

## Introduction

The Pedestrian Way speaks to one of the most important issues in the Strip District – the accommodation and safety of the pedestrian. The tremendous and often “crush loads” on the sidewalk, especially in the “Heart of the Strip” on the weekends, means the pedestrian is king. With the continued transformation of the Strip District, the influence of the pedestrian will grow. The relationship of the Pedestrian Way to the Transit Way can form a powerful alliance to support and enlarge the value of the Strip District.

Although the pedestrian environment is important on streets throughout the Strip District, the primary focal point for pedestrian activity is on Penn Avenue, particularly between 16<sup>th</sup> Street and 23<sup>rd</sup> Street. Similar to the evaluation of bicycle facilities on Penn Avenue, the Design Team evaluated potential options to enhance the environment on this key pedestrian street.

## Testing Sidewalk Ideas on Penn

The existing sidewalks on Penn Avenue are typically 11 ft. wide. This distance is adequate for sidewalk activity on many streets. However, this width is generally considered to be narrow for a pedestrian environment on a “great street” or an urban retail street. Further, often chaotic activity within the roadside environment limits the available through walkway width, which can make pedestrian mobility challenging during peak periods. There is no doubt the apparent crowding is accentuated by vendors and tables on the narrow sidewalks. However, there is an argument to be made that is what “makes the heart of the Strip District so unique”. Nonetheless, the Design Team evaluated an alternative in which the sidewalks would be widened to 15 feet on each side of the street. This idea would require the removal of one parking lane, leaving two travel lanes and parking on only one side of the street. Another variation considered was making one of the two



Penn Avenue sidewalks crowded with pedestrians and street vendors

travel lanes available for parking during the off-peak period. These concepts were eliminated from consideration for the following reasons:

- The addition of four feet of sidewalk width on each side of the street was judged to have a lesser impact on the quality of the pedestrian environment compared to the tradeoff of losing convenient on-street parking spaces and loading areas. The loss of one parking lane was identified as a major concern from business owners who indicated parking is a premium within the Strip District and would negatively impact their deliveries and customers.
- While no parking would be lost during off-peak periods in the second alternative, the reduction to a single travel lane during these periods has the potential to negatively impact traffic operations. Although a single lane would generally meet traffic capacity and level of service needs during the off-peak periods, the potential for delivery drivers to double-park in the travel lane on Penn Avenue would result in gridlocked conditions until the vehicle was moved.

Other concepts considered included potential weekend closures of Penn Avenue within the central portion of the Strip District, as well as the potential reconstruction of this section to a curb-less street. Occasional or regular weekend closures may be tenable within the section between 16<sup>th</sup> Street and



# Pedestrian Way Plan



23<sup>rd</sup> Street to expand the pedestrian capacity of this critical corridor and allow additional vendor space. This would be best achieved by using bollard or barricades at the ends of each block to be closed, which would allow traffic to cross Penn Avenue and result in minimal disruptions to traffic and parking circulation through the Strip District. The reconstruction of the central portion of Penn Avenue to a curb-less section would allow maximum flexibility in the usage of the street's cross-section both during normal operations and special events. Bollards would be used to define the general boundary between the pedestrian roadside zone and parking during normal operations, but the curb-less section would give more credence to use as a pedestrian mall or festival street during closures or special events with the entire street from building to building all being at one level.

In the future, if there are essential changes in the disposition of the wholesale/retail dynamic that currently characterizes Penn Avenue from 16<sup>th</sup> to 23<sup>rd</sup> Streets, the City and Strip District stakeholders have alternative ideas that can be reconsidered.

## Pedestrian Way Plan Features

With the existing Penn Avenue roadway section judged to represent the optimal balance between driving, walking, biking, parking, and delivering, the following recommendations are made to enhance the Penn Avenue corridor for pedestrians:

- Penn Avenue between 16<sup>th</sup> Street and 31<sup>st</sup> Street is proposed to remain a two-lane, one-way roadway with on-street parking and 11 ft. sidewalks on both sides (see Figure 1).
- New pedestrian enhancements would be focused at intersections to make crossings friendlier and safer, with the section of Penn Avenue between 16<sup>th</sup> Street and 23<sup>rd</sup> Street being a higher priority than the section between 11<sup>th</sup> Street and 16<sup>th</sup> Street or between 23<sup>rd</sup> Street and 31<sup>st</sup> Street. Pedestrian improvements will include:
  - Count-down pedestrian signals.
  - High-visibility crosswalks.
  - Curb extensions designed to not hinder the turning movements of larger vehicles and trucks at critical intersection corners.
- Enhanced shared lane bicycle markings, which includes a green stripe down the center of the travel lane with the shared lane marking centered on the green stripe (as has been used with success in other cities such as Long Beach, California and Salt Lake City, Utah)

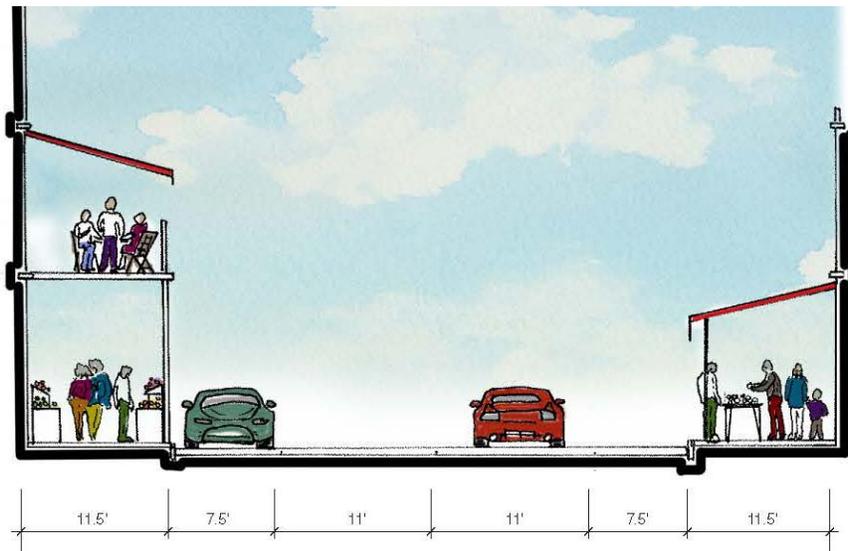


High-visibility crosswalk markings



Enhanced shared lane markings with green stripe

**Figure 1: Proposed Pedestrian Way Typical Section**

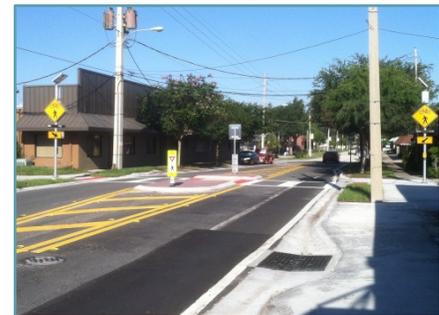


It is also recognized that pedestrian improvements are needed across the Strip District beyond Penn Avenue to provide a truly safe, convenient, and welcoming environment. The following are general pedestrian improvement recommendations across the Strip District:

- Fill in sidewalk gaps and repair damaged sidewalks
- Provide ADA features and universal design
- Use high-visibility crosswalks
- Install pedestrian signal heads with count-down timers at all signalized intersections
- Use Yield to Peds/No Right Turn on Red “blank-out” signs in areas with heavy pedestrian volumes and high numbers of conflicts between pedestrian and turning vehicles
- Construct curb extensions at intersections in areas with on-street parking (see Figure 2)
- Provide sufficient lighting, particularly at marked crosswalks and intersections
- Use pedestrian way-finding kiosks and signage
- Employ public art and streetscaping
- Implement enhanced pedestrian crossing treatments at difficult unsignalized pedestrian crossing locations such as on Smallman Street and Liberty Avenue

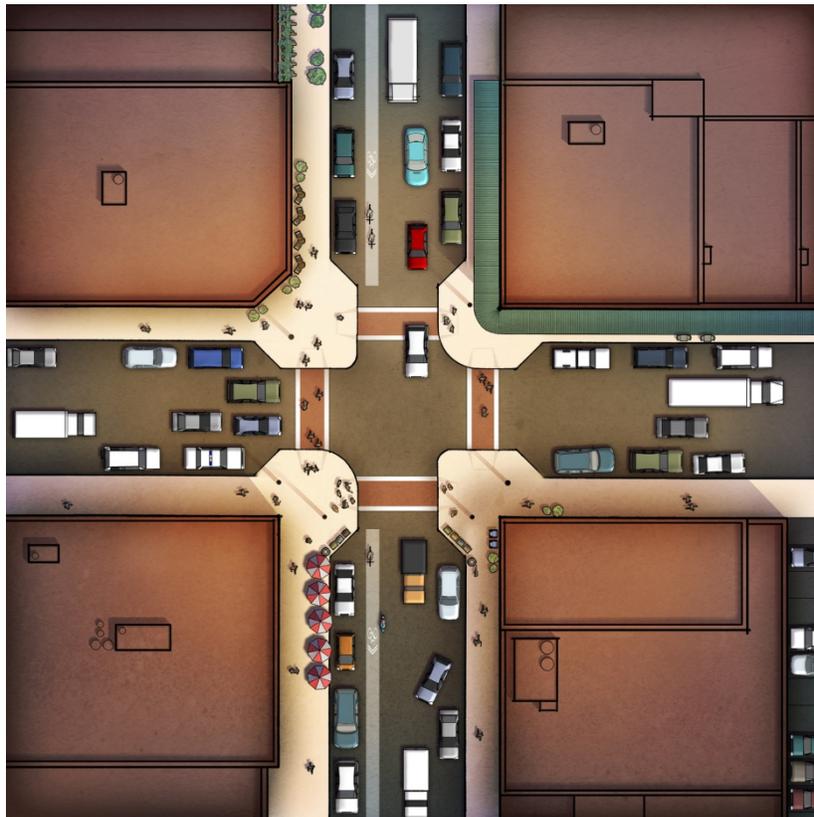


Curb extension with patterned pavement (Carbondale, CO)



Rectangular rapid flashing beacons at midblock crossing (Orlando, FL)

**Figure 2: Example of Curb Extensions at Intersections**



## **Pedestrian Way Benefits**

As the second major component of the complete system of streets, Penn Avenue as the Pedestrian Way plays a prominent role. While still “multi-modal” in use, the pedestrian environment must expand in safety and convenience or it may lose its attractiveness. Benefits of the recommended enhancements are:

- Pedestrians know when to cross and how much time is left to cross.
- Crossing locations are better defined and more visible.
- Crossing distances are shorter.
- On-street parking is better defined and controlled.
- More space is allowed on intersection corners for street furniture and amenities.
- Lane sharing with bicyclists is better recognized.

The benefits of expanding the reach of additional pedestrian enhancements throughout the Strip District are that:

- A continuous network of pedestrian facilities is created.
- A welcoming environment that accommodates all users is provided.
- Pedestrian safety is improved.
- Walking trips are encouraged.