LFC Requester:	Liu

AGENCY BILL ANALYSIS
2024 REGULAR SESSION

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SECTION I: GENERAL INFORMATION
{Indicate if analysis is on an original bill, amendment, substitute, or a correction of a previous bill}

Check all that apply:
Original x **Amendment** ____
Correction ___ **Substitute** ____

Date 01/10/24
Bill No: HB75

Sponsor: Sariñana/Gurrola
Short Title: ELECTRIC SCHOOL BUSES

Agency Name and Code Number: PED-924
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SECTION II: FISCAL IMPACT

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Nonrecurring	Fund Affected
FY24	**FY25**		
$400.0	$100.0	Nonrecurring	GF

(Parenthesis ( ) Indicate Expenditure Decreases)

REVENUE (dollars in thousands)

Estimated Revenue			Recurring or Nonrecurring	Fund Affected
FY24	**FY25**	**FY26**		
None	None	None	N/A	NFA

(Parenthesis ( ) Indicate Expenditure Decreases)

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY24	FY25	FY26	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
Total	None	None	None	N/A	N/A	NFA

(Parenthesis ( ) Indicate Expenditure Decreases)

Duplicates/Relates to Appropriation in the General Appropriation Act: N/A

SECTION III: NARRATIVE

BILL SUMMARY

Synopsis: House Bill 75 (HB75) would amend Section 22-8-27 NMSA 1978, Transportation Equipment, to include electric or zero-emission alternative fuel school buses as options for school bus replacement through the Public Education Department's (PED) transportation equipment purchasing system. The bill would add new material providing for the use of school buses as electrical energy storage when not in use for transportation and tasking New Mexico State University (NMSU) with conducting and reporting by August 1, 2025, a study of the feasibility of local school districts transitioning to electric school buses (ESB). The bill would appropriate $400,000 to NMSU for the feasibility study and $100,000 to PED to develop expertise on ESBs, charging stations, related infrastructure, and electrical changes, and to share this expertise with school districts and assist with related federal grant applications; any funds remaining at the end of FY25 shall revert to the general fund.

The bill does not provide an effective date. Laws go into effect 90 days after the adjournment of the Legislature enacting them unless a later date is specified. If enacted, this bill would become effective May 15, 2024.

FISCAL IMPLICATIONS

The bill provides no funding for replacement of existing buses with ESBs other than the amount that would be expended on combustion-engine buses. ESB's cost on average $420,000 each, and charging stations cost between $16,000 and $46,000, with one needed for each ESB. School buses with combustion engines, in contrast, typically cost approximately $130,000.

According to Electric School Bus Initiative analysis, a school district operating an ESB can expect to see over $100,000 in lifetime fuel and maintenance savings, compared to an equivalent diesel bus. The current cost of maintenance is unknown as currently all the maintenance or repair costs are under warranty for the only electric bus running in New Mexico, along with training for maintenance personnel, one dealership did offer a minimal training for free. There are no training costs that are needed to train bus drivers. The price of battery replacement around the six-year mark is currently $120,000 per bus.

School bus replacement from Public School Capital Outlay Funds (PSCOF) and to-and-from transportation allocation. Section 22-8-27 NMSA 1978 provides for PED to offer funding for replacement of school buses after 12 years of service. In 2023, House Bill 2 allocated $7.5 million from PSCOF for school bus replacement in FY24, spending reported by the Legislative Finance Committee to be on track after the first quarter. The PSCOF July 2023 Financial Plan includes estimated use of $16.7 million in FY24 for school bus replacement. PED tracks the service life of each school bus used in the state. The number of district-owned school buses due to be replaced in FY24 is 219 district-owned buses, for which $29,166,640 has been allocated. PED reports that $4 million from the FY23 transportation allocation has been carried over to FY24 for an ESB pilot project to award six ESBs to Albuquerque Public Schools and four ESBs to Santa Fe Public Schools. HB75 amends existing law to adapt the school bus replacement program to account for the higher cost of ESBs.

Federal tax credits. Two tax incentive programs created by the Inflation Reduction Act create opportunities for public school districts to recoup some costs of ESBs and charging infrastructure. The Federal Qualified Commercial Vehicle Tax Credit provides an opportunity for public school

districts to request direct payments of up to $40,000 per electric school bus placed into service during timeframes associated with the federal program. The Alternative Fuel Vehicle Refueling Property Credit provides up to $100,000 per charging unit for qualifying school districts that complete an electric school bus charging infrastructure project in in low-income or non-urban areas.

There may be additional funding for public school districts to transition to ESBs through future federal grant programs under the Bipartisan Infrastructure Law.

SIGNIFICANT ISSUES

An October 2023 brief on school transportation by the Legislative Education Study Committee (LESC) summarized narrative data collected from local school districts showing interest in transitioning to electric school buses and desire for support from the state. The LESC report identified two issues related to electrification of bus fleets: The prerequisite charging infrastructure and the opportunities for federal grants. The report recommended that state support for electric school bus purchasing be contingent upon district readiness demonstrated by having already applied for federal funding.

Five school districts have begun to add electric school buses to their fleets with rebates awarded in 2022 from the Federal EPA Clean Bus Program or New Mexico's Volkswagen Settlement funds.*

Adoption of Electric School Buses

LEA	Rebate Amount	Electric School Buses Awarded	Electric School Buses Operating	Electric School Buses Projected
Dora Municipal Schools	$610,000	2	0	2
Dulce Independent Schools	$790,000	2	0	2
Lake Arthur Municipal Schools	$790,000	2	0	2
Las Cruces Public Schools	$1,975,000	5	0	5
Santa Fe Public Schools	*$1,119,987	3	1	4
Total	**$3,284,987**	**14**	**1**	**15**

PERFORMANCE IMPLICATIONS

The broad adoption of ESBs to transport students daily to and from school stands to make a significant contribution to the health of students because diesel buses are increasingly found to be a source of toxic air pollutants. Occupants as well as students outside idling diesel buses are exposed to substantially greater concentrations of ultrafine particles, according to a 2014 study by the Health Effects Institute, and children have been shown to be "particularly at risk because of their immature respiratory systems and higher breathing rates per body mass."

The average school bus ride in New Mexico is less than 32 miles with 99% of routes being under 78 miles. ESBs are estimated to have approximately a 125-mile range, capable of taking over the existing routes of most combustion-engine school buses.

ADMINISTRATIVE IMPLICATIONS

The bill would require PED to develop and share expertise about ESBs with school districts and appropriates $100,000 to support this requirement. In the absence of a central clearinghouse for ESB training, developing expertise and sharing it with stakeholders may require services of a contractor capable of researching and compiling training material from diverse sources.

According to the World Resource Institute's Electric School Bus Initiative, whose stated purpose is to help fully transition the US school bus fleet to electric by 2030, operating and maintaining ESBs involves important differences from familiar combustion engine buses, such as driving with regenerative braking, charging and range considerations, charger management, high-voltage battery systems, protective equipment, and safety procedures. Training activities may consist of the following:

- Obtain bus safety and recommended maintenance documents from manufacturer or dealer.
- Train drivers on instrument clusters, regenerative braking, emergency high-voltage shutoff, charging and other key procedures.
- Train maintenance workers on new electric components (e.g., electrically driven heating/cooling and power steering, volt meters, traction motors), preventative maintenance and schedules, diagnostics, and proper high-voltage shutoff procedures.
- Educate towing companies on options for transport and battery disconnect.
- Train first responders on how to respond to emergency events.

Other possible stakeholders suggested for training include school district transportation directors, district fleet managers, district dispatch staff, school bus contractors, and inspectors.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

HB41, Clean Transportation Fuel Standards, which directs the Environmental Improvement Board to develop, promulgate, and enforce rules pertaining to carbon intensity of transportation fuels and pertaining to the implementation of a clean fuel transportation standard program.

TECHNICAL ISSUES

None.

OTHER SUBSTANTIVE ISSUES

None.

ALTERNATIVES

None.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

None.

AMENDMENTS

None.