

# **Sustainable Skateboarding in Ann Arbor**

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Graham Sustainability Scholars Final Report

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## **Executive Summary**

Skateboarding is a sustainable form of transportation; a means of self expression, creativity, recreation; and an opportunity to be part of a community. However, skating is often stigmatized by the general public. The city of Ann Arbor prohibited the activity in 1988 and skateboarding on the University of Michigan campus is discouraged. In recent years, the City of Ann Arbor and the University of Michigan have set ambitious carbon neutrality goals. Skateboarding, an emission-free form of transportation, is a sustainable alternative to gas and electric vehicles that could help Ann Arbor and the University of Michigan reach their carbon neutrality goals.

Our Graham Sustainability Scholars team partnered with Olympia Skate Shop, a local skateboarding business in Ann Arbor, to review and report on:

1. The local community opinion of skateboarding,
2. Ann Arbor laws regulating skateboarding, and
3. University of Michigan carbon neutral transportation goals.

Our report serves as a guide for future skateboarding and sustainable transportation activists and offers historical and background information to support and spur change in this space.

We conducted a desktop review of literature and other online resources, created a survey, and developed advocacy materials for Olympia Skate Shop and local skateboarding groups. Throughout the course of the project, we engaged with the local skating community. This engagement was mutually beneficial and offered us the opportunity to learn and share about skateboarding as a sustainable form of transportation. The report, survey, and advocacy materials we produced will guide Olympia Skate Shop and the skateboarding community in destigmatizing skateboarding and advocating for skateboarding as an acceptable, sustainable form of transportation.

## **Introduction and Background**

Overall, skating has created a culture of self-expression and freedom, yet it is stigmatized due to the history of strict laws and regulations. Initially, skating was created as more “asphalt surfing” for surfers on the West coast. Then, in the 1950’s and 1960’s skateboarding became more popular and there was mass production of boards. A new skating culture that resembled punk and anti establishment was born and spread around the country. In the 1960’s, society

built a narrative that skating is associated with danger, drugs, and rebellion. Many neighborhoods, especially on the West coast, began banning skating for their kids. This led to anti-skating laws and regulations in cities across the country. For instance, in 1988, Ann Arbor insurance companies advised against the local skateparks as not a good idea due to liability concerns.

Skateboarding provides an opportunity for creative expression, building a community, and has physical and mental health benefits. At its core, skating embodies a form of protest and rebellion against establishment norms, aligning with the ethos of environmental activism. Skating has historically been an inclusive activity, and ideally should remain accessible to anyone eager to learn. While the sustainability of skateboard production may vary, the act of recreational skating itself is inherently carbon neutral. Notably, the introduction of electric skateboards has expanded the utility of boards, allowing for eco-friendly commuting options and further blurring the lines between recreation and practicality.

## Methods

After some initial desktop research on the history and current status of skateboarding, we decided to focus on the following areas:

- Skateboarding ordinances,
- Skateboarding in the community of Ann Arbor,
- and skateboarding as a means of transportation.

*Skateboarding Ordinances:* We completed more extensive desktop research on and analyzed ordinances and their history in Ann Arbor, the University of Michigan.

*Skateboarding in the community of Ann Arbor:* We developed a survey to distribute to skaters to learn about their experiences as a skateboarder, their experiences with law enforcement, and skateboarding as a means of transportation.

*Skateboarding as a means of transportation:* We reviewed e private and public transportation systems within the Ann Arbor city limits and their user accessibility (e.g. cost, ease of use, efficiency, etc.). From this, we developed an overall assessment on the impact of skating for the infrastructure and local community.

The University of Michigan skateboard club and its founder are key stakeholders in this project and provided valuable insights into all three of our focus areas and the local skateboarding scene in general.

## Deliverables and Recommendations

1. **Summary of the history of skateboarding, skateboarding ordinances, and skateboarding as a means of transportation.** We have compiled our major takeaways and findings from a review of past news articles, skateboarding policies, the City of Ann Arbor and the University of Michigan's transportation plans, and connecting with the local skateboarding community. This summary can be found in Appendix 1.
2. **Development of a public survey** to understand experiences as a skateboarder, skaters experiences with law enforcement, familiarity of and thoughts on the local laws and regulations, the skateboarding infrastructure in Ann Arbor, and skateboarding as a means of transportation. The survey can be found in Appendix 2. The survey was shared with Olympia Skate Shop. At the time of this report, the survey was not yet distributed. Therefore, we do not have survey results but we recommend that future Graham Scholars teams distribute and analyze the results.
3. **Development of marketing materials** including an infographic and zero-waste stickers to promote skateboarding as a mode of sustainable transportation. The infographic detailed the history of skating in Ann Arbor, why skating is sustainable, and how the community can get involved. It was distributed to University of Michigan students during Festifall in August of 2023. The infographic can be found in Appendix 3. The zero-waste stickers were distributed to the community during Festifall and to the University Skating Collective for their local events. The sticker image can be seen in Appendix 4.

### Recommendations

1. We recommend Olympia Skate Shop attend community events to help destigmatize skating. Our infographics and stickers can be distributed at more community events.
2. We recommend the University of Michigan repurpose old granite benches from the medical campus to be used as skating infrastructure. Past University Skating Collective member, Leo Chumack, advocates for more skating infrastructure on the central campus at the University of Michigan. This can be done in a sustainable, cost-effective way by repurposing old granite benches. This would create an accessible place for both students and residents to practice skating skills.

### Impact

Our project will help guide future skateboarding ordinances on campus and in Ann Arbor and educate the general public on skateboarding as a safe and sustainable mode of transportation. Ultimately, we hope our work contributes to making skateboarding more accessible to more

people. As society becomes more aware of the climate crisis, more people are taking responsibility with individual actions and engaging in environmental activism at different levels. We hope skateboarding can be one way to take action. The impact of numerous individuals choosing skating as a mode of transportation has the potential to mitigate the environmental impact associated with single passenger gas vehicle commuting. Therefore, the community's evolving perception of skating not only integrates it as a recreational activity but also positions it as a tangible and impactful contribution to a more sustainable way of life in Ann Arbor.

Our project addressed three of the United Nations Sustainable Development Goals: Goal 11 - Sustainable Cities and Community, Goal 12 - Responsible Consumption and Production, and Goal 13 - Climate Action.

## **Acknowledgements**

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# Appendix 1

**Disclaimer:** not all of our sources are formal. We believe it's important to include perspectives that have been published by people in the community, in contexts like blogs or social media, because the socially legitimized narrative often does not include them.

## **Transportation efficiency of skateboards vs other vehicles**

The research, titled "Skateboarding for Transportation by the Numbers: Quantitative Indications of the Use of Skateboards as an Active Travel Mode," provides quantitative insights into the increasing adoption of skateboards as an active and practical mode of travel (Fang). The study conducted at UC Davis sheds light on the growing trend of utilizing skateboarding as a viable and enjoyable mode of transportation within communities, even among individuals lacking prior experience. With a speed range of 6 to 13 miles per hour, skateboards offer a middle ground between walking and biking, as highlighted in a compelling graph comparing the two modes of mobility. Notably, skateboarding proves to be an efficient means of travel, allowing individuals to take their boards everywhere, a convenience not easily afforded by bicycles. The cost efficiency of skateboarding is another appealing factor, with lower upfront costs and minimal maintenance requirements.

## **Materiality: how skateboards are made, impact on the environment**

Many skateboards are traditionally crafted from maple trees, particularly California maples, contributing to deforestation concerns. To counteract this, global companies are actively exploring alternative materials such as bamboo, ash trees, Kareline natural products, and Wasteboards to create more eco-friendly skateboards. Addressing another environmental impact, the commonly used Polyurethane for wheels, derived from crude oil, raises concerns about fossil fuel usage. However, some companies like Sector 9 are innovating by incorporating Hemp Oil-based wheels and offering a recycling program where skaters can send in their old wheels to be repurposed ("Imagining A Sustainable Skateboard — VILLAGE PSYCHIC"). Additionally, efforts are underway to find sustainable alternatives, such as utilizing banana stems for skateboard manufacturing, with studies suggesting a 15% composite of banana stems for optimal sustainability (Zulfikar and Yusuf). The increased demand for Canadian maple wood as skateboarding gains popularity poses a threat to the environment, considering the lengthy maturity period of 30-80 years for Canadian maple trees. This contributes to deforestation, impacting habitats, and generating non-renewable resources. Moreover, the production of skateboards involves toxic elements like epoxy resins and urethane wheels, while the disposal of trucks and wheels generates waste. Some companies are making strides by recycling old components to create new ones, and the use of bamboo emerges as a promising replacement for maple wood ("Environmental Impact of Electric Skateboard - Change Impacts"). Additionally, individuals are finding creative ways to repurpose old decks, contributing to a more sustainable and circular approach within the skateboarding community. The overarching message is a call for heightened awareness and concerted efforts to address environmental issues associated with skateboarding production.

## **General History of Skateboarding**

Skateboarding emerged in the 1950s, coined as "asphalt surfing," and soon witnessed mass production of boards, with hardware continually evolving since then ("History of Skateboarding | skatedeluxe Blog"). By the 1960s, the phenomenon had reached places like Ann Arbor, establishing itself as more than just a mode of transportation—it became a vibrant culture complete with its own fashion trends, shoe brands, magazines, competitions, and music, often embodying a punk and anti-establishment ethos ("History of Skateboarding | skatedeluxe Blog"). During the 1960s, a narrative associating skateboarding with danger, drugs, and rebellion took root, generating a societal cautionary energy that urged parents to discourage their children from engaging in the sport. An example illustrating this perception is the case of skateboards being sold as party favors to sororities, with irresponsible use outside the regular skating culture leading to numerous injuries. While not representative of the skateboarding culture as a whole, such incidents contributed to the negative image. In 1988, insurance companies expressed concerns about the liability associated with Ann Arbor's skatepark, further emphasizing the challenges faced by the skateboarding community. Despite these obstacles, the skateboarding culture continued to grow and expand, exemplified by the establishment of Thrasher Magazine in 1981 and the ongoing evolution of hardware, highlighting the resilience and dynamism of the skateboarding community.

### **History of local laws/ordinances and currently how skateboarding is viewed within the laws of ann arbor and the university**

In 1995, the Regents Ordinance of the University of Michigan was established, prohibiting the operation of roller skates, roller blades, Segways, electric scooters, hoverboards, self-balancing scooters, or bicycles in a manner that poses a threat of harm to pedestrians or damage to University property. The ordinance was revised in 2020 to include contemporary devices such as hoverboards.

However, the wording in the ordinance is vague and has no definition on what a "safe distance" or "unsafe speed" is and this gives way to enabling authorities to impose fines of up to \$100 for activities as simple as performing tricks or an ollie in an open space.

The closure of the Ann Arbor skatepark in 1995, due to low usage, coincided with the introduction of the university ordinance, casting doubt on the reasons behind its closure. In 1997, the Ann Arbor City Council clarified its right to ban skateboarding citywide, imposing fines and impounding boards without specifying a dollar amount. Skaters organized in response, planning to petition, lobby, and launch a PR campaign to combat fines that were limiting accessibility to the sport.

Between 2000 and 2004, Doug Song compiled a list of 970 citations for skateboarding violations, though not all resulted in fines (Vielmetti). The situation shifted in 2014 with the opening of the new Ann Arbor Skatepark, prompting questions about its location, use of old infrastructure, and dimensions for accurate carbon cost calculations. By 2020, the COVID-19 pandemic appeared to have loosened the enforcement of skateboarding regulations, with a decrease in people getting in trouble.

### **History of laws in other cities on skateboarding**

In 1996, New York City implemented restrictions on skateboarding on sidewalks and public plazas, limiting the spaces where skateboarders can practice their sport. Meanwhile, in Washington DC, the absence of private skate parks forces skateboarders to navigate the city's sidewalks and crosswalks (Chiu 27). Notably, Wards 7 and 8 lack skate parks, further limiting opportunities for skaters in these areas. In California, strict regulations dictate safety measures for skateboarders. Everyone, regardless of age, is required to wear a helmet, knee pads, and elbow pads (Contributor). Additionally, individuals under the age of 18 must wear a skateboarding helmet when on the street, bikeway, or public path. The city of San Francisco goes a step further by prohibiting skateboarding on the street or sidewalk in any business district at certain times. These diverse regulations underscore the challenges skateboarders face in navigating and enjoying their sport within urban environments, as cities grapple with balancing safety concerns and the freedom of expression inherent in skateboarding culture (“California Skateboarding Laws That Affect Skateboarding Accident Cases”).

### **What about electric skateboards? Materiality, carbon cost, utility**

Electric skateboards, designed primarily for commuting, present a shift from the recreational use of traditional skateboards. The materiality of electric skateboards closely resembles that of their traditional counterparts, incorporating a deck, trucks, and wheels. However, a significant addition is the lithium battery, a rechargeable component that contributes to the accessibility of electric skateboards, with prices ranging from \$200 to \$1000 (“Environmental Impact of Electric Skateboard - Change Impacts”). While this makes them a fraction of the cost of a car, electric skateboards are slightly more expensive than traditional boards, which typically range from \$50 to \$150. Environmentally, the production process aligns with that of traditional skateboards, but the inclusion of lithium-ion batteries introduces some ecological considerations (“Environmental Impacts of Lithium-ion Batteries”). Despite being a more sustainable alternative to fossil fuels, the extraction of materials for these batteries, through methods like open-pit mining and brine extraction, poses environmental challenges, including habitat destruction and groundwater depletion. Additionally, e-waste concerns arise, as improper disposal can lead to toxic leaching and fires. Although lithium-ion batteries have a long lifespan and can be charged thousands of times, their environmental impact during production and disposal suggests that, if possible, alternatives such as traditional bamboo skateboards may be a more eco-friendly choice for those not reliant on electric boards for commuting.

### **Improving infrastructure section**

To promote sustainability in urban planning and infrastructure, one of the more important strategies is repurposing existing structures rather than constructing new ones. An example of this could be the utilization of granite benches, from the medical campus, to be implemented for recreational usage. Additionally, an effort is made to understand the necessity of defensive architecture, either removing existing defensive structures or avoiding their construction altogether. Defensive architecture takes the form of metal rods or benches that deter skateboarders to use for any recreational usages. By placing defensive architecture, it creates less of an inclusive and urban environment overall.



Another important component is prioritizing the creation of protected bike lanes as a key element of infrastructure planning. These dedicated lanes not only provide a safe space for skateboarders and longboarders but also contribute to a more sustainable and efficient mode of transportation.

## Appendix 2

### Olympia: Skater Stories

This survey is intended to gather stories from skaters about their experiences with law enforcement, legislation, and sustainability surrounding the activity. All questions are optional!

insankar@umich.edu [Switch account](#)



Not shared

Name

Your answer \_\_\_\_\_

City

Your answer \_\_\_\_\_

Do you attend a school in that city? If so, which?

Your answer \_\_\_\_\_

Please share any relevant (positive or negative) experiences with law enforcement that you have had as a skater

Your answer \_\_\_\_\_

Please share any thoughts or opinions you have on the laws/legislation surrounding skating in your city

Your answer \_\_\_\_\_

Do you or anyone you know use skateboarding as a form of transportation?

Your answer \_\_\_\_\_

If so, how easy or difficult is it to use skateboarding as a form of transportation in the city you live in and why is that the case?

Your answer \_\_\_\_\_

Please share any relevant (positive or negative) experiences with law enforcement that you have had as a skater

Your answer

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Please share any thoughts or opinions you have on the laws/legislation surrounding skating in your city

Your answer

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Do you or anyone you know use skateboarding as a form of transportation?

Your answer

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## Appendix 3



### a brief history of skating in A2

1-1995 - skating is an integral part of youth counterculture.  
*"kids love it parents hate it!"*

1995 Regents Ordinance of the University of Michigan



1997 Ann Arbor skatepark closed due to **"low usage"**  
City Council asserts the right to **ban skating in any place** in A2  
punishable by fine, but **no dollar amount specified.**

*interesting...*

skaters organize political action as they are being fined left and right  
difficult to do because "part of our lifestyle is a lack of organization."  
nothing much comes out of it.

by 2004... there have been 970 citations.

2014 a new Ann Arbor skatepark opens  
(accessible to most residents only by car)  
*(not very!)*

let us know your experience with skating and law enforcement! Take the survey [linked here](#)

Appendix 4

