1-5 ■ TBD

Infrastructure Assessment

ELECTRIC SERVICE UTILITIES by NEW YORK STATE LABOR MARKET REGIONS - PUBLIC SCHOOLS LONG ISLAND REGION

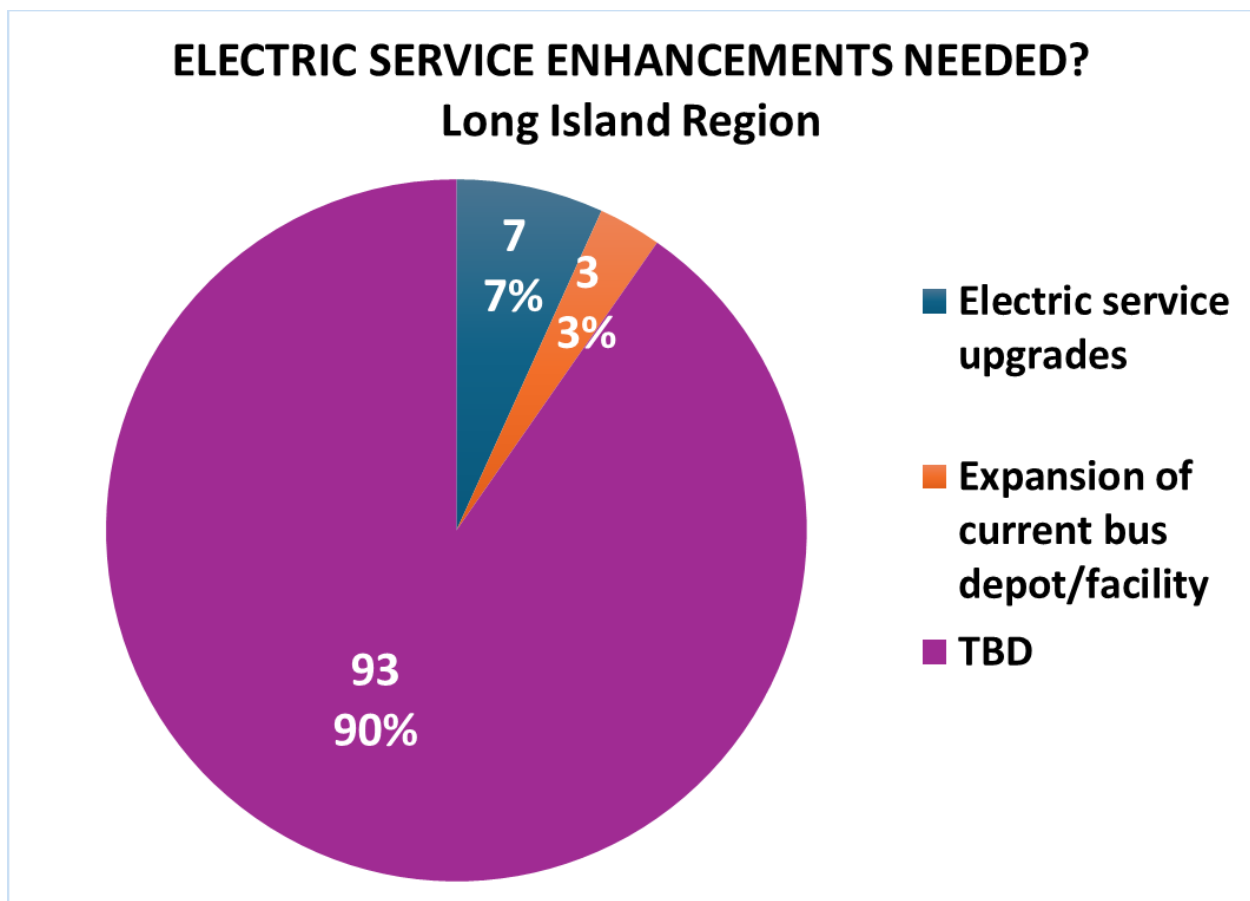
October, 2024



Electric Service

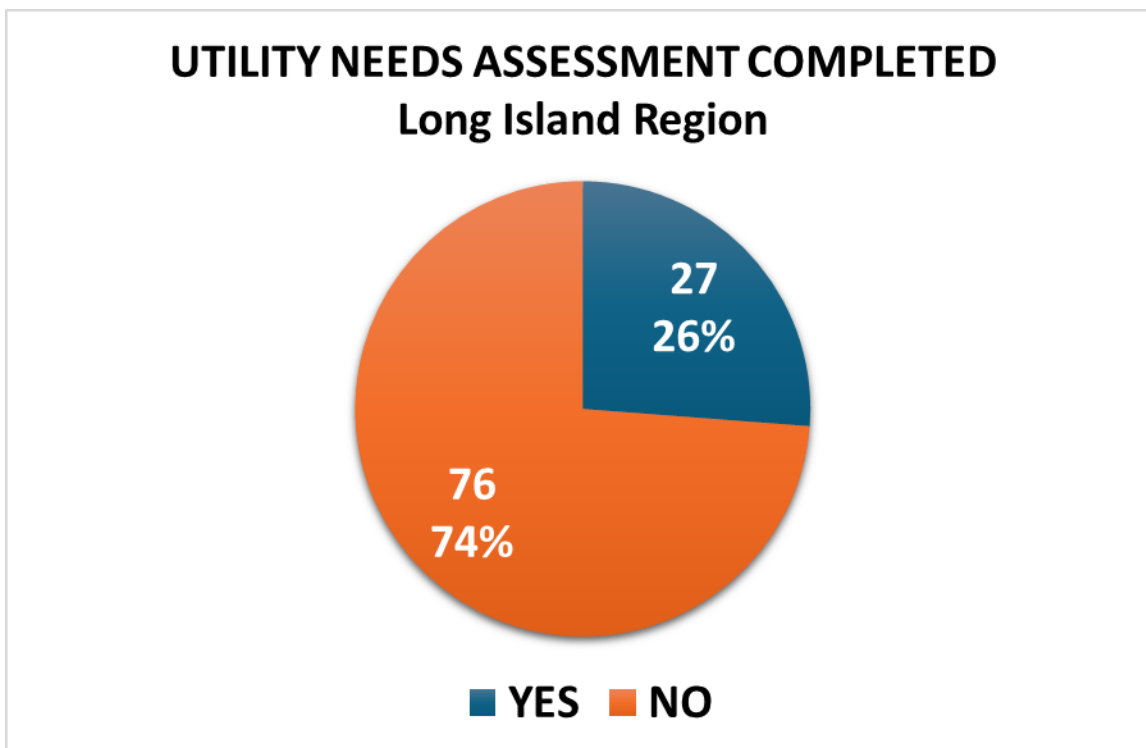
School Districts in the Long Island Region primarily receive electricity from one (1) major utility company—PSEG-LI. However, also as indicated, there are some small utility providers serving a similarly small number of districts.

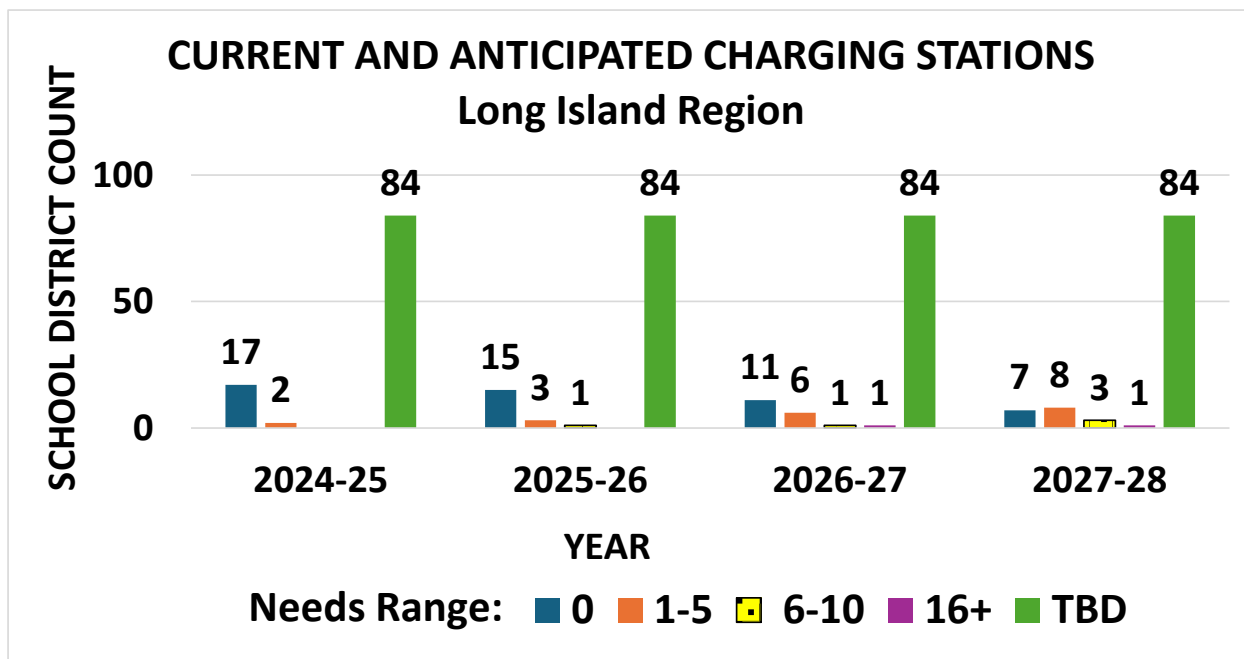
In general, districts in the Long Island Region report that current electric service is sufficient for their needs in 2024-25. However, as evidenced in the graph below, seven (7) districts—anticipate that electric service upgrades will be necessary to support a fully electric bus fleet. Additionally, three (3) districts reported that they would need an expansion of the current bus depot/facility to support the zero-emission busing. A total of ninety-three (93) districts is still assessing their needs.



Charging Stations and Infrastructure

Eighty-six (86) school districts in the region responded to the survey report that there are no charging stations available in the district, currently. However, there are twenty (20) school districts that either have some charging stations ready for use or anticipate that chargers will be installed during the 2025-26 school year. Mirroring the data around bus acquisition, districts anticipate accelerating the purchase and installation of charging stations in the coming years. The graph below indicates that by the 2027-28 school year, at least twelve (12) districts in the region anticipate that some charging stations will be installed. The primary reasons cited for the current limited availability are the lack of adequate electric service available to districts, leasing of current bus garages and land, needing to wait until formal fleet electrification plans are completed, and that a significant number of districts that contract for all transportation services do not anticipate installing charging infrastructure at the district. Based on the data collected from one-hundred and three (103) districts, a total of twenty-seven (27, 26%) of the districts in the Long Island region have completed their electric utility needs assessment or have a load letter from their utility provider.





Challenges

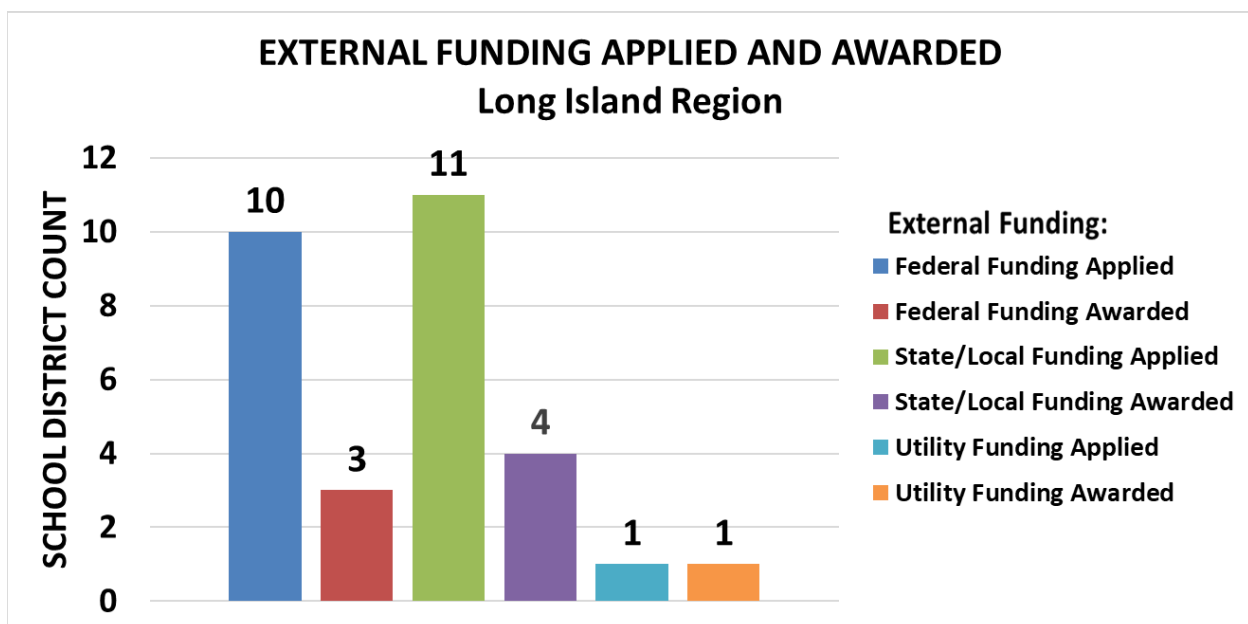
Districts were asked to rate and rank identified challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. The rating scales were from 1-least challenging to 6-most challenging. The common challenges identified and presented to the district were around:

1. Lack of Voter Support;
2. Lack of External Funding;
3. Utility Support Upgrades;
4. Facility/Construction Issues;
5. Vehicle Performance/Range Limitation; and
6. Contractor/Vendor Compliance Issues.

The results from the Long Island region show that Lack of External Funding, Utility Support upgrades and Facility Support/Upgrades rated the highest in the most challenging section. Whereas Lack of Voter Support was the least challenging concern.

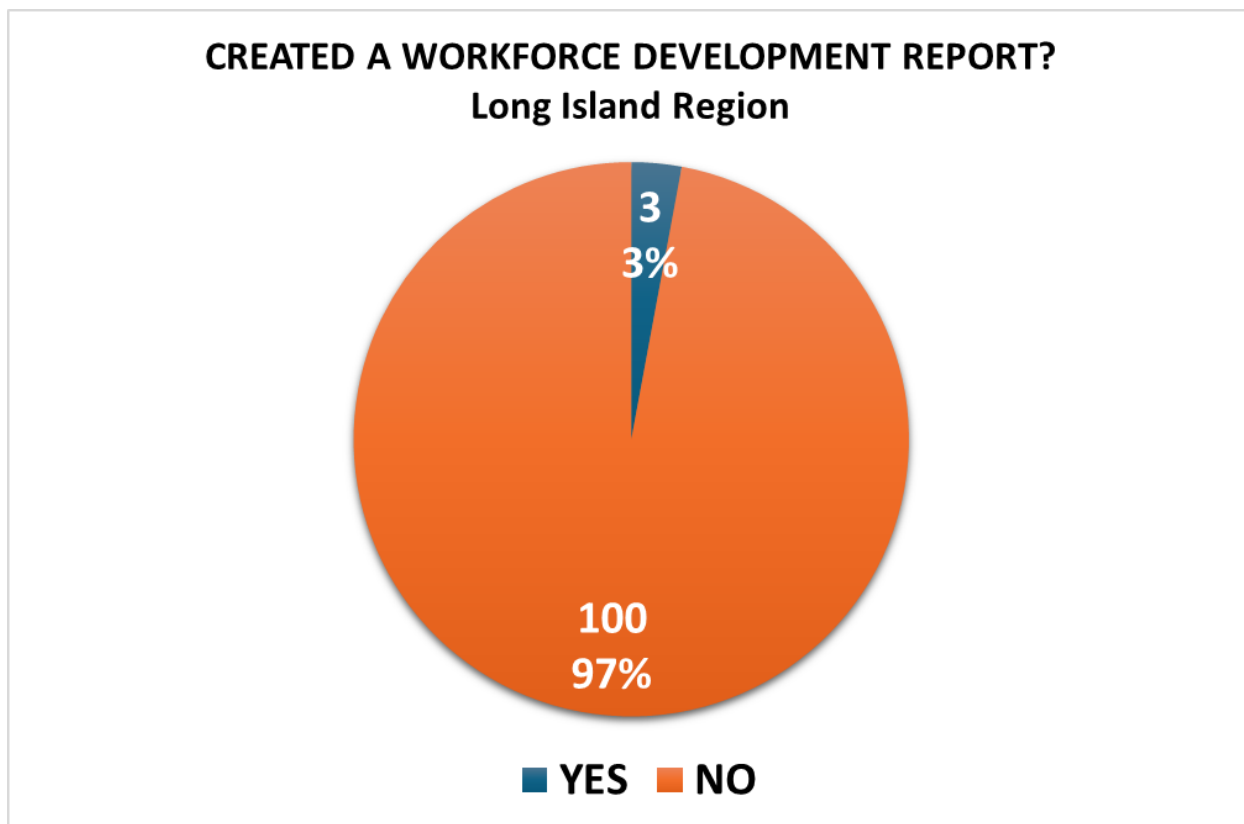
Funding Opportunities

State/Local Funding opportunities were available to many districts and eleven districts (11, 10%) applied for funds and four (4) districts received funds with a range from a low of \$29,708 to a high of \$2,000,000. The average award was approximately \$269,867 Federal Funding opportunities have been available to the districts and ten districts (10, 9%) applied for funds and three (3) districts received funds with amounts of \$690,000, \$1,200,000, and \$2,000,000. One (1) district reported applying for Utility Funding and received \$200,000.



Workforce Development Plan

The regulation requires that all districts create and implement a Workforce Development plan prior to the beginning of the procurement process for new zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment, the school district, private school bus company, or other employer whose workers provide pupil transportation services. In the Long Island region three districts (3, 2.9%) reported completing a Workforce Development Plan out of one hundred-three (103) districts.



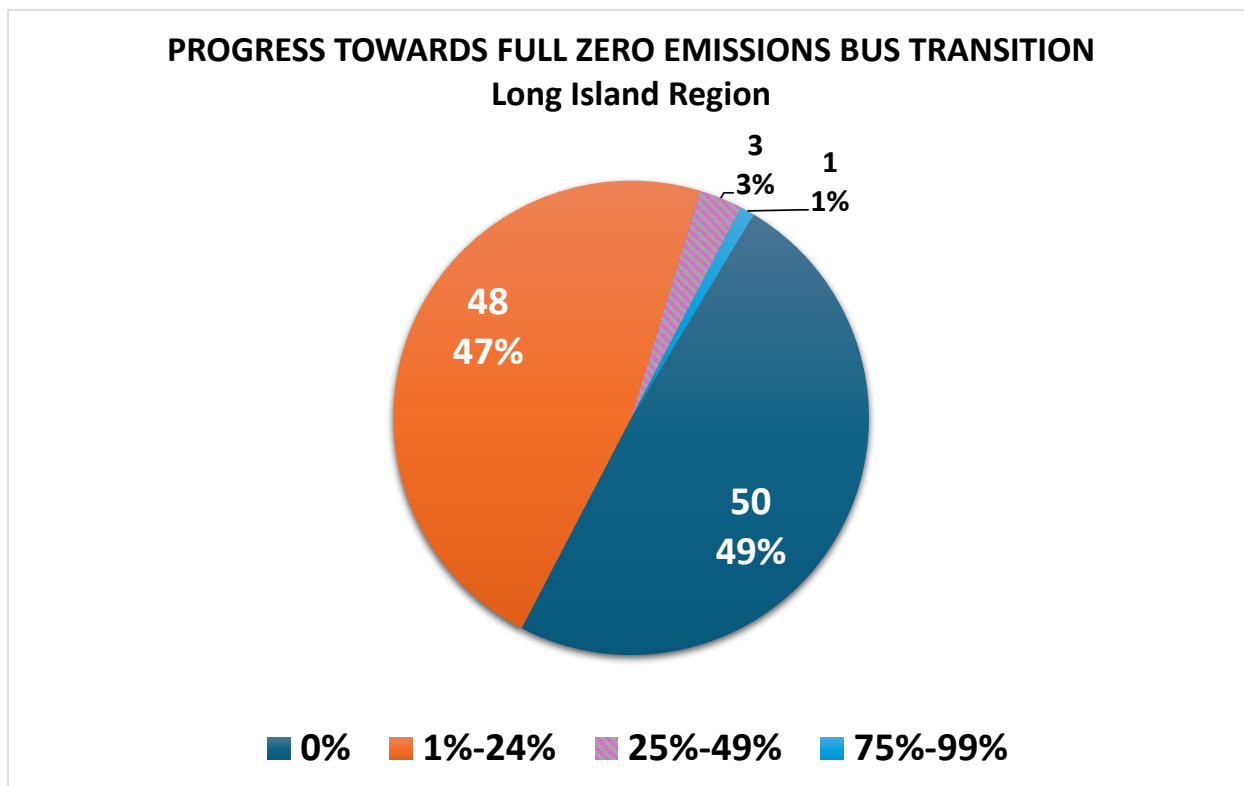
Transition Towards Zero Emission Busing

Districts were asked to share their progress in transitioning to full zero-emission busing.

Out of all respondents:

- One (1) district reported being 75-99% complete;
- Three (3) districts reported they are 25-49% complete;
- Forty-eight (48) districts reported they are 1-24% complete; and
- Fifty (50, 49%) districts reported they have made no progress to date.

In total, fifty-two districts (52, 51%) have begun the transition to zero-emission busing, while fifty districts (50, 49%) remain at 0%.



District Comments-Summary

Long Island is the largest Labor Market Region outside of New York City with one hundred twenty-five (125) school districts. Out of that number one hundred-two (102) completed the survey and sixty-eight (68) left comments. Some districts and private contractors are making good progress toward zero emissions. Seaford, for example, reported that their contractor, Educational Bus Transportation, Inc. (EBT) “received funding for ten (10) Zero-emission buses,” which are “expected to arrive in January of 2026.” The district is also planning construction of a new yard for charging their vendors’ buses. Guardian Bus and First Student reportedly have 100% electrification plans for some of the districts they contract with (Freeport, e.g.).

Significant challenges remain for many districts in this region. Cost was the greatest challenge to transitioning to zero emissions and were described as “prohibitively expensive.” Long Island residents in many districts pay high property and school taxes and fears over tax increases are reflected in voter opposition in some districts; wealthier districts stressed insufficient state and federal funds. These districts receive less state funding for their schools so would be subject to tax increases to support the ZEB

transition. Concerns about cost included the initial outlay for bus and charging station purchases, upgrading of facilities to house the charging stations, and maintenance over the long term. Battery life and end of life disposal were raised as concerns. Inadequate electrical grid capacity is also an obstacle. Districts reported that the main provider PSEG could not support the increase in demand.

Reliability and safety were also major concerns. Many districts contract with Suffolk Transportation, which provided their official statement on the challenges to districts:

One of the most pressing issues we've encountered is the reliability of electric buses, which currently stands at around 50%. This reliability rate is insufficient for consistent operations and would be unsustainable for a fully electric fleet. Additionally, the high cost of approximately \$470,000 per vehicle, excluding tax, makes it financially unfeasible to transition without substantial governmental support. Battery range is another significant hurdle. To optimize yard space and electrical infrastructure, we need batteries that can hold a charge for several days rather than requiring daily recharging. While we've been testing large electric buses, their performance has been inconsistent. Despite having a fleet of over 1,000 school vans, there is no commercially available electric school van model that has undergone thorough testing and proven to be viable.... Moreover, our experience with the first few buses highlighted several technical issues. Initially, the buses could not operate in temperatures below 50 degrees. Working with Blue Bird, we developed an improved battery warming and cooling system. Although the newer units included a Webasto heater to keep the battery warmer overnight, we later found it to be ineffective and decided to remove it. Additionally, we faced daily electrical problems, leading to a collaborative effort with Blue Bird's dealer, the bus manufacturer, and the chassis company to resolve these issues. This summer, Blue Bird will train our shop to make necessary fixes to enhance reliability...Suffolk Transportation remains committed to working with Blue Bird and other partners to refine this technology and make it as reliable and efficient as possible. We wholeheartedly endorse the vision of achieving full electrification by 2035 but recognize the need for significant advancements in vehicle performance,

charging logistics, and pricing to make this goal attainable across all school districts.

New York City Region

The New York City Labor Market Region comprises five (5) counties—Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island). Together, there is only one (1) school district covering an area of approximately 304 square miles that was responsible for educating 938,189 school-age children in the 2023-24 school year. The district provided a summary report describing in detail the status of its transition to zero-emission busing as of June 30, 2024. This document, in full, is included in this report as Appendix 1. Overall, the district reports that it is working closely with NYSERDA and ConEd on assessing its needs and securing external funding through grants and other programs to support the transition.

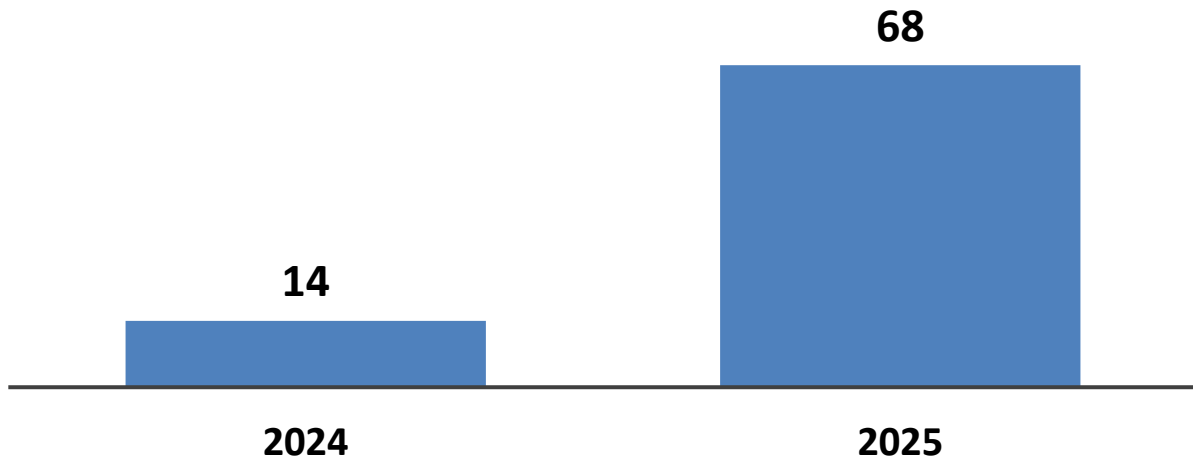
The New York City Department of Education, Office of Pupil Transportation provides transportation through one hundred percent (100%) externally contracted fleet. New York City Public Schools provide transportation to more than 150,000 students across approximately 9,000 daily routes operated by more than fifty (50) individual bus vendors. The total fleet size is approximately 10,500 vehicles.

Last year NYCPS reported having fourteen (14) vendor funded electric vehicles. This year they reported having a total of sixty-eight (68) electric buses in service to about 1,500 students. This is a substantial increase and shows positive effort towards Zero Emission Busing.

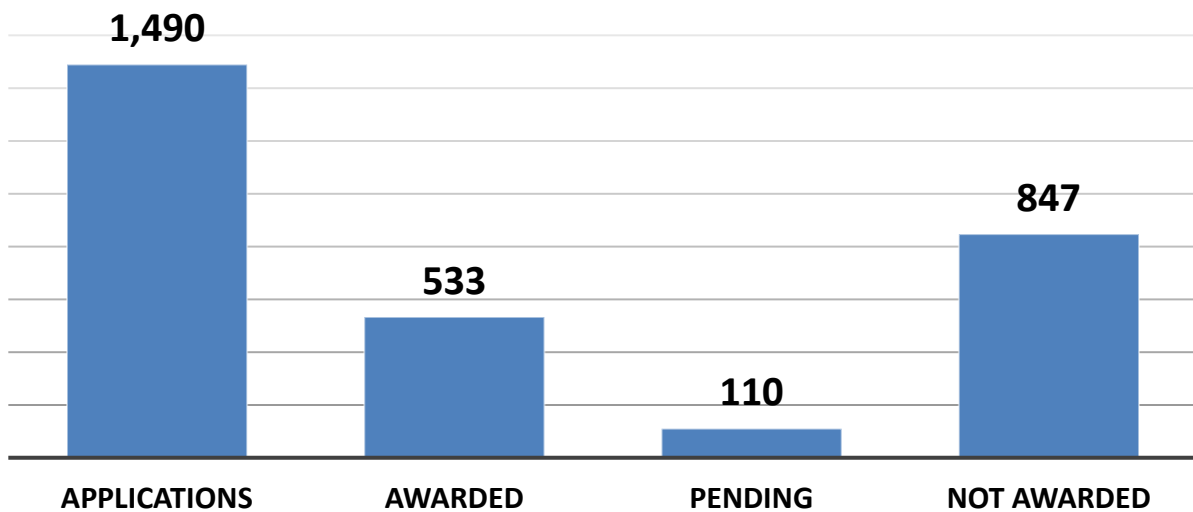
NYCPS reported they were awarded five hundred thirty-three (533) electric buses; this is about 5% of their entire fleet. Grants through EPA, Clean Heavy Duty Grant, and NYSBIP have totaled fifty-four (54) applications with twenty (20) Awards, and four (4) Pending. The total number of buses applied for was 1,490 and currently awarded is five hundred thirty-three (533) with an added one hundred ten (110) Pending.

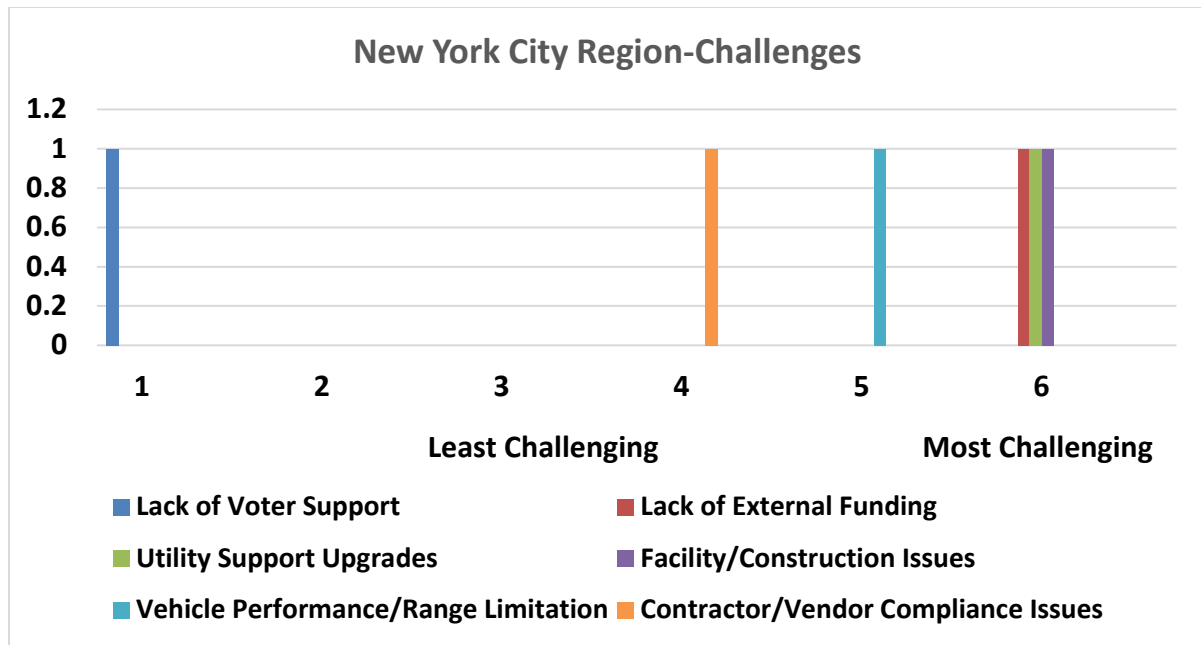
Data from the survey shows NYCPS reported that they are at 1-24% towards full transitioning to zero emission busing. Funding Sources, Utility Support, and Facility/Construction were the most challenging areas reported by NYCPS.

New York City Public Schools-Zero Emission Buses



Zero-Emission Vehicles





Appendices

Appendix 1

LEGISLATIVE MANDATE

LOCAL LAW NO. 120 FOR THE YEAR 2021

Subdivision f of section 24-163.9 of the administrative code of the city of New York, as amended by local law number 120 for the year 2021 provides:

f. Reporting requirements. (2) Before the end of the fiscal year commencing on July 1, 2023 (...) the department of education shall submit a report to the mayor and the speaker of the council on:

- i. actions taken to achieve the requirement provided by subdivision e to replace school buses with all-electric zero emission school buses by September 1, 2035
- ii. barriers, if any, to achieving such replacement by such date
- iii. plans to address the barriers described in subparagraph ii
- iv. a date by which such replacement will be complete
- v. the safety and reliability of the all-electric zero emission school buses in use pursuant to a school bus contract
- vi. the percentage of routes served by all-electric zero emission school buses where the origin or destination is located in an environmental justice area as defined in section 3-1001
- vii. a description of each model of all-electric zero emission school bus that is in use pursuant to a school bus contract, including but not limited to the name of the manufacturer and the number of buses of each such model in use
- viii. applications that have been submitted by the department for federal, state, private or other funding for the purpose of achieving such replacement
- ix. progress that vendors have made in developing charging infrastructure, including the proportion of such charging infrastructure that has been installed in an environmental justice area as defined in section 3-1001

(3) The first report required pursuant to paragraph 2 of this subdivision shall include whether there are, or the status of achieving by the date of the next report, 75 all-electric zero emission school buses.

SECTION ONE – SUMMARY

New York City Public Schools (“NYCPS”, aka the New York City Department of Education) provides pupil transportation through a 100% externally contracted fleet. Within NYCPS, the Office of Pupil Transportation (“OPT”), under the guidance of the Chief Operating Officer (“COO”), manages student transportation across the five boroughs of New York City. OPT transports more than 150,000 students across approximately 9,000 daily routes operated by more than 50 individual bus vendors.

In coordination with the Mayor’s Office of Climate and Environmental Justice (“MOCEJ”), the EPA, NYSEDA and Con-Ed, NYCPS has actively engaged with our vendors to provide knowledge and raise awareness of opportunities for assistance with respect to the electrification of the school bus fleet. This included a comprehensive workshop and materials created to educate our vendors around electrification. NYCPS is committed to continuing this engagement with our vendors, as well as providing them with letters of support and other documentation they need to qualify for grant funding.

Considering the number of electric school buses currently operated by city contractors as well as the influx of federally awarded dollars from the EPA Clean School Bus Grant, we anticipate that there will be more than 400 electric school buses. uses in operation in New York City prior to the next required report, which is due in June 2029. This number could be higher, depending on future grant awards and investments made by vendors. It is important to note that most current yellow bus transportation contracts expire in June of 2025 and that some of our current vendors may not be the same going forward. That said, all awarded electric vehicles are required to operate within the school district for a minimum of five years, and as such we anticipate ownership transfer would occur if new vendors began serving NYCPS. NYCPS vendors have been very aggressive about pursuing federal and state grant opportunities to further their journey towards operating a 100% zero-emission fleet by 2035. NYCPS’s current vendors have submitted 49 applications for nearly 1,300 buses. In addition to grant awards, vendors continue to pursue opportunities to self-fund vehicles. There are currently 14 vendor funded electric vehicles in operation: 11 repowered vehicles (gas/diesel buses converted to electric) and 3 new electric buses. Given the uncertainty of our contracting modeling, grant funding and electrical infrastructure requirements, it is difficult to predict when complete replacement will be achieved.

Grant	Applications				Vehicles			
	Number of Apps	Awarded	Not Awarded	Pending	Number of Buses	Awarded	Not Awarded	Pending
EPA Round 1	7	3	4	0	151	51	100	0
EPA Round 2	5	2	3	0	405	180	225	0
EPA Round 3	30	7	23	0	685	163	522	0
NYSBIP	7	0	0	7	54	0	0	54
Total	49	12	30	7	1,295	394	847	54

SECTION TWO – EXISTING ELECTRIC SCHOOL BUSES IN NEW YORK CITY AND PROGRESS ON INFRASTRUCTURE

Current Inventory

The table below contains the details of the 14 electric buses currently in operation:

Manufacturer	Type	Bus#	Areas Serviced	Environmental Justice Area (Source)
Unique Electric Solutions - Repower	C	5130-ESB	Brooklyn	Yes
Unique Electric Solutions - Repower	C	4031-ESB	Brooklyn	Yes
Unique Electric Solutions - Repower	C	5129-ESB	Queens	Yes
Unique Electric Solutions - Repower	C	E001	Queens	Yes
Unique Electric Solutions - Repower	C	E002	Queens	Yes
Unique Electric Solutions - Repower	C	E003	Queens	Yes
Unique Electric Solutions - Repower	C	E004	Queens	Yes
Unique Electric Solutions - Repower	C	E005	Queens	Yes
Collins	A	NT2101-ESB	Citywide	Yes
Microbird	A	NT2102-ESB	Citywide	Yes
Thomas	A	NT2103-ESB	Citywide	Yes
Unique Electric Solutions - Repower	C	129-ESB	Bronx	Yes
Unique Electric Solutions - Repower	C	136-ESB	Bronx	Yes
Unique Electric Solutions - Repower	C	137-ESB	Bronx	Yes

Current Infrastructure Projects

Vendors continue to work with Con-Ed towards building charging capacity capable of supporting electrification targets. Currently, seven vendors are working towards infrastructure upgrades. These seven vendors are pursuing upgrades at 17 bus depots. Of these 17 bus depots, 14 are in environmental justice areas. The locations are as follows: 8 in the Bronx, 4 in Brooklyn, 2 in Staten Island, 2 in Queens and 1 in Westchester County.

Safety and Reliability

NYCPS has had regular discussions with vendors regarding the operation of electric buses. While there are few buses on the road currently, most of which have come into operation in the last 12 months, there are some common themes in terms of safety and reliability:

- 1) Charging Issues – including:
 - a. The length of time it takes to charge
 - b. Midday charging capabilities
 - c. Battery quality issues and/or development of battery technology
- 2) Braking Issues – failed deceleration tests
- 3) Range – maximum of 100 miles, raising concerns about longer routes and field trips.
 - a. The average bus travels 60 miles in a day
 - b. 25% of buses travel over 70 miles in a day
 - c. 10% of buses travel over 90 miles in a day
 - d. Extreme temperatures can greatly affect the miles driven per charge

NYCPS intends to continue monitoring issues with electric buses, as well as the development of the technology, keeping in mind this is a rapidly developing field.

SECTION THREE – INDUSTRY-WIDE VIEW OF ELECTRIC SCHOOL BUSES

There are many “barriers to (...) achieving the replacement of school buses with all-electric zero emission school buses by September 1, 2035.” For each of the three “barriers” noted below, “plans [and strategies] to address [and mitigate] the barriers” are also noted.

- **Barrier: High Cost of New Electric School Buses**

- A review of the New York State Office of General Services Statewide Contract for School Buses^[1] shows that:
 - Type A electric school buses are 2.3-2.7x more expensive up-front than their gasoline-powered equivalents
 - Type C electric school buses are 1.6-1.8x more expensive up-front than their gasoline and diesel-powered equivalents
- The increased level of investment necessitated by this price differential may cause some vendors to lag in early implementation of the technology, which could ultimately lead to a delay in achieving the requirement.
- Overall levels of production of electric school buses are presently lower than would be necessary to meet Statewide and national needs by the 2035 deadline, plus related supply-chain constraints
- Mitigants include the following: “although electric school buses have higher upfront costs than traditional diesel or gasoline-powered buses, the total cost of ownership is expected to reach parity by 2027 due to advances in battery technology, increased supply chain outputs, as well as lower fuel and maintenance expenses”^[2]
- Mitigant: Grant programs from the Federal and State government which subsidize the purchase of electric school buses. (See section 4.)
- Mitigant: Many vendors have explored retrofits/repowers, and NYSEDA has allowed these to qualify for the NYSBIP program. The marginal cost of these vehicles is lower than a new electric school bus.

- **Barrier: Sufficient Electricity for Charging at School Bus Depots**

- Many school bus depots are lacking in sufficient electrical supply for bus charging, and many are not electrified at all.
- Mitigant: ConEdison (local utility) working with our vendors to ensure sufficient supply of electricity at depots to support a fully electrified fleet

- **Barrier: Sufficient Charging for Fleet During the Day**

- Many school buses operate routes that would require them to charge in the middle of the day. Access to on-street chargers for this subset of the school bus fleet will need to be addressed in addition to the electrification of school bus depots noted above
- Future Strategic Mitigant: NYC Department of Citywide Administrative Services (“DCAS”) Fleet team installing curb-side chargers' city-wide which buses could utilize
- Future Strategic Mitigant: NYC School Construction Authority (“SCA”) could install charging infrastructure at schools for mid-day charging where feasible and legally appropriate

SECTION FOUR – EXISTING GRANT OVERVIEW

NYCPS provides pupil transportation through a 100% externally contracted fleet. Given this operating model, NYCPS has not submitted any applications for federal, state, private or other funding for the purpose of “achieving the replacement of school buses with all-electric zero emission school buses by September 1, 2035.”

OPT currently contracts with about 50 individual school bus contractors. These school bus contractors apply for a variety of federal, state, private or other funding on their own accord. NYCDOE has provided applicants with letters of support and any other forms required to be submitted with grant applications by Federal or State regulations, as well as informational support.

This is a time of unprecedented investment into electric school buses by the US Federal Government. The Bipartisan Infrastructure Bill included \$5B for the EPA’s Clean School Bus Program (“CSBP”). The EPA has already awarded \$2.8B in the first three rounds of funding for this program nationally, and current NYCDOE vendors have been named recipients for over \$125M in funding.

- 188 buses for City-Affiliated Bronx-based NYCSBUS
 - o \$8.0M for 25x Type A (Round 1 lottery, October 2022, Citywide award)
 - o \$29.5M for 100x Type A (Round 2 competitive, January 2024, Citywide award)
 - o \$18M for 63x Type A (Round 3 lottery, May 2024, Districts 2, 3, 4)
- 105 buses for Consolidated Bus Transit
 - o \$10.0M for 25x Type C (Round 1 lottery, October 2022, District 1)
 - o \$31.6M for 80x Type C (Round 2 competitive, January 2024, Districts 19, 20, 21, 22)
- 50 Buses for Logan Bus Company
 - o \$15M for 25x Type A and 25x Type C (Round 3 lottery, Districts 23, 25)
- 25 Buses for Pioneer Transportation
 - o \$8.6M for 25x Type C (Round 3 lottery, District 7)
- 25 Buses for GVC
 - o \$6.2M for 25x Type A (Round 3 lottery, Citywide award)
- 1 bus (\$0.5M) for Jofaz (Round 1, for Community Partnership Charter, Brooklyn)

Just under half (\$2.17B of \$5B) of the US EPA CSBP program remains unannounced. NYCDOE eagerly awaits new information on forthcoming rounds of funding and will continue to assist and support our vendors in their applications.

Additional federal funding opportunities exist for NYCDOE’s school bus contractors through the US EPA’s Clean Heavy-Duty Vehicles (“CHDV”) or Diesel Emissions Reduction Act (“DERA”) programs, as well as through Federal tax credits such as the Qualified Commercial Clean Vehicle (45W) and Alternative Fuel Vehicle Refueling (30C) credits. Unfortunately, US EPA’s CHDV program makes private operators like most of NYCDOE’s school bus contractors ineligible.

Grants are also available to NYCDOE school bus contractors from the New York State Energy Research and Development Authority. (“NYSERDA”) The New York School Bus Incentive Program (“NYSBIP”) was funded with \$500M from the Environmental Bond Act approved by voters in November 2022, and the funding availability was announced in September 2023. Applications opened in late November 2023 and are being funded by NYSERDA on “first-come, first-served” basis.

Applications Submitted by Current NYCPS Vendors

Grant	Vendor	# of Buses	District	Status
EPA Round 1	Consolidated	25	1	Awarded
EPA Round 1	Jofaz	1	17	Awarded
EPA Round 1	NYCSBUS	25	Chancellor's Office (Citywide)	Awarded
EPA Round 1	Logan (Bobby's)	25	9	Not Awarded
EPA Round 1	Logan (Grandpa's)	25	27	Not Awarded
EPA Round 1	Pioneer	25	7	Not Awarded
EPA Round 1	Pioneer	25	31	Not Awarded
EPA Round 2	Consolidated	80	19, 20, 21, 22	Awarded
EPA Round 2	NYCSBUS	100	Chancellor's Office (Citywide)	Awarded
EPA Round 2	Total Transportation (First Student)	25	18, 19, 22, 24, 25, 26, 27, 28, 29	Not Awarded
EPA Round 2	GVC	100	7, 8, 9, 10, 11, 12	Not Awarded
EPA Round 2	Pioneer/Logan	100	7, 8, 9, 10, 11	Not Awarded
EPA Round 3	GVC	25	Chancellor's Office (Citywide)	Awarded
EPA Round 3	Pioneer	25	7	Awarded
EPA Round 3	Little Linda	25	23	Awarded
EPA Round 3	Lorissa	25	25	Awarded
EPA Round 3	NYCSBUS	21	2	Awarded
EPA Round 3	NYCSBUS	21	3	Awarded
EPA Round 3	NYCSBUS	21	4	Awarded
EPA Round 3	Total Transportation (First Student)	25	26	Not Awarded
EPA Round 3	Total Transportation (First Student)	25	29	Not Awarded
EPA Round 3	Pioneer	25	8	Not Awarded
EPA Round 3	Pioneer	25	31	Not Awarded
EPA Round 3	Grandpa's	25	10	Not Awarded
EPA Round 3	Logan Bus	25	27	Not Awarded
EPA Round 3	Logan Transportation	25	12	Not Awarded
EPA Round 3	Little Richie	25	9	Not Awarded
EPA Round 3	Bobby's	25	24	Not Awarded
EPA Round 3	Lorinda	25	19	Not Awarded

Grant	Vendor	# of Buses	District	Status
EPA Round 3	Little Lisa	25	11	Not Awarded
EPA Round 3	NYCSBUS	21	1	Not Awarded
EPA Round 3	NYCSBUS	21	5	Not Awarded
EPA Round 3	NYCSBUS	21	6	Not Awarded
EPA Round 3	NYCSBUS	21	13	Not Awarded
EPA Round 3	NYCSBUS	21	14	Not Awarded
EPA Round 3	NYCSBUS	21	15	Not Awarded
EPA Round 3	NYCSBUS	21	16	Not Awarded
EPA Round 3	NYCSBUS	20	17	Not Awarded
EPA Round 3	NYCSBUS	20	20	Not Awarded
EPA Round 3	NYCSBUS	20	21	Not Awarded
EPA Round 3	NYCSBUS	20	32	Not Awarded
EPA Round 3	NYCSBUS	20	75	Not Awarded
NYSBIP	Total Transportation (First Student)	25	18, 19, 22, 24, 25, 26, 27, 28, 29	Pending
NYSBIP	Hoyt Transportation	1	7, 8, 9, 10, 11, 12	Pending
NYSBIP	Careful Bus	1	Citywide	Pending
NYSBIP	Careful Bus	5	Citywide	Pending
NYSBIP	GVC	20	Citywide	Pending
NYSBIP	Marcan	1	Citywide	Pending
NYSBIP	IC Bus	1	Citywide	Pending

^[1] <https://online.ogs.ny.gov/purchase/spg/awards/4052423254CAN.HTM>

^[2] <https://www.nyserda.ny.gov/All-Programs/Electric-School-Buses/Electric-School-Bus-Roadmap>

^[3] Definition from Wikipedia: "when a vehicle operates without carrying or accepting passengers, such as when coming from a garage to begin its first trip of the day."

Appendix 2

Survey Instrument

Zero Emission Busing - Progress Toward Transition - 2025

All Districts

Basic Information

1. District Contact Information

	Response
6-Digit BEDS Code	
District Contact Person	
Contact Person Email	
Contact Person Phone Number	

2.

What means does the district use to provide transportation? (Check all that apply)

- ☐ Contract for all or some of the district's transportation needs
- ☐ Own/operate fleet in district for some or all transportation needs

3.

Is the State's Zero-Emission School Bus mandate causing the district to reconsider its busing service options?

- ☐ We are considering expanding contract bus services
- ☐ We are considering expanding in-house service
- ☐ We do not anticipate changing how busing service is currently provided

4.

What is the district's estimated percentage of progress toward full transition to zero-emission busing? When considering your progress toward full transition, consider achievement of milestones such as (1) application for one or more grants, rebates, or reimbursement programs; (2) put a proposition before district voters; (3) Commissioned/received a Fleet Electrification Plan or Electric Utility Assessment; (4) Purchased one or more zero-emission buses or required zero-emission buses in a recent Transportation RFP or RFB; and (5) Installed one or more vehicle charging stations.

- ☐ 0%
- ☐ 1-24%
- ☐ 25-49%
- ☐ 50-74%
- ☐ 75-99%
- ☐ 100%

5.

School districts have indicated several common challenges that create administrative or operational hurdles to implementation of the zero-emission busing mandate. Please rank the six items below, from least to most challenging for your district.

	Please rank in order of least challenging to most challenging for your school district, with 1 being least challenging and 6 being most challenging.
Lack of Voter Support	☐ 1 - Least Challenging ☐ 2 ☐ 3 ☐ 4 ☐ 5

Zero Emission Busing - Progress Toward Transition - 2025

All Districts

	Please rank in order of least challenging to most challenging for your school district, with 1 being least challenging and 6 being most challenging.
	☐ 6 - Most Challenging ☐ N/A - Not Applicable
Lack of External Funding Sources	☐ 1 - Least Challenging ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 - Most Challenging ☐ N/A - Not Applicable
Utility Support/Upgrades	☐ 1 - Least Challenging ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 - Most Challenging ☐ N/A - Not Applicable
Facility/Construction Issues	☐ 1 - Least Challenging ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 - Most Challenging ☐ N/A - Not Applicable
Vehicle Performance/Range Limitation	☐ 1 - Least Challenging ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 - Most Challenging ☐ N/A - Not Applicable
Contractor/Vendor Compliance Issues	☐ 1 - Least Challenging ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 - Most Challenging ☐ N/A - Not Applicable

Zero Emission Busing - Progress Toward Transition - 2025

All Districts

6. NY State Education Law §3638(5)(c) requires that all school districts create and implement a workforce development report that:
1. estimates the number of current positions that would be eliminated or substantially changed as a result of the purchase or lease, and the number of positions expected to be created at the school district, private school bus company or other employer whose workers provide pupil transportation services or services attendant thereto by the proposed purchase or lease over the intended life of the proposed purchase or lease;
 2. identifies gaps in skills of its current workforce that are needed to operate and maintain zero-emission school buses, omnibuses, vehicles, charging infrastructure or equipment, fueling infrastructure or equipment, or other equipment;
 3. includes a comprehensive plan to transition, train, or retrain employees that are impacted by the proposed purchase or lease;
 4. contains an estimated budget to transition, train, or retrain employees that are impacted by the proposed purchase or lease.
- Has your district created its Workforce Development Report?
- Yes
- No
7. Has the District put a proposition for zero emission busing needs before the voters?
- Yes
- No
- 7B. If yes, please date of most recent proposition.
- 7C. Was the proposition approved by voters?
- Yes
- No
8. Has the District applied for State/Local grants (district application or contractor application on behalf of the district)?
- Yes
- No
- 8B. If yes, which program(s) has the district applied for? (check all that apply)
- ☐ NYSERDA NY School Bus Incentive Program (NYSBIP)
- ☐ NYSERDA NY Truck Voucher Incentive Program (prior to NYSBIP)
- ☐ Other
- 8C. Based on your district's application, what was the maximum amount of State/Local funding the district was eligible for?
- 8D. How much State/Local funding was awarded to the district?
- 8E. Difference between maximum State/Local eligible amount and awarded amount.
- [Survey.All Districts.Q8B]
- [Survey.All Districts.Q8C]

Zero Emission Busing - Progress Toward Transition - 2025

All Districts

9. Has the District applied for Federal grants/assistance (district application or contractor application on behalf of the district)?

Yes
No

- 9B. If yes, which program(s) has the district applied for? (check all that apply)

☐ EPA Clean School Bus Program
☐ EPA Clean Heavy-Duty Program
☐ Other

- 9C. Based on your district's application, what was the maximum amount of Federal funding the district was eligible for?

- 9D. How much Federal funding was awarded to the district?

- 9E. Difference between maximum Federal eligible amount and awarded amount.

[Survey.All Districts.Q9B]

[Survey.All Districts.Q9C]

10. Has the District applied for Electric Utility Make-Ready funding (utility provider incentive)?

Yes
No

- 10B. Based on your district's application, what was the maximum amount of utility incentive/make-ready funding the district was eligible for?

- 10C. How much utility incentive/make-ready funding was awarded to the district?

- 10D. Difference between maximum Utility eligible amount and awarded amount.

[Survey.All Districts.Q10A]

[Survey.All Districts.Q10B]

11. Has the district contacted NYSDERDA to obtain assistance with commissioning a Fleet Electrification Plan (FEP)?

Yes
No

- 11B. If yes, what is the status of the Fleet Electrification Plan?

Application Submitted
In Progress
Completed

- 11C. If a Fleet Electrification Plan is complete, what local capital infrastructure investments will be necessary to support full conversion? (Check all that apply)

Electric service upgrades
New bus depot/facility

Zero Emission Busing - Progress Toward Transition - 2025

All Districts

Expansion of current bus depot/facility

- 11D. If a Fleet Electrification Plan is completed, what additional supports would be useful to the district, based on the results of the FEP? (Check all that apply)

- ☐ Continued technical support
- ☐ Support on public outreach
- ☐ Training for transportation staff
- ☐ Funding for architectural/mechanical/engineering design for bus depot upgrades
- ☐ Additional incentive funding for buses, equipment, charging infrastructure
- ☐ Other

- 11E. If a Fleet Electrification Plan is completed, please provide the estimated gross cost to the district to fully transition the district to zero-emission busing, including costs for vehicles, equipment, infrastructure, and workforce needs.

12. Is the district working with BOCES for assistance with zero-emission busing?

Yes

No

- 12B. If yes, what assistance is BOCES providing? (Check all that apply)

- ☐ Shared infrastructure
- ☐ Shared regional service solutions
- ☐ Technical assistance/consultation
- ☐ Grant/funding application assistance
- ☐ Other

13. Has the district requested an electric utility needs assessment or have a load letter from its utility provider?

Yes

No

14. Does the district own/maintain ZEB chargers, or anticipate the need to install chargers, for example to support charging of district-owned, contractor-owned, or out-of-district buses?

Yes

No

- 14B. How many chargers were operational in 2024-25?

- 14C. How many chargers are anticipated to be operational in 2025-26?

- 14D. How many chargers are anticipated to be operational in 2026-27?

- 14E. How many chargers are anticipated to be operational in 2027-28?

15. Please use this space to provide any additional information, concerns, or details specific to your school district that may not be captured in the survey.

Zero Emission Busing - Progress Toward Transition - 2025

All Districts

16. Please upload any relevant documentation, reports, analysis, studies, fleet assessments, or route assessments that have been used to inform the district's transition planning.

Zero Emission Busing - Progress Toward Transition - 2025

Contracting Districts

Contracting Questions

1. Does the district currently require zero-emission vehicles in its contracts?

Yes
No

2. Does the district anticipate requiring zero-emission vehicles in future RFPs or RFBs?

Yes
No

- 2B. If so, when does the district anticipate adding a zero-emission vehicle requirement?

Upon expiry of the current contract term.
For new contract terms that begin after June 30, 2027.
For new contract terms that begin after June 30, 2035.
Other: _____

3. Do any of the district's current contractors utilize zero-emission buses for services to the district?

Yes
No

- 3B. If yes, how many routes are currently served by zero emission buses?

- 3C. If yes, how many students receive zero-emission buses for their regular AM/PM bus service?

Zero Emission Busing - Progress Toward Transition - 2025

District Owned/Operated

District Owned/Operated

1. How many buses/pupil transportation vehicles does the district currently own?
2. How many zero-emission buses/pupil transportation vehicles does the district currently own?
3. How many zero-emission buses/pupil transportation vehicles does the district have on order that have not yet arrived?
4. How many zero-emission buses/pupil transportation vehicles did the district acquire in 2024-25?
5. How many zero-emission buses/pupil transportation vehicles does the district anticipate acquiring in 2025-26?
6. How many zero-emission buses/pupil transportation vehicles does the district anticipate acquiring in 2026-27?
7. How many zero-emission buses/pupil transportation vehicles does the district anticipate acquiring in 2027-28?
8. Based on your bus/pupil transportation vehicle replacement schedule, how many buses in your fleet are scheduled to be replaced in 2025-26 school year?
9. Of the buses/pupil transportation vehicles scheduled to be replaced in 2025-26, how many replacement buses are expected to be zero emission buses?