

13th Avenue Redesign

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Introduction

13th Avenue between Kincaid and University hasn't been used as a street for years yet its design still reflects this. My project will explore how the street can be redesigned for its current purposes.

Purposes

To redesign the street, we must assess the purposes of the street. The main purpose of the street is students walking between classes and to provide a path for them between Kincaid and University. The path must be able to hold the large concentration of students between classes at peak hours. The second fundamental purpose is to provide a bike route for students that cycled to campus. There is a route before Kincaid and after University so it must connect routes easily for cyclists. The street must also provide bicycle parking for the students as the street currently holds a large percentage of the school's current bicycle parking amenities. 13th Avenue should also provide direction for students. New and prospective students frequently use this corridor, especially because of its proximity to Duck Store, so wayfinding should be provided. The street should be able to be used as a meeting place for students. The street doesn't need to just be a highway of travel but also a place to sit, relax and meet with other fellow students. 13th Avenue is also used for events such as vendor fairs and would need to be able to accommodate them. Finally, the street can be used infrequently for emergency vehicles and would need to be able to accommodate them as well.



13th Avenue Current Design.

Problems

There are several problems of 13th Avenue that would need to be addressed in the redesign. The fundamental issue is that the street is designed for car traffic when it is hardly used by it. One of the main glaring problems is poor bicycle parking. The current set up is difficult to lock your bicycle to and the design makes it easy for a domino toppling over of bicycles. It is also an unattractive feature to have on the gateway into campus. Another issue with the current design is uneven paving in front of the Lillis Business Complex. The bricks and foundation were poorly laid and has become a hazard for bicyclists. The lighting on 13th Avenue, although some is at a proper pedestrian height, many poles are too high and the lighting is even blocked by the trees. An even distribution of lighting would make the students feel safe on their treks through campus at night. 13th Avenue is a frequent corridor of students returning to their dorms after visiting the restaurants or bars west of campus. Wayfinding is also an issue on 13th Avenue and clear maps are not provided for wandering students. A clear map of the campus and nearby attractions should be provided to guide students. Also, directions to nearby bike routes would be helpful for cyclists. All these issues combined create the overarching problem that 13th Avenue is not the grand entrance to campus it could be.

Goals

The goals of this project are to rectify these problems and create a functional path that can be used by pedestrians and cyclists for its current purposes. The first goal would be to establish clear paths for cyclists and pedestrians. Also to make pedestrians and cyclists feel safe by separating their paths. The street will also provide ample bicycle parking that is covered if possible for students. The street will keep the existing trees and incorporate them into the design. The lighting on the street will be improved to increase the safety of the users.

Creating a Place

To meet these goals, 13th Avenue should be redesigned to create a place. According to Project for Public Spaces, great public spaces are where celebrations are held, social and economic exchanges take place, friends run into each other, and cultures mix. They are the “front porches” of our public institutions where we interact with each other and government. When the spaces work well, they serve as a stage for our public lives.

Great places are accessible; people are engaged in activities there; the space is comfortable and has a good image; and finally, it is a sociable place: one where people meet each other and take people when they come to visit.

Access & Linkages

You can judge the accessibility of a place by its connections to its surroundings, both visual and physical. A successful public space is easy to get to and get through; it is visible both from a distance and up close. Is the space walkable, accessible, connected and convenient? The transit usage, pedestrian activity and parking patterns are all important factors in accessibility.

Comfort & Image

Whether a space is comfortable and presents itself well – has a good image – is key to its success. Comfort includes perceptions about safety, cleanliness, and the availability of places to sit – the importance of giving people the choice to sit where they want is generally underestimated. Does the place make a good first impression? Are there enough places to sit? Are seats conveniently located? Do people have a choice of places to sit, either in the sun or shade?

Uses & Activities

Activities are the basic building blocks of a place. Having something to do gives people a reason to come to a place and return. When there is nothing to do, a space will be empty and that generally means that something is wrong. The space should be used throughout the day for a variety of activities. A space that is used by both singles and people in groups is better than one that is just used by people alone because it means that there are places for people to sit with friends, there is more socializing, and it is more fun. The land use patterns are important to incorporate this category.

Sociability

Sociability is how welcoming and neighborly the space feels. What is the street life and evening use? Obviously, a place with people is a place people want to go. When people see friends, meet and greet their neighbors, and feel comfortable interacting with strangers, they tend to feel a stronger sense of place or attachment to their community – and to the place that fosters these types of social activities. Do people use the place regularly and by choice?

Power of 10

Within any campus, there should be at least ten dynamic places that attract people. This concept is what PPS calls “The Power of Ten.” Within each place, there should be at least ten things to do, such as waiting, meeting, eating, reading, playing, and so on. Such places bridge the gap between the distinct and diverse communities within the campus and can be the settings for community gatherings, residential life, or academic discussions, if they provide a mix of public, private, educational, retail and cultural amenities

Parklets

Parklets are typically applied where narrow or congested sidewalks prevent the installation of traditional sidewalk cafes, or where local property owners or residents see a need to expand the seating capacity and public space on a given street. Designs may include seating, greenery, bicycle racks or other features, but should always strive to become a focal point for the community and a welcoming public gathering place. Cities may opt to have a standard design template to reduce design and construction costs for applicants. The program goals of parklets according to the City of San Francisco are to:

- *Reimagine the potential of city streets:* Public rights-of-ways make up approximately 25 percent of the City's land area. Parklets promote a low-cost, easily implementable approach to public space improvement through projects that energize and reinvent the public realm. They help address the desire and need for increased public open space and wider sidewalks.
- *Encourage non-motorized transportation:* Parklets encourage walking by providing pedestrian amenities like street furniture, landscaping and public art. Parklets often provide bicycle parking and thus increase the visibility of bicycling in San Francisco.
- *Encourage pedestrian activity:* Parklets provide pocket spaces for pedestrians to sit and relax, while also improving walkability.
- *Support local businesses:* Parklets attract attention to businesses and provide additional seating that can be used by cafe customers and others. A parklet also beautifies the street and creates a neighborhood destination.

Although 13th Avenue is not a city street anymore, many of these principles can still be applied. Utilizing parklets on this street could reinvent the public realm by providing pedestrian amenities. They would encourage students to sit and relax between classes. They would also encourage students to come to campus more and could potentially increase the local businesses on campus.

Design Features

Permeable Pavement

Permeable paving is a range of sustainable materials and techniques for permeable pavements with a base and subbase that allow the movement of stormwater through the surface. In addition to reducing runoff, this effectively traps suspended solids and filters pollutants from the water. Pervious pavement would be an excellent choice of material for 13th Avenue for several reasons:

- It is an efficient use of resources because it uses local materials, incorporates waste byproducts and does not have any toxic runoff during installation.

- Lighter shades increase reflectivity and prevent heat island effect.
- Minimizes stormwater runoff by allowing three to eight gallons of water to pass through per minute per square foot.

Permeable pavement can also come in a variety of shades, designs and colors to delineate between pedestrian walkways and bicycle paths.

Bioswales

Bioswales are landscape elements designed to remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides and filled with vegetation. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt.

For best results, bioswales should enhance and utilize existing natural drainage swales whenever possible. Existing swales can be enhanced with native plants. The thicker and heavier the grasses, the better the swale can filter out contaminants. Additionally, subgrade drains and amended soils may be needed to facilitate infiltration. Other considerations when designing or maintaining bioswales:

- Deep-rooted native plants are preferred to promote water infiltration and reduce maintenance. They are also better at controlling erosion.
- A parabolic or trapezoidal shape is recommended with side slopes no steeper than 3:1.

Bicycle Parking

The current bicycle parking on 13th Avenue are metal undulations that only serve their minimum design purpose. The racks are difficult to park a bike to as the handlebars get trapped, especially if the rack is being used to capacity. Knocking bicycles over is common and it is easy to create a domino effect. To promote an organized environment that doesn't make cyclists feel like second class after thought citizens, Park-A-Bike racks are recommended. They are an organized and secure alternative to the popular bike racks in use. They are also efficient to use for high density bicycle parking.

The other alternatives for bicycle parking would be more of LiveMove's wining bicycle rack design or to create another competition for bicycle rack design, which would increase student involvement.

Flexible Furniture

Having furniture available in gathering areas is important in creating a great place. Utilizing flexible furniture is important to accommodate the needs of users, from single users to groups.

Many campus have used flexible furniture to accommodate their students and their variety of uses.

Shared Use Path

Shared-use paths attract a variety of user groups who often have conflicting needs. It is important to provide sufficient separation for users traveling at different speeds. For example, if volume and space permits, bicyclists and pedestrians should have different lanes or pathways. It is good design for shared-use paths to provide different lanes for users who travel at different speeds to prevent conflicts between user groups on high use trails.

Wayfinding

Wayfinding encompasses all of the ways in which people and animals orient themselves in physical space and navigate from place to place. Campus environments are complex settings that are often confusing to visitors and residents alike. Signage and information systems that are clear and properly located make it possible for users to find their way around a campus quickly and easily. Understanding what information is needed and where it should be located is an issue that must be addressed in public spaces in order to prevent confusion of employees, students and visitors.

Potential Design

Utilizing this research, the 13th Avenue Redesign can take on my forms. Below are just a few of the possible outcomes.



13th Avenue Before



13th Avenue After

The new design of 13th Avenue puts the entire streetscape on an even plane to emphasize pedestrian use. The street material is a permeable pavement to minimize stormwater runoff. To also help aid in Oregon's wet climate, the design incorporates bioswales. The bicycle parking has been changed to a sleeker, more organized rack that can also be used for high density bicycle parking. Lighting has also been added at a pedestrian friendly height. There has also been street furniture added for students to use as a meeting location. It's flexible furniture to accommodate the different uses, from single users to groups. Not pictured but still important to the design is signs for wayfinding that would be positioned at the entrance of campus.

Another design feature that should be incorporated into 13th Avenue is parklets. They provide mixed use seating, a sociable setting, can incorporate public art and can be used for different activities. Parklets come in a variety of forms and designs. Below are two options:



13th Avenue Parklet Design 1.

Parklet option 1 uses a concrete infrastructure with incorporated seating.



13th Avenue Parklet Design 2.

Parklet option 2 is made of wood and metal framing and includes bicycle parking.

These are just some of the ways these ideas can be incorporated into 13th Avenue. No matter how the design is executed, as long as it creates a place for students that enhance their experience at the University of Oregon it's a design well done.

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