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**Altoona, PA**  
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### ***Senior Thesis Breadth Topics***

#### **Acoustic**

A greater amount of air delivery into the stage/auditorium space will undoubtedly alter acoustic considerations. Outlet air velocities and diffuser sizes all have an impact on background noise and sound transmission. A basic acoustic analysis in the auditorium including the impact from additional air delivery will feature in future breadth studies for this project.

#### **Lighting**

In an effort to reduce energy costs and consumption for the whole building, gymnasium lighting systems will be examined. With the assumption that the existing system is adequately serving the needs of the school, the possibility of utilizing a daylighting system will be explored.