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Cover photo: City of Pittsburgh

Executive Summary

The Strip District (the Strip), a Pittsburgh East End neighborhood dating to the early 19th century, has been undergoing a transition. Since 2015, the Strip's residential population has more than doubled, and new industries are coming into the neighborhood. Our client, 3R Sustainability (3R), along with Strip District Neighbors (SDN), performed a visioning survey to determine the neighborhood's priorities and needs surrounding the Strip's transformation. The survey, which was distributed throughout the neighborhood, indicated three key priority areas: small business resilience, access to green spaces, and transportation.² 3R is a Pittsburgh-based ESG and built environment consulting firm headquartered in the Strip District. SDN is a nonprofit organization that promotes economic development in the neighborhood. Our team used these survey results to guide our investigation into avenues that 3R can pursue to tackle accessibility challenges in the Strip.

We reviewed relevant literature that included articles from 3R and the results from the visioning survey. The review considered "circulator" (or shuttle) concepts, parking strategies, bikeability, mobility, and transportation equity. Additionally, we researched and identified street design features that increase greenery and pedestrian and bike access.

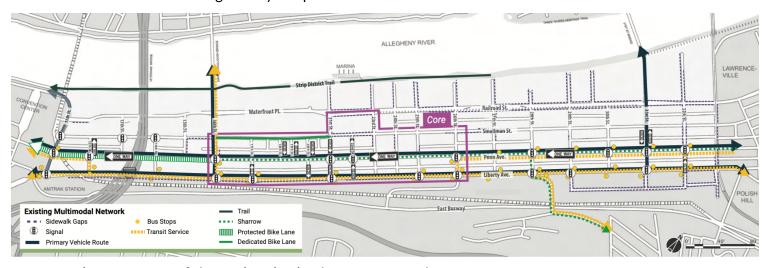


Figure 1. Map of the Strip District (Source: DOMI)

Building on our research, we visited Pittsburgh and conducted stakeholder interviews with advocacy groups and business owners in May 2022. With numerous newfound insights, our team identified three methods to inform our analysis and craft final recommendations. We synthesized our existing interviews, identified useful case studies, and conducted additional interviews with stakeholders utilizing a Design Thinking approach to determine additional accessibility pain points. We determined additional interviews were necessary to understand the range of perspectives in the community.

¹ Strip District Neighbors, "State of the Strip District."

² 3R Sustainability, "Strip District Neighbors Survey."

Several themes became apparent through various conversations. We concluded that further funding of the existing public transportation infrastructure would be a more feasible solution along the lines of the circulator. Additionally, the core of the parking debate stems from convenience rather than supply. Therefore, adding parking is not the solution. Another theme was the need for improved pedestrian and cycling infrastructure. It is evident that the Strip's specific challenges could be better addressed by a dedicated neighborhood city coordinator.

Our team identified key case studies that relate to issues faced by the Strip District. This comparative analysis allowed our team to build a cohesive case for several accessibility transformation options for the Strip using metrics such as access to multimodal transportation options, pedestrian and bike safety, parking spot availability, and vehicle emissions.

Other themes and ideas came out of a combination of our stakeholder interviews, our case study analysis, and our design thinking interviews. These insights can best be summarized in the table below:

Insight	Recommendations
Public Transit in Trouble; Circular Logic	 Assess possible funding mechanisms and perform a feasibility study for a circulator Pilot a new, rebranded bus route in the Strip District with high frequency. The vehicles used should either be a small bus or a distinctly rebranded bus in order to overcome existing negative perceptions of the public transit system.
Moving Mosh Pit	 Pilot a Slow Streets program in the Strip³ Penn Ave. car closures on certain days Improved pedestrian infrastructure (connected sidewalk network, bike lanes, lighting)
Right of Way	 Install curb bump outs, speed bumps, and stop signs on Penn Ave. and Smallman St., especially at the intersections with 25th St. Use Minneapolis case study to encourage support for pedestrian safety among business owners
New Biking City	 Protected bike lanes Develop clear signage and education materials for drivers (especially for back-in parking at the Terminal) Improve river trail for leisure biking experience
Street Parking Roulette	 Dynamic pricing that disincentivizes curb parking except for those shopping or with mobility issues⁴
Side Alley River	Use Detroit River waterfront case study to uncover funding mechanisms to revitalize the riverfront

³ "Slow Streets."

⁴ Shoup, Association, and Shoup, The High Cost of Free Parking.



11. Introduction & Background

The Strip District, a Pittsburgh neighborhood just northeast of Downtown along the Allegheny River, is experiencing rapid population growth and change with new businesses and developments transforming the historic area. Our client, 3R Sustainability (3R), along with Strip District Neighbors (SDN), have performed a visioning survey to determine the neighborhood's priorities and needs to support the Strip's transformation. The survey was distributed throughout the neighborhood and supported by Councilwoman Deb Gross. It indicated three key priority areas: small business resilience, access to green spaces (riverfront included), and accessibility (e.g., public transportation, bikeability, walkability, parking availability, etc.). These results combined with a plan, The Strip District Mobility Plan, developed for the Pittsburgh Department of Mobility and Infrastructure (DOMI) illuminated the need for health- and human-focused Complete Streets that promote safe and accessible modes of transportation beyond cars while keeping the vibrant and eclectic history of the Strip at the forefront of decisions.

The Strip would benefit from a solution that improves convenient non-motorized access to local businesses while alleviating the strain on parking spots in the Strip's core. This would promote transportation options with lower carbon emissions as well as encourage Strip visitors to spend less time searching for parking spots. In the DOMI study, Stantec, a design and urban planning consulting firm, using input from over 450 participants, had identified a set of solutions to improve mobility in the Strip, including a "circulator" shuttle that brings visitors to and from parking areas along the main shopping street in the Strip: Penn Ave. 5 While the existing DOMI study lays down a strong foundation for improving Strip District mobility, there is a need to combine feedback from the community with analysis that qualifies the projected benefits and costs of various mobility solutions. As a result, our team leveraged the existing analysis to uncover the most compelling and relevant solutions

We chose to use the term accessibility - how much you can get to - over the more-often used term, mobility - how far you can go, in this report.⁶ Rather than focusing on a means to an end, mobility, often, focusing on accessibility allows us to prioritize the destination. This moves us away from mobility metrics of speed and vehicle miles traveled to accessibility metrics such as access to multimodal transportation options and access to destinations, of which the Strip has many.⁷

III. Methods

Our research began with a review of relevant literature. The review considered circulator concepts, parking strategies, bikeability, mobility, and transportation equity. Additionally, we

 $^{^7}$ Levine, Grengs, and Merlin, From Mobility to Accessibility : Transforming Urban Transportation and Land-Use Planning.



⁵ Department of Mobility and Infrastructure and Stantec, "Strip District Mobility Plan."

⁶ Herriges, "The Difference Between Mobility and Accessibility."

researched and identified mobility features that increase greenery and pedestrian access and complied with Complete Streets Design Guidelines, which DOMI is in the process of drafting.

Building on our research, we visited Pittsburgh and conducted stakeholder interviews in the beginning of the summer (May 2022). Stakeholders included local business owners and representatives from BikePGH, Strip District Neighbors, and the Pittsburgh Downtown Partnership.

Based on our research, our team identified key case studies that will relate implemented concepts from other cities to issues faced by the Strip District. This comparative analysis allowed our team to build a cohesive case for several accessibility transformation options for the Strip. We considered the following metrics: access to multimodal transportation options, pedestrian and bike safety, parking spot availability, bikeability, walkability, and vehicle emissions. Using these metrics to compare solutions and contextualize our findings, we narrowed our analysis to concrete options and relevant recommendations.

With numerous newfound insights, our team identified three methods to inform our analysis and final recommendations. We synthesized our existing interviews, identified useful case studies, and conducted other interviews with residents, shoppers, and tourists in the Strip using a Design Based Thinking approach to determine additional mobility pain points. We determined additional interviews were necessary to understand the range of perspectives in the community. Taken together, our year-long initiative hopes to inform and inspire future accessibility initiatives in the Strip District.

Project Timeline



Stakeholder Interviews

During the team's time in Pittsburgh, we spoke with stakeholders in the area who are involved and invested in the mobility and accessibility issues being discussed. We spoke with the following people:

Interviewee	Company/Affiliation
Real Estate Agent	Strip District Neighbors (community-based group advocating for development in the Strip); Real Estate Agent
Bike Advocate	Bike Pittsburgh (bicycle advocacy and education group)
Circulator Advocate	Architect at local architecture firm
Local Storeowner 1	Owner, pecialty food store
Downtown Development Administrator	Pittsburgh Downtown Partnership
Local Storeowner 2	Owner, specialty market

Case Study Support

The Strip District is a unique and vibrant community that combines the City's industrial past with its high-tech future. However, many of the Strip's accessibility challenges are not exclusive to the Strip. Many North American cities and regions all over the world have successfully undergone accessibility reforms that have greatly improved the lives of their residents. Following our stakeholder interviews, we identified case studies that most closely mirrored the conditions and issues within the Strip. We focused on the revitalization of Detroit's Riverfront, the economic impact of bike lanes in Minneapolis, and a circulator shuttle in Baltimore to inspire our recommendations to address similar problems in the Strip District.

Design Thinking Based Research

Design Thinking or Human-Centered Design is a problem solving methodology that centers people's needs, leveraging a combination of qualitative and quantitative methods to understand behaviors and perceptions and develop relevant solutions by soliciting user feedback along the way. Our team applied design thinking to uncover the mobility needs of three residents, three visitors, and three employees that move through the Strip District via interviews and qualitative analysis.

Results & Recommendations IV.

Several themes became apparent through conversations with stakeholders. One contentious issue in the Strip is the different value placed on parking by stakeholders in the Strip. Local Storeowner 2 and Local Storeowner 1 believe that it is imperative to business resilience that there is not only a surplus of parking but convenient parking in close proximity to their shops. The current parking system includes inexpensive parking in convenient locations and expensive parking in off-site lots. This contributes to traffic in the Strip, as patrons will circle the streets in search of convenient and



cheap parking as a result of the parking prices not matching their market value. This leads us to the conclusion that the core of the parking debate stems from convenience rather than supply.

We discussed the idea of a circulator shuttle in the Strip. Though the circulator was a concept that both developers and business owners agreed on, we heard from Downtown Development Administrator about the history of the circulator concept in the Strip, which has been supported for over 20 years by the Circulator Advocate and many other local Strip businesses. Though it is currently viewed as a magic bullet proposal, the ability to fund the circulator is controversial, with Downtown Development Administrator saying that the costs of operating and maintaining a circulator shuttle are prohibitive, but others, like Circulator Advocate suggesting sourcing funding from local tech companies or banks. As Downtown Development Administrator noted, the existing Port Authority bus routes 54, 86, 87, 88, and 91 travel along Liberty Avenue with stops at 17th, 21st, 25th, 26th, and 27th streets. However, the existing bus routes on Liberty Avenue are two blocks away from Penn Avenue. Therefore, we concluded that a more feasible solution along the lines of the circulator would be further funding for public transportation and pedestrian walkways, such as improving lighting, sidewalks, and pedestrian safety between Liberty and Penn, given that the infrastructure exists and connects to Greater Pittsburgh.

Finally, there is a difference of opinion between shop owners, Local Storeowner 2 and Local Storeowner 1, and advocacy groups for safer and accessible pedestrian and cyclist access in the Strip including Bike Advocate. Local Storeowner 2 and Local Storeowner 1 believe that their core sales base comes from their traditional customers who rely on parking spots and convenient car access to their stores. Local Storeowner 2 supports this by providing its patrons with a parking lot with 26 spots. On the other hand, Bike Advocate believes that by creating access for a new base of customers, businesses could benefit as well as support existing customers. Neither Local Storeowner 2 nor Local Storeowner 1 have a customer tracking system, and so the claims that new residents and new patrons of the Strip will not bring in additional business is founded on anecdotal evidence as opposed to systematic data.

Both Downtown Development Administrator and Desmone emphasized the Strip's specific challenges could be better addressed by a dedicated city coordinator for the Strip District and other East side neighborhoods in Pittsburgh.

Given the contradictions in the stakeholders' opinions regarding the effects of mobility changes on business resilience in the Strip, the team recognized that there are key stakeholders whose voices are missing from the discussion. For example, the business owners believe that by eliminating a parking lane to allow a protected bike lane, their customer base would shrink. However, pedestrian and cycling advocates believe that this change would cause their customer base to grow. To better understand the consequences of changes such as these to the streets, we'd need to hear from the patrons themselves. This includes shoppers from other neighborhoods, commuters through the Strip, and folks who work in the Strip. Several comprehensive studies have been completed by the City. However, Downtown Development Administrator explained to us how

⁸ Shoup, Association, and Shoup, The High Cost of Free Parking.



historically, it has been difficult to get buy-in from the stakeholders because they do not trust the process. With additional information from patrons of the Strip centered around mobility as it relates to business resilience, and by engaging skeptical stakeholders in this process, we performed design research to identify more concrete evidence to move the dial on any future recommendation.

Design Research Insights

Neighborhood in Transition

"The Strip used to be a business hub, a place you'd go for a specific purpose. Today, it's a destination. It's a place to go and hang out for a while." — SD Visitor

The Strip District has evolved from a practical pit stop to a tourist destination and up-and-coming residential neighborhood. The contradictions—old vs. new, local vs. cosmopolitan, diverse vs. privileged—are at the center of its new identity and growing appeal. The Strip's rich history as an important wholesale produce center contributes to the neighborhood's charm and community pull, with many family-owned businesses still operating over a hundred years later. At the same time, the emergence of trendy distilleries and restaurants, the development of new condominiums, and the establishment of new offices in the Strip District are attracting new visitors, residents, and employees.

Public Transit in Trouble

"You have to be going where the bus is going in order to prefer public transportation" — SD Resident

Public transportation in Pittsburgh is widely perceived as underutilized, unreliable, inconvenient, and unsafe. Severely impacted by the pandemic, ridership has plummeted in a noticeable way, further eroding the system's reliability as routes are cut. Buses and the T system are most used by folks that commute to downtown for work to avoid expensive downtown parking rates. There is a strong negative association of public transit with homelessness and drug abuse, contributing to safety perception concerns. Within the Strip District, the option of using public transportation does not even occur to most patrons, reflecting the fact that the neighborhood is underserviced as the nearest bus routes run along the periphery. More importantly, however, negative associations with the public transportation system run counter to the type of experience that draws people to the Strip District, suggesting that even if public transit were bolstered in the neighborhood, it may remain underutilized.

Circular Logic

"The Circulator could be a bus, as long as it was safe. But it would need to be rebranded as 'fancy, modern, cool.' My first reaction when I hear the bus is that it would be sketchy." — SD Employee



Excitement about the Circulator concept reflects a lack of last-mile options within the Strip. However, Strip District patrons have mixed feelings about whether it would satisfy those needs in practice. There was enthusiasm about a trolley as a nod to the neighborhood's historic charm. But residents and visitors expressed doubts about the Circulator's reliability, cautioning that it would need to guarantee consistent and frequent stops in order to earn rider trust. Across the board, Strip District patrons reacted negatively to the concept of expanding the existing bus system to service the stops proposed by the Circulator, mainly due to the negative perceptions associated with the existing public transit system.

Moving Mosh Pit

[[Walking in the Strip] is like being in a moving mosh pit. It feels like the whole sidewalk is a mass of humanity moving." — SD Visitor

Congestion is a good problem to have, as it signals the neighborhood's revival as a popular place to be. Walking is one of the strongest value drivers of the Strip experience. Yet, descriptions of walking along Penn avenue on a weekend suggest that the Strip District's density has reached a level that deters patrons from frequenting the Strip at certain peak times. With stores spilling out onto the sidewalks, pedestrian safety is becoming increasingly compromised as individuals jut into the street to circumvent sidewalk build-up.

Right of Way

"There is a lack of understanding that this is a residential neighborhood. People drive like maniacs. We have a speeding issue." — SD Resident

Driving in the Strip District is perceived as more aggressive compared to other parts of Pittsburgh. This is partially attributed to the fact that frustrated drivers exhibit reckless behavior in pursuit of highly coveted street parking spots as well as avoiding the more heavily trafficked Liberty Avenue. The dynamic can also be explained by the fact that many do not regard the Strip District as a residential neighborhood, resulting in a more aggressive driving mindset than the area warrants. Particularly dangerous intersections were identified at 25th & Penn Ave and 25th & Smallman. Strip District patrons described actively avoiding these intersections and lamenting that there are no stop signs or speed bumps to improve pedestrian safety at these dangerous crossings.

New Biking City

"Pittsburgh is a new biking city. It's still very unfriendly towards cyclists. Ten years ago, every week you'd hear about a hit and run. It's improved, but I still wouldn't choose to bike out of fear for my safety." — SD **Employee**

Known for its hilly terrain, Pittsburgh has been relatively slow to incorporate biking into its mobility mix. Strip District patrons unanimously cited biker safety concerns as a product of



insufficient protection from biking infrastructure and a driver mindset that is unaccustomed to sharing the road. Additionally, distances within the Strip were perceived as too short to warrant a bike ride, when one could simply walk. That the Strip is a flat area within Pittsburgh presents a unique opportunity for biking to enhance the Strip experience. Biking for leisure, particularly if the river trail is improved, would be a welcome activity; however, until biking infrastructure is significantly improved, it is likely to remain an unpopular mode of getting around the Strip due to safety concerns.

Street Parking Roulette

"It's like playing roulette. You cruise around until someone pulls out of a space...then you dive for it." — SD Visitor

Emotions regarding parking in Pittsburgh are rooted in the City's history of car dominance. As the City has become more dense, parking has become a thornier pain point for Pittsburghers. In the Strip District, in particular, the influx of daily visitors associated with its transition from pit stop to destination has transformed the parking experience in a negative way. Interestingly, however, the Strip District does not have a parking supply issue, but rather a parking expectation issue. There is a holdover historical baseline expectation of available, convenient, free street parking as part of the Strip District experience. Strip District patrons accustomed to easy street parking do not think to search for alternatives (i.e. parking garages or opting for a different transportation option) or are unwilling to pay a higher price for less convenient, albeit abundant, parking.

Side Alley River

"There could be better integration of the river and neighborhood life. The river trail is like the side alley of a house. It should be like the front lawn." — SD Visitor

There is a very weak association between the Strip District and the Allegheny River. In the past year, a homeless encampment has been established near 21st and Smallman, deterring some Strip District patrons who would otherwise enjoy utilizing the river trail. Across the board, Strip District patrons feel the river represents an opportunity to enhance the neighborhood experience, and incorporate more green spaces.

Case Studies

In order to provide additional useful conclusions and examples, we selected analogous cases to proposed policy solutions in the Strip. Our review was focused primarily on North American cities that experienced deindustrialization in the late 20th century and had similar land use patterns to the Strip. Our analysis harnesses these constructive examples to inform possible solutions. We reviewed case studies in Detroit, Michigan; Baltimore, Maryland; and Minneapolis, Minnesota.



Detroit's Riverfront Revitalization

Background: Due to years of population growth and widespread industrialization, the coastal waterfront around the Detroit River became a polluted and underutilized resource. By the mid-20th century, the Detroit River was one of the most polluted rivers in the United States with abandoned buildings, gravel storage piles, and parking lots occupying the banks of the river up until the early 2000s.

Starting in the 1980s, a variety of citizen groups and the Michigan state government started the long process of revitalizing the river. Beyond the ecosystem recovery efforts, in 2003, the Detroit Riverfront Conservancy was founded to transform the area around the river. The organization was able to raise money from private parties to acquire parcels of land on the riverfront to develop a walking and bike path. In total, \$1.8 billion has been invested in the riverfront with over 3 million visitors every year. USA Today readers have voted it as the best Riverwalk in the country for the past two years. 10

Lesson Learned: The Detroit Riverfront Conservancy was successfully able to quantify the economic benefits of the river improvement (contracting with CSL International). Additionally, the Detroit Riverfront Conservancy was able to leverage private dollars to fund the extensive redevelopment effort.¹¹

Connection to the Strip: Similarly to Detroit, the Strip District has an underutilized river resource, with the Allegheny River separated from the core of the Strip by only a few blocks. Most of our interviewees had little to no association between the Strip and the river, and the majority of those we interviewed do not utilize the existing riverfront walking paths.

The Pittsburgh-based organization, Riverlife, has already produced the Strip District Riverfront Park Vision Plan to outline changes to the area surrounding the Allegheny River. While this vision has significant support from community members, businesses, and public officials, the organization still needs to acquire funding to finance the construction of the river park and support its long-term maintenance and operations. Fortunately, there is significant momentum to connect the riverfront with the Strip District. Local efforts can draw on the success of the Detroit Riverfront to inspire a path forward to finance the existing revitalization proposal.

Linking Bike Lanes & Economic Vitality in Minneapolis

Background: Minneapolis conducted five street improvement projects between 2008 and 2012, including new bike lanes and road diets. Each of the five street improvement corridors, Riverside Avenue, Franklin Avenue, Central Avenue, Lyndale Avenue South, and North Second Street, were

¹² RiverLife, "Strip District Riverfront Park Vision Plan."



⁹ "Home | Detroit Riverfront Conservancy."

¹⁰ Guest, "From Industrial Wasteland to Urban Lure, Detroit's Riverwalk Sees 3 Million Visitors a Year."

¹¹ Hartig, "From Cleanup of the Detroit River to Revitalization of the Waterfront."

compared to a control corridor that was similar in street classification type, geographic proximity, and similar business activity (retail and food job density and employment statistics). ¹³ Quarterly US Census data on employment and wages, information from the Longitudinal Employer-Household Dynamics Dataset, and sales tax data provided insights into the economic impact of bike infrastructure construction.

On one street, Central Avenue has traditionally been home to a working-class population of Polish, German, Slovak, Russian, Lebanese, and Ukrainian immigrants, who originally came to the area to work in nearby railway and warehouses. Since the 1990s, the area has been known for restaurants and shops that attract visitors from across the City. In 2012, the City added bike lanes by removing parking lanes and reducing driving lane width. This work was done in coordination with the Minnesota Department of Transportation as Central Ave is also a state trunk highway.

Lesson Learned: Overall, the bike lanes and road diet study corridors did not impede economic growth, and may have contributed to positive growth in three of the five corridors. Franklin Avenue saw an increase in food service employment two years after bike lane installation. Lyndale Avenue's road diet led to improved retail sales. Riverside Avenue and North Second Street presented mixed or insignificant results, none of which indicated a negative impact of removing right-of-way or parking lane removal.

Central Avenue saw a significant positive impact on its local economy. Foodservice and retail employment increased after the construction of the bike lanes. Restaurant sales also had a dramatic increase post-construction, compared to the control corridor of University Avenue NE. Contextual data was not collected for these specific street changes, and therefore, there is not enough information to recommend more specific bike improvements besides bike lanes.

Connection to the Strip: The Central Ave area of Minneapolis reflects a similar history as the Strip's. Much of the new bike lane on Central Ave runs through the neighborhoods with a variety of businesses and restaurants, similar to the Strip. By adding a bike lane, Central Ave saw only positive results for its local economy, which should encourage residents and businesses to support improving infrastructure for non-motorized traffic.

The neutral and positive impacts on the other Minneapolis corridors also help eliminate fear that the removal of parking lanes and the addition of bike lanes would have a negative impact on local businesses.

¹⁵ Dibblee, "Bike Lanes on Central Ave NE?"



¹³ Liu, Jenny H. and Shi, Wei. Understanding Economic and Business Impacts of Street Improvements for Bicycle and Pedestrian Mobility – A Multicity Multiapproach Exploration. NITC-RR-1031/1161. Portland, OR: Transportation Research and Education Center (TREC), 2020.

¹⁴ "Central Avenue."

Baltimore's Charm City Circulator

Background: In Baltimore, the DOT proposed the free Charm City Circulator to ease congestion in the business district, improve connectivity for residents, commuters and tourists, and connect the existing parking supply to areas of interest in the City. The circulator is funded primarily by the City's parking tax, primarily coming from commuters parking in lots, rather than City residents, as well as by state and federal grants, advertising revenues, and other revenues including non-profits, local universities, and downtown entities. The circulator began with two initial routes in 2010 and expanded to four routes in 2011. The circulator is operated by an external vendor and includes 21 buses.

Due to a combination of operational issues including the bus manufacturer's failure to fulfill their contract, expansion of the circulator without additional revenue streams to offset related purchases, and critical issues with revenue and expenditure tracking, the service has run an annual deficit since 2011, according to a 2014 report. In 2021, the Maryland Department of Transportation awarded the Circulator \$11.9 million in funds from the CARES Act to help improve the struggling shuttle. The Circulator faced challenges providing its services on two of its four routes with low and declining ridership to promote equitable accessibility.

Lesson Learned: A circulator should carefully consider "pick up" and "drop off" points close by to parking facilities. Having a variety of funding sources, potentially including a ridership fee, is a commonality between successful circulators. Having a joint venture between the City and a private entity can reduce risk by providing additional sources of funding, and provide independent verification of service assessments.

Connection to the Strip: Baltimore, like Pittsburgh, was a major manufacturing center and rail hub with a rich connection to its history. The motivation to put in a circulator was similar to the opportunities that the Strip District sees in a circulator, like relieving congestion stemming from a lack of convenient parking options, and connecting neighborhoods.

The Strip District Neighbors have a committee focused on introducing a circulator to the Strip for purposes similar to that of the Baltimore Charm City Circulator. The committee has developed a route including "drop off" and "pick up". A more thorough investigation into potential funding pathways is necessary to get the Strip District project off the ground. The 2021 Infrastructure Investment and Jobs Act could be one such funding opportunity.



¹⁶ "CHARM CITY CIRCULATOR: A FINANCIAL ANALYSIS TO DETERMINE THE SUSTAINABILITY OF CURRENT OPERATIONS."

¹⁷ "Charm City Circulator Is Thrown a Financial Lifeline."

¹⁸ Holt, "A Tale of Two Circulators."

Recommendations

Insight	Recommendations
Public Transit in Trouble; Circular Logic	 Assess possible funding mechanisms and perform a feasibility study Pilot a new, rebranded bus route in the Strip District with high frequency. The vehicles used should either be a small bus or a distinctly rebranded bus in order to overcome existing negative perceptions of the public transit system.
Moving Mosh Pit	 Pilot a Slow Streets program in the Strip¹⁹ Penn Ave. car closures on certain days Improved pedestrian infrastructure (connected sidewalk network, bike lanes, lighting)
Right of Way	 Install curb bump outs, speed bumps, and stop signs on Penn Ave. and Smallman St., especially at the intersections with 25th St. Use Minneapolis case study to encourage support for pedestrian safety among business owners
New Biking City	 Protected bike lanes Develop clear signage and education materials for drivers (especially for back-in parking at the Terminal) Improve river trail for leisure biking experience
Street Parking Roulette	 Dynamic pricing that disincentivizes curb parking except for those shopping or with mobility issues²⁰
Side Alley River	Use Detroit River waterfront case study to uncover funding mechanisms to revitalize the riverfront

Our recommendations focus on three main themes:

Pedestrian and Bike Improvements: Improving how non-motorized visitors maneuver through the Strip will encourage visitors to opt for lower emission forms of transportation as well as increasing safety for all.

Cars and Parking: Using pricing strategies to incentivize parking in lots and garages while leaving curb parking spots open to those who need temporary or nearby parking will reduce the time spent searching for parking. Upgrading infrastructure so as to encourage slower driving will also make the Strip safer for pedestrians and cyclists.

The Circulator: Performing a feasibility study will help bring the circulator pilot to life. The primary focus should be funding mechanisms, pick-up and drop-off points, and the rebranding of shared modes of transportation.

²⁰ Shoup, Association, and Shoup, The High Cost of Free Parking.



^{19 &}quot;Slow Streets."

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Strip District Neighbors



Our Stakeholder Interviewees.

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