Statement of Need

The accessibility on the Penn State New Kensington campus can be overwhelming for anyone with a mobile disability due to the complex paths needed to get through the building, as well as all the outside paths. Most pathways require anyone that is incapable of using stairs to walk outside during all times of the year. Although there are paths inside the building to other areas of the campus, and there is an elevator located in the building on the left-hand side providing access to the conference rooms and one on the right-hand side for sciences and engineering classes, it can be quite confusing already for someone without accessibility needs with the multiple paths the campus has to each section of the building.

A great way to help is to have some form of accessibility located at the center of the building. It is decently challenging to get to the student lounges, cafe, bookstore, etc. without taking very convoluted paths around the campus. An extreme example is the Senior Labs located in Arbuckle. They are impossible to access without rolling through the grass outside since there are stairs outside Arbuckle. The upper and lower doors of Arbuckle are also heavy and not easy to open for someone with any physical disabilities. I heard from a faculty member that someone had hurt badly hurt their knee opening one door.

The theatre also has only one proper ramp that is hard to get to without going down stairs. There is also little room for anyone with a wheelchair to stay in their chair without being lifted out and sit down on a seat. If the accessibility of the student lounge was improved, a ramp could easily be installed, and a few seats could be removed in the theatre.

Project Description

1. **Objectives**

The purpose of this project is to make the campus overall more accessible to everyone. The installation of ramps would greatly improve access as well as safety. In the event of an emergency, the elevators would not work, meaning that someone could get stuck. For instance, the basement classrooms in the Conference Center (B014 and B013, etc.) are only able to be exited by elevator. If an emergency were to happen then the only way for someone in a wheelchair to get out would be to desperately attempt to climb the stairs, or go down the outside stairs, which could lead to further injury or even death.

In terms of better accessibility, some areas of the campus are hard to access like the cafeteria, theater, EMET senior labs, and the Arbuckle building due to its heavy doors. Adding ramps and inclines would greatly improve the quality of both students and faculty with mobility issues by reducing the distance they need to cover and the time they are outside. It would also benefit the cafe and Junction (coffee and food shop) that commonly have lots of packages that need to be moved.

2. **Benefits**

Building ramps at the junction lobby, theater, senior labs, and Arbuckle Technology guarantees full access for individuals with mobility disabilities,

eliminates any possible legal risks of being “accessible”, helps with emergency evacuations, and makes moving heavy equipment an easier task for faculty.

Installing wheelchair incline lifts in the lobby on both staircases ensures equal access where ramps aren't practical due to steep angles or space limitations. These lifts also support safe transportation of lighter equipment.

3. Methods

The main ways to improve accessibility on the campus would be to install wheelchair lifts in the main lobby where the student lounges are and add ramps in problematic/dangerous areas in the building. Adding two incline lifts on each side of the lobby area will allow easy access to the student lounges, the theatre (after a ramp has been installed to replace one side or a temp ramp is used), the cafeteria, the bookstore, and the student success center.

For ramps, the lower conference center has stairs opposed to a ramp outside, which could be catastrophic in the event of an emergency. There is no other means of access to the outside, besides an elevator, which is closed during a fire. There is also no way to access the Senior Labs for EMET (Electro-Mechanical Engineering Technology) without going down a set of stairs, inside or outside. Due to how steep the slope would have to be to avoid modifying existing walls inside, it would be best to simply make the ramp located outside instead. The journey outside to reach these labs would be very brief. So, this would be okay. The ramp to the theatre could easily be accomplished with a temporary ramp or likewise installed.

It has also been stated that the temporary ramps to the administration section of the building are very steep. Getting a different temporary ramp or creating a built-in ramp on one side of the admin building would greatly help handicapped students and janitors alike, as they need to buff the floors in the admin building as well.

4. **Evaluation**

The pricing for building ramps and wheelchair lifts on the campus would differ based on indoor or outdoor, materials used, the type of ramps/ wheelchair lifts, permits and labor costs. Materials for ramps will cost in the range of $150-$250 per linear foot and based on the type it can cost up to $6000. The labor costs will be in the range of $60-$90 per hour, for concrete ramps it will take longer to build compared to metal ramps causing it to cost more, while metal ramps will take a much shorter time to install.

5. Sustainability

The outdoor ramps would have to be able to withstand the elements. For the conference center, the only way in for someone in a wheelchair is the elevator. In the event of an emergency the elevator would stop working leaving the person stuck with no way out. Installing a ramp while leaving those exit stairs would be difficult while also keeping the walkway would be a challenge, we would either need to expand the stairs to allow both or cover the stairs with the ramp keeping the walkway. The ramp would most likely need to be drilled and anchored into the building and depending on the material, have to have upkeep to keep said ramp safe.

The ramps outside would either be metal or a cement pour. A metal ramp would probably be the best as it can be removed if something needs to be replaced, whereas the cement ramp, if something were to happen, would either need to be replaced or patched.

Organization Information

We are all college students, we do not have a lot of personal experience out in the field or background, but all of us are avid about our careers and at least two of us have internships prepared for this summer. We all believe in equal opportunity and feel that the accessibility of this building can impede that. Our vision is for everyone to have a fair chance and to have the same experiences and opportunities that we have had on this campus so far. A crucial part of that is being able to traverse the campus and access the most frequently used areas. In doing so we are able to bring more people together on this campus and ensure everyone feels welcome and accommodated to.

Conclusion

The accessibility of the New Kensington Campus is limited, but usable. Improving the accessibility of the building will greatly benefit those with physical disabilities, as well as help the staff have an easier time maneuvering with packages and heavy machinery. The accessibility of the campus is clearly outdated and causes many issues with navigation. Being able to add inclines and a few ramps will drastically help improve this and can contribute to the longevity of the accessibility on campus, and possibly the campus itself. Penn State is an inclusive university, and community. We should pride ourselves on welcoming everyone and ensure everyone has the accommodation they need to flourish while they are part of the Penn State experience. We are Penn State.

Budget

The pricing for building ramps and wheelchair lifts on the campus would differ based on indoor or outdoor, materials used, the type of ramps/ wheelchair lifts, permits and labor costs. Indoor lifts can cost anywhere between 2 - 10 thousand dollars, Materials for ramps will cost in the range of $150-$250 per linear foot, and based on the type it can cost up to $6000 (This was copied from above). Inclined wheel chair lifts can cost around $3000-$7000 for straight models, curved models tend to cost more as they are custom made, but for our purpose a simple 180° curve could suffice and would most likely reduce the cost of a custom assembly.

Type	**Incline Lift (Per Incline)**	**Ramps (Concrete) Per Foot**	**Ramps (Temp Alum.)**	**OR**	**Ramps (Composite) Per Foot**
Cost	$3000-$7000	$200-$250	~$200		$150-$200
Purpose	Lobby Theatre Bookstore Cafe Access	Arbuckle Senior EMET Labs	Theatre Access From Lobby		Theatre Access From Lobby
Type	**(Lighter) Doors x4**				
Cost	~$1000-2000		**All w/o Labor Costs**		
Purpose	Heavy Doors Reduce Injury				

Supporting Materials

Wheelchair Lift Costs

Low Cost Solutions for Schools

Accessibility Ex: Convoluted Path to Theatre


PennState
University Police
and Public Safety