

Memorandum

To: City of Aurora Planning Department
From: Andrew Tissue, AIA | Cunningham
Project Name: Aurora Public Schools Bus Canopy
Project No.: 20-0597
Subject: **Project Narrative**
Date: July 29, 2021
Copy To: n/a

The staff of Aurora Public Schools (APS) Support Services Divisions create, maintain and enhance environments that support students' opportunities to learn. They seek to create and maintain safe, clean, adaptable, equitable, and highly functional school, work and transportation environments in support of all APS students. With a deep understanding the business of education, Support Services staff have been analyzing fiscal, strategic, and tactical methods to leverage the use of District resources.

Toward that end the Support Services departments are collaborating to optimize the Maintenance and Operation of the Transportation facility at 160 Airport Boulevard to aid the District Energy Conservation efforts thru the Design and Construction of sheltered bus parking to accommodate solar electricity harvesting and energy efficient busses. The improved facility will enhance the District ability to transport APS students safely, effectively, and efficiently to and from education facilities at beginning and end of school days. Additionally, it will continue to support shuttle service to and from other academic and/or athletic activities.

Project Statement:

Transportation Department bus parking and servicing buildings currently supports a fleet of 180+ school buses. The District is looking to shelter these buses to protect them from inclement weather while accommodating current & future opportunities to harvest solar energy and transition from fossil fuel to electric buses over time. Full coverage of the current bus parking lot by roofed canopy structure(s) open (unwalled) on all four sides will address the following concerns of the District:

1. Lessen District exposure to property damage/loss or life safety by:
 - a. Providing shelter for busses from potential damage caused by weather events such as hail or heavy snow.
 - b. Providing shelter for bus drivers as they walk to and from the buses in inclement weather through ice and snow.
 - c. Avoiding potential injuries to bus drivers as result of ice and snow drifts.
 - d. Reducing the potential for snowplows to collide with busses during snow removal.

2. Minimize operational cost by creating an elevated, unobstructed location for solar energy harvesting utilizing photovoltaic (PV) panel arrays with the potential to recharge up to 3.17 megawatts of clean power into the grid. This will offset power used by the District and lower operational costs.

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3. Reduce operational costs by providing optimal charging conditions for energy efficient electric buses. As the District replaces the existing gas-powered buses with electric busses it will also reduce its carbon emissions and reduce funds spent on fossil fuels.

END OF MEMO