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# TAKOMA JUNCTION

## VISION STUDY

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### Acknowledgments

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The development of a vision for Takoma Junction would not have been possible without the committed participation of the community members of the City of Takoma Park. A special thanks is extended to all the residents, business owners, and members of public who shared their thoughts and ideas with the team and participated in the survey and the public engagement activities, all of which led to the articulation of the vision for the Junction. This Vision Plan provides an assessment of existing conditions, summarizes input from the community, and recommends proactive, context-sensitive guidance on how to ensure safety for all roadway users while celebrating the spirit of Takoma Junction. The recommendations in this document align with the common values and vision expressed by the community.

### *a VISION for Takoma Junction*

**Takoma Junction is a welcoming, inclusive, historic, creative space that reflects Takoma Park's values of sustainability, inclusivity, creativity, diversity, and respect for nature. It offers the local, vibrant community an opportunity to gather, relax, take advantage of local goods and services, and enjoy public and green spaces. The Junction is safely accessible by foot, bike, transit, and private vehicle. It is a magnet for community events and the creative arts, providing opportunities to meet new people and form new ideas, while balancing social functions with the essential services the Junction provides.**



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# INTRODUCTION

## INTRODUCTION: OUR STORY

In Fall 2018, the Maryland Department of Transportation State Highway Administration (MDOT SHA) initiated a vision study to collaboratively develop and document a range of potential future transportation improvements in an area of Takoma Park. In March 2019, MDOT SHA commenced the public engagement that is the foundation of this vision study. The improvements were identified to address pedestrian, bicycle, and vehicular mobility at the intersections of MD 195 (Carroll Avenue) and MD 410 (Ethan Allen and Philadelphia Avenues)—an area known as “Takoma Junction.”

### Where is Takoma Junction?

Takoma Junction is at the geographic center of the City of Takoma Park in the southeast tip of Montgomery County, Maryland. Founded in the late 19<sup>th</sup> century, the City of Takoma Park is characterized by neighborhoods with large trees, narrow streets, and small shopping areas of local businesses. The area is a part of the Takoma Park/East Silver Spring overlay zone—a Montgomery County Neighborhood Retail Employment Zone which supports commercial revitalization and pedestrian-oriented commercial uses. Takoma Junction is just blocks from the Washington, D.C., boundary to the southwest and is equally close to the border between Montgomery and Prince George’s Counties to the southeast (Figure 1). As a convergence of two important roadways, and at the intersection of three jurisdictions, Takoma Junction is an important connection in the region, bringing many communities together in one place.

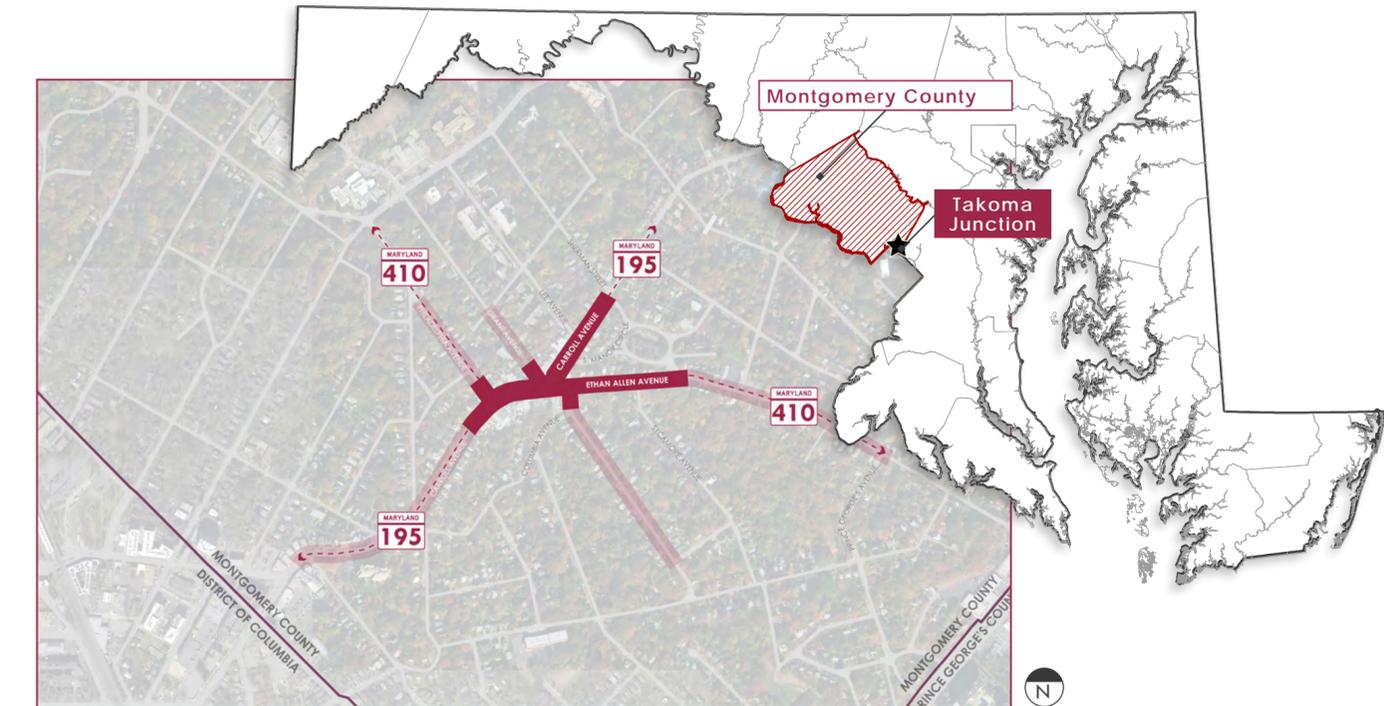


Figure 1. Takoma Junction Study Area in Montgomery County

Figure 2. Transit and Bike Services in Takoma Junction



### STUDY AREA

Takoma Junction is an elongated “bowtie” intersection where MD 195—Carroll Avenue, a north-south arterial—intersects with MD 410, an east-west arterial. The two roads enter separately from the north and east, respectively, and overlap for approximately 400 feet. They ultimately split, departing as Carroll Avenue to the southwest and Philadelphia Avenue to the northwest. The study area is centered on the overlapping segment from Philadelphia Avenue at the west to Lee Avenue at the east; but other streets, particularly Grant Avenue and Sycamore Avenue, also play a role in how people use the Junction. Congestion at the Junction encourages cut-through traffic on some of these side streets and other small residential streets in the area.

Roadways through this area are heavily trafficked and service five bus routes (Figure 2). Within the study area, there are several bus stops serving Montgomery County Ride On Routes 12, 13, 16, and 18, and WMATA Route F4. While the frequency of service along each line varies, a total of 14 buses pass through length of the Junction during each peak hour. Some of the bus stops were formerly configured to use pull-off areas, but due to the difficulty of re-entering through-traffic lanes, bus operators have been directed to cease using pull-offs. As a result, cars must now wait behind buses as passengers are loaded on and off. Frustrated drivers sometimes pull around buses into the oncoming lane of traffic, creating a dangerous situation.

Takoma Junction sees the most traffic between 8:00 and 9:00 in the morning hours and 5:45 to 6:45 in the evening hours, but volumes are significant throughout the day. Many pedestrians and bicyclists—including students from nearby schools Takoma Park Elementary School, Piney Branch Elementary School, and Takoma Park Middle School—travel through the study area. Bicycle markings within Takoma Junction include sharrows in both directions of Carroll Avenue north of Ethan Allen Avenue and a contraflow bicycle lane along Grant Avenue. All study area streets are posted at 25 miles per hour.



Takoma Junction is a verdant and lively community. From public art and art deco architecture to the colorful trim around storefront windows, no opportunity is too small to introduce character and whimsy in Takoma Junction.

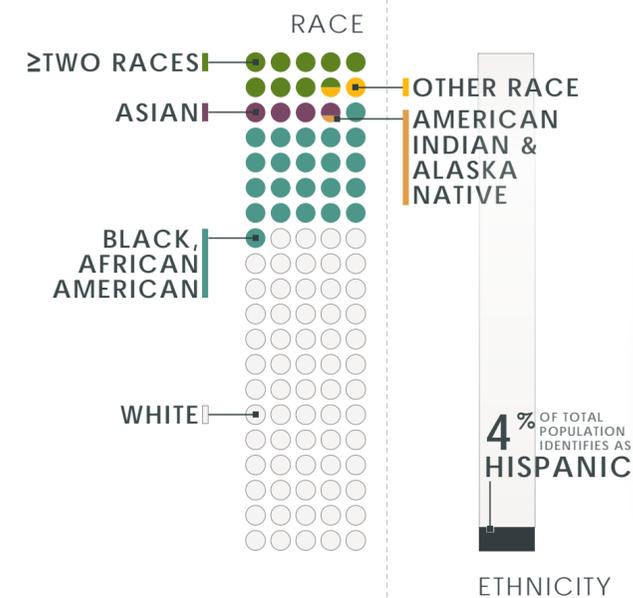


Figure 3. Race and Ethnicity in Takoma Park  
Source: Table B02001, U.S. Census American Community Survey 2017 5-year estimates for Census Tract 7017.01

### THE TAKOMA PARK COMMUNITY

The neighborhoods around the Junction contain mostly single-family homes, with a few enclaves of garden apartments, churches, and community parks. The density and connectedness of the community's street grid provides ample opportunity for residents to enjoy walks and bike rides along neighborhood streets. Meandering across the rolling topography, these streets connect the community and provide access to commercial centers which provide day-to-day shopping needs.

The City of Takoma Park is one of Maryland's 28 Main Streets. The Main Street Maryland program strives to strengthen the economic potential of Maryland's traditional main streets and neighborhoods by providing designated communities with support for economic planning, marketing and promotion, training and education.

According to the 2013 to 2017 5-year estimates of the American Community Survey (ACS), the City of Takoma Park is home to 17,643 residents, with an estimated 3,487 residents immediately surrounding the study area (census tract 7017.01). The largest population group is comprised of adults within the



Figure 4. Percentage of Takoma Park Population Under 19 Years of Age  
Source: Table S0101, U.S. Census American Community Survey 2017 5-year estimates for Census Tract 7017.01

"Generation X" cohort. An estimated 29 percent of the population is between the ages of 35 and 54, while children under 19 years of age ("Generations Y and Z") are the next largest population at an estimated 27 percent of the total—eight percent of that cohort is under the age of nine (Figure 4).

Many of the households within Takoma Junction house multiple generations. An estimated 65 percent of households in Takoma Junction are family households. Nearly 40 percent of households are homes to families with children under 18 years of age, while 30 percent include seniors aged 60 and over (Figure 5).

Understanding the needs of the two largest population groups—Generations X and Y—and recognizing the age range among residents is important for framing this study's approach to improving connectivity, accessibility, and the overall experience within Takoma Junction.

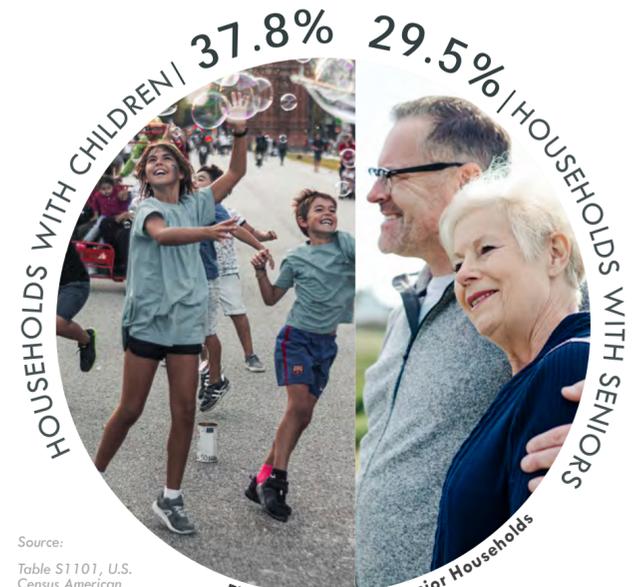


Figure 5. Children & Senior Households  
Source: Table S1101, U.S. Census American Community Survey 2017 5-year estimates for Census Tract 7017.01



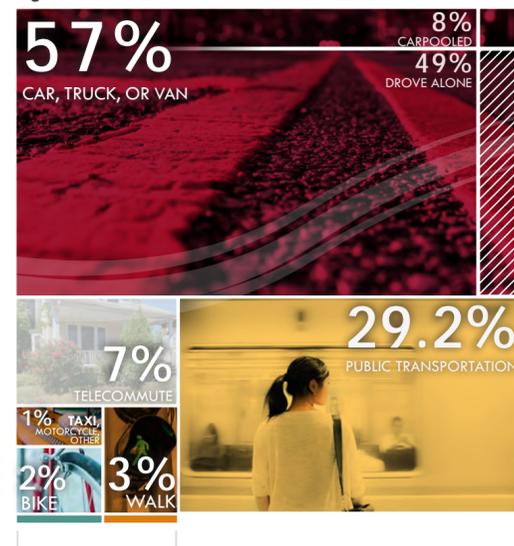


"I love that there are lots of different people moving around and doing different things—walking to school, catching the bus, shopping, etc."

- STUDY PARTICIPANT



Figure 6. Means of Commute to Work in Takoma Park



### Moving, Living, and Working in Takoma Park

Takoma Junction is a "Suburban Activity Center," as described in MDOT SHA's Context Guide: Access and Mobility for All Users. A Suburban Activity Center is characterized by a diversity of land uses, low-rise buildings typically supported by off-street parking.

As major arterials, the roads that comprise Takoma Junction carry lots of vehicular traffic, but the Junction is also used by people who walk and people who bike. Many children walk to the local schools, and residents walk to the stores and services. The design of the junction must prioritize the safety and comfort of these most vulnerable users.

Residents of the City of Takoma Park use various modes of travel when commuting to work, with an estimated 57 percent of Takoma Park residents traveling by car, truck, or van, and almost 30 percent traveling by public transportation (Figure 6). More residents leave Takoma Park each day than workers enter from outside. According to the 2017 Longitudinal Employer Household Dynamics (LEHD) survey, the Healthcare and Social Assistance sector is the area's largest employer, accounting for 48 percent of local jobs. In total, the LEHD survey estimates there are 3,976 jobs in Takoma Park, 53 percent of which are held by workers aged 30 to 54. Most of the Takoma Park jobs, however, are filled by outside workers. According to the LEHD, just 217 Takoma Park residents stayed in the area for employment, while 6,391 residents left for their jobs. At the same time, 3,759 workers came into Takoma Park for their work, accounting for 95 percent of local jobs. The residents who leave for work are typically headed either to Washington, D.C., or to Silver Spring.

Commuting patterns offer insight into rush hour traffic and offer insight when observing the challenges that arise when patterns of movement *through* the area encounter movement patterns *within* the area. For these reasons, this study considered commuting patterns as an important part of the overall narrative when it comes to moving through and around Takoma Junction.



Figure 7. MDOT SHA Access and Mobility Meter

The meter diagram above was first introduced in MDOT SHA's Context Guide: Access and Mobility for All Users, which places an emphasis on balancing access and mobility needs. The meter suggests how a balance between these two needs may vary between two different areas, called "context zones." The meter is helpful in understanding the polarity and convergence of access and mobility when fitting a roadway to its particular context.

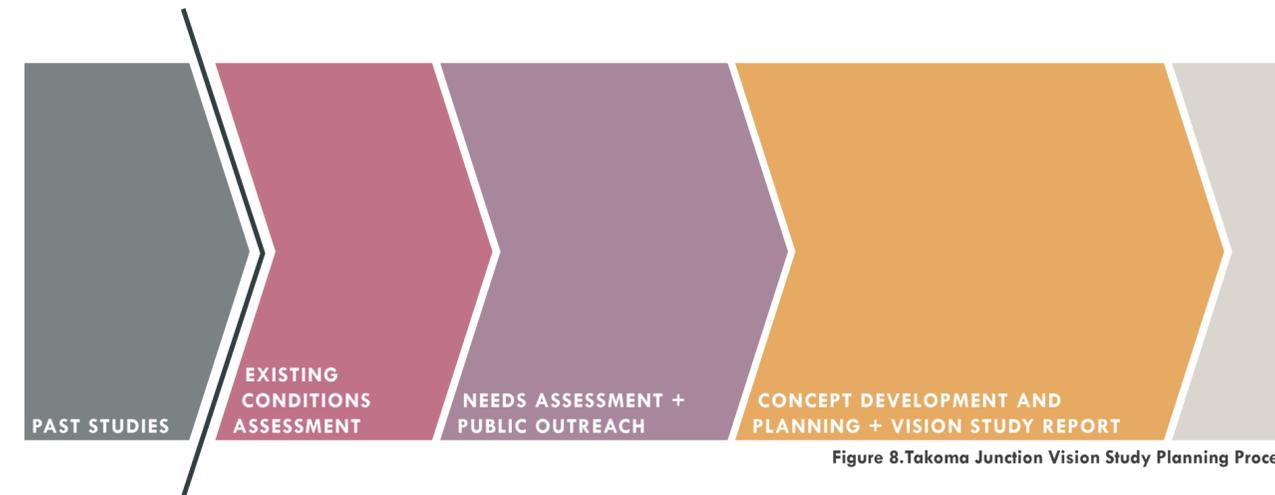


Figure 8. Takoma Junction Vision Study Planning Process

## Takoma Junction Vision Plan Purpose & Process

The *Takoma Junction Vision Study* set out to identify a long-term vision for the future of transportation at Takoma Junction. Co-crafted by stakeholders, a long-term vision informs the development of future actions and concepts for improving vehicular, pedestrian, and bicycle mobility of Takoma Junction. A vision serves, furthermore, as a measure against which those concepts and strategies for improvement could be evaluated, prioritized, and measured.

### WHY A VISION PLAN?

A vision study is a planning effort that views improvements in the community through a long-range lens. Recognizing public concern about safety, increasing traffic congestion, and potential changes due to an evolving community landscape, MDOT SHA saw value in a community-crafted vision statement for Takoma Junction to guide and measure plans for the area's future.

The process of developing a vision statement builds consensus among community members because it focuses on values. The resulting vision is a shared image of what the community wants to be; it inspires community members to work together to achieve their wishes.

Providing guidance and direction to decision-makers, the *Takoma Junction Vision Plan* offers a lens through which planning decisions in the Junction could be considered. As a preliminary study, this effort is not a precise blueprint for action; rather, the *Takoma Junction Vision Plan* informs future decision-making by identifying potential opportunities for improvements, considering the costs and benefits of alternate strategies.





# ASSESSMENT

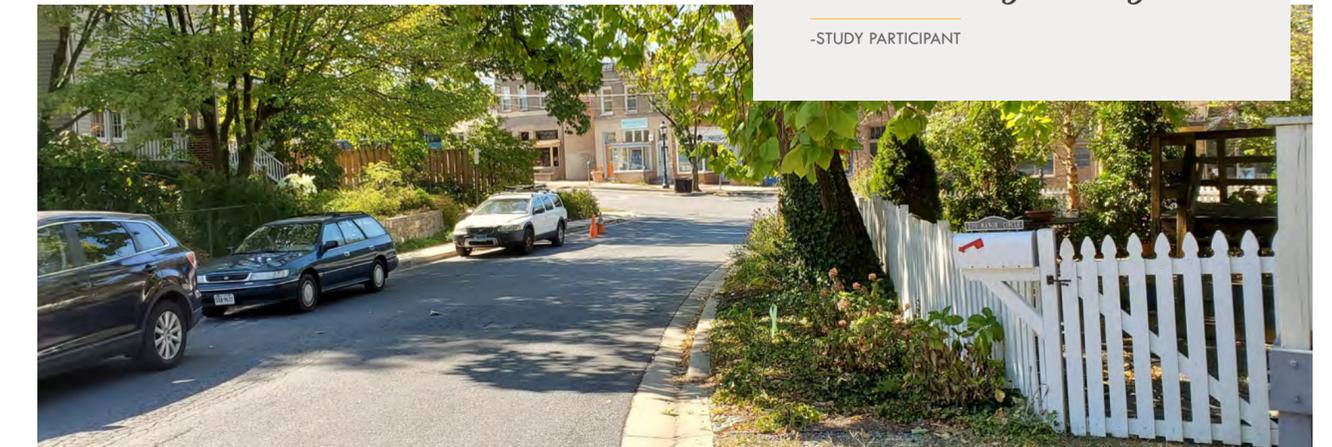
## COMMUNITY SNAPSHOT: WHERE WE ARE TODAY

Both MD 195 and MD 410 are two-lane roads, excluding the four-lane roadway portion where they overlap. They carry a large amount of traffic, serving both local and through trips. The fine-grained nature of development and the mix of land uses (residential, schools, and small businesses) in and around the Junction make it a place where one feels encouraged to walk or bicycle. However, the vehicular traffic and the complexity of the intersection result in substantial congestion, which impacts safety and quality of life in the area.

The assessment process for this study included layers of data inputs, which identified needs and opportunities. This began by analyzing existing conditions, and incorporated traffic and safety data, field observations of the travel landscape, a portrait of Takoma Junction's community character, and an inventory of assets and challenges. Stakeholders from the community were then invited to participate in engagement opportunities—including a Stakeholder Advisory Group, public survey, and public workshops—to offer insights, perceptions, and observations from their experiences.

### MOVEMENT ANALYSIS

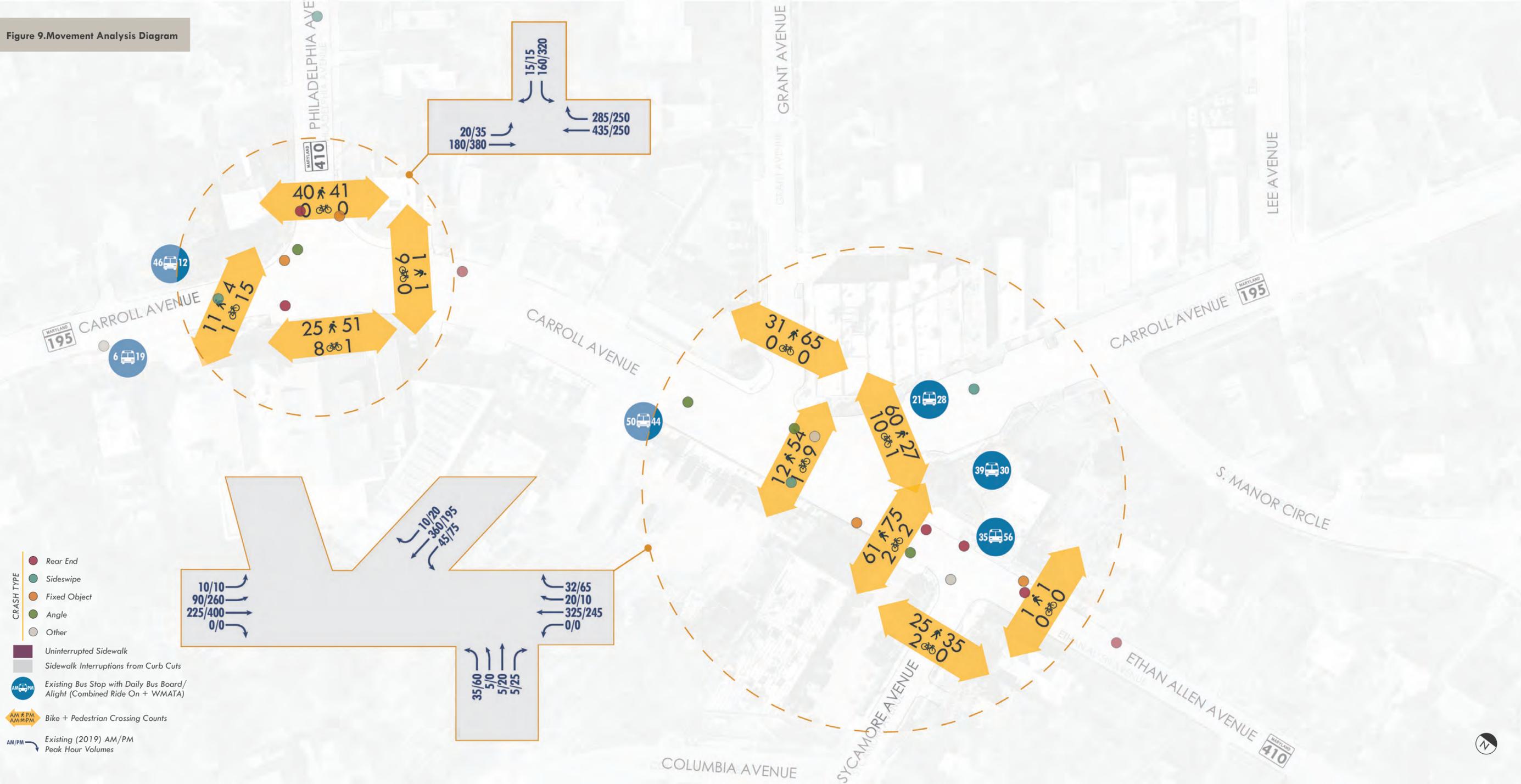
In February 2019, MDOT SHA conducted traffic observations in the area that included the intersections of Carroll Avenue at Philadelphia Avenue, Ethan Allen Avenue at Carroll Avenue and Grant Avenue, and Ethan Allen Avenue at Sycamore Avenue. During the morning and early evening peak periods, field observations noted traffic and circulation patterns. These analyses described the mode by which people move throughout the Junction and how long travelers typically wait at signals. Additionally, the team collected data on the number and types of crashes. Detailed traffic analysis is included within the Appendix of this report.



*"I LOVE THE NEIGHBORHOOD. It is a neighborhood first. We know the people at the bakery, the Co-op. The crossing guards know every child, especially the ones who are walking or biking alone."*

-STUDY PARTICIPANT

Figure 9. Movement Analysis Diagram



FIELD OBSERVATIONS

As the convergence of two State routes, the Junction generates activity. That same convergence, however, creates intricate challenges when it comes to moving about and through the area.

Layered on top of that configuration are the challenges of high levels of vehicular traffic accompanied by the demand for and use of pedestrian and bicyclist facilities. Street parking, deliveries, and multiple driveways are additional complicating factors.

At different periods throughout the day, the Junction can be a challenge to any one of these roadway users—pedestrians, bicyclists, and drivers—contributing to a perception that the area is unsafe. During field observations, the team observed heavy pedestrian and bicyclist volumes on Carroll, Philadelphia, and Ethan Allen Avenues, and on neighborhood side streets north and south of Ethan Allen Avenue (Figure 9).

Vehicle travel delays, particularly during peak periods, are associated with signal timing and, at least in part, with buses making stops to load and unload passengers. Drivers can get impatient due to the long delays during peak periods, occasionally seeking unsanctioned maneuvers to get around buses or make turns, despite restrictions.

Challenges notwithstanding, community members consistently express deep affection for the area—for its physical characteristics, the businesses, and the people who live in Takoma Park. Along with improving the safety and attractiveness of the area, generally, there is a strong emphasis on maintaining the character of the Junction so that it continues to support the local businesses and remains a walkable neighborhood.

*“It is dangerous to ride your bike through the intersection. You have to go on the sidewalk and the sidewalk is narrow.”*

- STUDY PARTICIPANT



Figure 10. Adjacent Land Use



### COMMUNITY CHARACTER

Takoma Junction is located within Takoma Park's boundaries, near the eastern portion of the Takoma Park Historic District (Maryland Inventory of Historic Properties (MIHP) No. M: 37-3), the largest National Register of Historic Places-listed historic district within Montgomery County. Takoma Junction features 22 commercial buildings and includes a former gas station canopy with Art Deco elements in what is today known as B.Y. Morrison Park. Home to many businesses in the area, the local buildings are modest one- to two-story brick structures fronting the road. The commercial buildings and structures within Takoma Junction contribute significance to the Takoma Park Historic District but are not fully a part of the larger historic district.

In the fall of 2019, a local preservation firm completed and filed a Maryland Inventory of Historic Properties form with the Maryland Historical Trust (MHT) as part of an effort to include Takoma Junction in the MIHP. This form (MIHP M: 37-34) describes the Junction's contributing resources and significance; however, MHT has not yet made any formal Determination of Eligibility.

#### Identity and Personality

Found throughout the area, community art is a common thread of Takoma Junction's public spaces. Jim Colwell's "Guardians of the Neighborhood" mural (above) in B.Y. Morrison Park celebrates the diversity that the artist saw in the Takoma Junction community. Supporting the pavilion that protects the mural are pillars fronted with terracotta tiles (at right) by artist John Hume and depict "Tales of Mystery and Imagination"—whimsical and quirky, yet entirely genuine stories of Takoma Park's past residents (including musician Root Boy Slim and animal residents, like Roscoe the Rooster and Motorcat). Across the street, the western wall of the Co-op features a mural to identify the market.

The colorful street furniture and café tables, decoration around the architectural trim of storefronts, and identity branding and advertising for events held in Takoma Park carry this same vibrancy throughout the Junction.



*"I love the human scale of the neighborhood. Buildings are smaller and fit together."*

- STUDY PARTICIPANT

## ASSETS & CHALLENGES

The Junction boasts many assets to be preserved and enhanced, and other challenges which should be clearly identified and mitigated through long-term planning efforts.

Ethan Allen Avenue, Carroll Avenue, and Philadelphia Avenue are arterials providing east-west and north-south connectivity through an area that is largely residential. Due, in large part, to the lack of a regular street grid in this area, there are few alternate routes that serve the same travel needs. As a result, MD 410 will continue to carry a significant amount of traffic. Residents greatly



*“I love the small, locally-owned shops with easy access by bicycle and on foot from adjacent neighborhoods.”*

- STUDY PARTICIPANT

appreciate the buildings along Carroll Avenue between Grant and Lee Avenues, which house a concentration of small businesses within the Junction. Here, visitors can stop into the bakery for some bread, head next door for a bite to eat, or take some music lessons a few doors down before popping into one of many other businesses.

*“I LOVE THE CO-OP! It is the heart of our community—a place where I connect with people from all socio-economic groups in my community. It is the place I value most in Takoma Park.”*

- STUDY PARTICIPANT



The Takoma Park Silver Spring Co-op is a key destination in the area, drawing both residents and Takoma Junction visitors. As a grocery store where customers will typically leave with heavy bags, customers often opt to drive to the Co-op, rather than walk or bike. The adjacent parking lots are critical to the success of the store.



Many businesses see customers arriving by car. Even the shops on Carroll, which attract significant foot traffic, still rely on available parking to support visitors arriving to the Junction via car. Parking, however, is mostly limited to street spots or the City-owned parking lot along the south side of Carroll Avenue. B.Y. Morrison Park, located where Carroll and Ethan Allen Avenues meet, experiences a similar challenge and is separated from local businesses and parking by busy roadways on either side. This is no doubt part of the reason that the park is used infrequently, which could change if it were safer and easier to access.

Moving about the Junction on foot is further complicated by constricted sidewalk space. Sidewalks throughout the Junction vary in width, some providing ample width to stop and linger while other areas have pinch points. At times, the pinch points are so constricted by utility poles, sign posts, and other vertical elements obstructing sidewalk space that passing is challenging for pedestrians—particularly those with mobility challenges.

Takoma Junction as a great place to spend time and enjoy some of its many assets; yet, the complex intersection, confusion over traffic movements, and perception of unsafe conditions for roadway users currently detracts from the overall experience.

# NEEDS ASSESSMENT: WHERE WE GO FROM HERE

## Public Engagement

The *Takoma Junction Vision Study* is grounded in a robust program of public engagement (Figure 11). This included a 13-member Stakeholder Advisory Group, a community survey, and public engagement touchpoints with the public. Other information was collected and evaluated, including the previous MDOT SHA traffic studies, interviews with school crossing guards, and meetings with the Old Takoma Business Association and residents of Victory Tower apartments. Outreach flyers were translated into Spanish, Amharic, French, Simplified Chinese and Vietnamese to ensure the whole community could participate.

Community members consistently identified the following needs and desires for the Junction:

- Safer conditions for pedestrians—sidewalks and crosswalks;
- Accommodations for bicyclists;
- Parking for customers and loading zones for deliveries to local businesses;
- Less congestion for vehicles – smoother flow of traffic;
- Simplified intersections;
- Bus stops that don't impede traffic or encourage unsafe car driver behavior;
- Improved access into and out of city parking lot;
- More landscaping; and,
- Improved public gathering spaces.

As many of these may require tradeoffs or prioritization of one need over another, the challenge will be in crafting a balance.

## STAKEHOLDER ADVISORY GROUP

To advise MDOT SHA on outreach opportunities and transportation needs within Takoma Junction, the MDOT SHA created a Stakeholder Advisory Group (SAG). A mailer sent to every address in the City of Takoma Park—over 9900 households—distributed a public call for applications. After receiving 108 applicants, 13 individuals became members of the SAG and participated in a series of meetings throughout plan development.

The members of the SAG represent diverse interests, with a balanced distribution of individuals who bicycle, scooter, walk, drive, and/or use transit in Takoma Junction. MDOT SHA held four SAG meetings between April and July 2019, each one open to the public. Throughout their involvement, their involvement tasked SAG members with:

- Sharing information and resources with their neighbors, community groups, or employees;
- Sharing personal perspectives on mobility at Takoma Junction with the study team; and
- Advising MDOT SHA on outreach methods and opportunities.

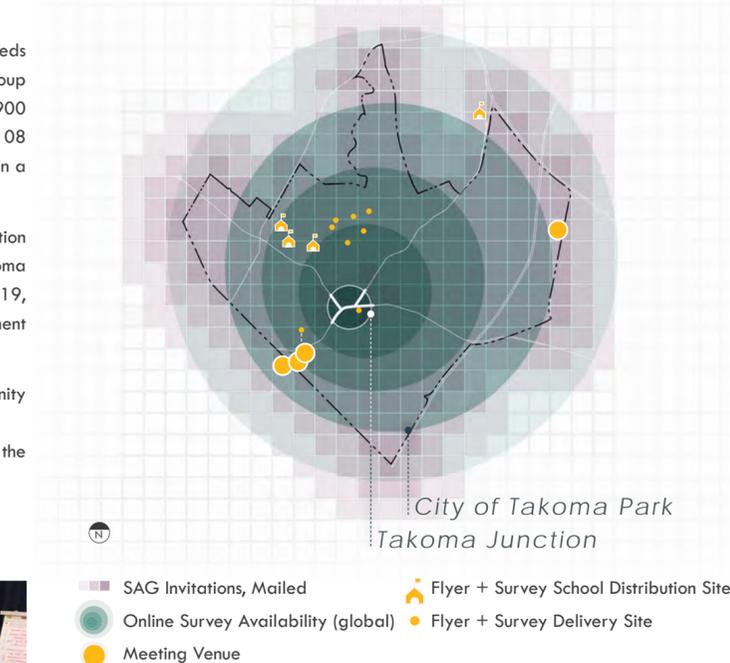


Figure 11. Public Outreach Diagram

In addition to mobilizing SAG members to post, share, and deliver flyers and survey information to their constituents, the team targeted locations throughout Takoma Park and the surrounding communities to broaden outreach efforts.

**Table 1. Summary of Stakeholder-Defined Assets and Challenges**

ASSETS	OPPORTUNITIES	CHALLENGES	THREATS
<ul style="list-style-type: none"> <li>Desirable shopping destinations</li> <li>Historic district</li> <li>Confluence of historic paths</li> <li>Geographic center/community meeting place</li> <li>Links all corners of the City</li> <li>Diversity of residents / users</li> <li>Fire station signal pre-emption</li> <li>All-red / scramble for pedestrian crossing</li> <li>Encourages socializing and interaction</li> <li>Many multi-modal opportunities</li> <li>Presence of available parking</li> <li>Existing Bikeshare</li> <li>Bus stops and bus service—many routes and destinations</li> <li>Walkability—particularly a positive when considering environmental benefit</li> <li>Dialed-in, engaged, and progressive community</li> <li>Vibrant and growing commercial area</li> <li>Businesses close to Metro, other transit options, and residences</li> </ul>	<ul style="list-style-type: none"> <li>Bike lanes (e.g., 2-way lane on Park Avenue)</li> <li>Shelters at bus stops</li> <li>Sidewalks—wider and safer</li> <li>Sidewalks on Philadelphia and Carroll Avenues (removing obstructions)</li> <li>Consolidation of obsolete curb cuts</li> <li>Added sidewalk, north side of Ethan Allen Avenue</li> <li>More efficient vehicle movements on Carroll Avenue and MD 410</li> <li>Incentivization of transit use</li> <li>Senior-friendly crosswalks (longer signal for pedestrians)</li> <li>Enforcement of intersection blocking at Woodland Avenue/Ethan Allen and Holt/Philadelphia</li> <li>Additional parking; but less emphasis on, or visual prominence of parking</li> <li>De-prioritize cars, which can wait for pedestrians to move safely</li> <li>Consideration of one-way conversion of side streets</li> <li>Photo enforcement</li> <li>Added outdoor seating for business</li> <li>Public spaces for gatherings</li> <li>Decrease vehicular traffic</li> <li>Vision Zero community</li> <li>Encouragement/support of local businesses</li> <li>Reduced complexity of intersection and sidewalks</li> <li>Improved accessibility for children, elderly, and disabled</li> <li>Reflecting Takoma Park's values (e.g., environmental stewardship, respecting the equal rights of all)</li> </ul>	<ul style="list-style-type: none"> <li>Poorly-defined pedestrian / bike areas</li> <li>Attractiveness of route to through traffic</li> <li>Non-compliance with ADA codes, (e.g., inaccessibility / not senior-friendly (i.e., crosswalk timing) )</li> <li>Unexpected vehicle movements for pedestrians</li> <li>No pedestrian signal at Sycamore Avenue</li> <li>Danger presented to both vehicles &amp; pedestrians</li> <li>Conflicts at co-op entrance</li> <li>Merging of residential / business/ traffic—interacting in tight environment, with varying (sometimes competing) interests</li> <li>Poor enforcement of lane usage; lack of signage</li> <li>Absence of traffic cameras to deter traffic violations</li> <li>Poor signal timing</li> <li>Left turns from City lot are hazardous</li> <li>Auto service centers contrast with other nearby uses</li> <li>Frustrations (e.g., over buses stopping) lead to bad behaviors by drivers</li> <li>Traffic back-up on Ethan Allen Avenue—Vehicles jumping queue near where pedestrians walk (front of co-op)</li> <li>Nuisance created by noises from honking cars due to congestion; impacts residents at Manor Circle / Sherman Avenue / Carroll Avenue</li> </ul>	<ul style="list-style-type: none"> <li>Continued congestion</li> <li>Ongoing traffic crashes / compromised safety</li> <li>Diminished air quality due to emissions</li> <li>Improper location of services required for proposed development / parking of trucks / delivery / waste / recycling</li> <li>Number of cars coming out of City parking lot turning left</li> <li>Ongoing hazards for children and travel to schools</li> <li>Congestion impacts businesses by discouraging customers</li> <li>Fire station / emergency services response time compromised by congestion</li> <li>Induced demand alterations in the surrounding network increases traffic locally</li> <li>Inability to attract new businesses</li> <li>Loss of visitor parking resources</li> <li>Alteration of the historic district character from changing roadway configuration</li> <li>Inability, or failure, of stakeholder groups and agencies to cooperate</li> <li>Neighborhoods continue to be divided by challenging roadway network</li> <li>Narrow focus on existing infrastructure creates an inability to think creatively or long-term</li> </ul>

**SURVEY**

From May 9<sup>th</sup> to June 10<sup>th</sup> 2019, MDOT SHA ran the *Takoma Junction Vision Study Community Values Survey*. Though hosted online, paper copies of the survey were also available. Over 700 participants completed the short survey. Table 2 summarizes some respondent input and common themes from three open-ended questions.

**What would you add to Takoma Junction to make it a better place to travel around and through?** Participants wanted to improve safety for people on foot and bike. In addition to modifications that would make the intersections less confusing, participants identified safety improvements such as easier crossings, improved signal timing, and traffic calming measures. Additional enhancements included landscaping and improvements at bus stops.

**Table 2. Sample of Survey Responses**

MAJOR THEMES BETTER TRAVEL AROUND + THROUGH
Improve safety for bikers
Improve safety and comfort for pedestrians - sidewalks and crosswalks
Make it easier and safer to cross the streets
Improve signal timing
Realign the intersection of 410, Carroll and Sycamore
Build a traffic circle
Implement traffic calming measures
Improve access into and out of Co-op and city lot
Add trees and landscaping
Provide more (free) parking
Relocate or remove park/gazebo
Change access into/out of Sycamore
Add/restore bus pull-offs

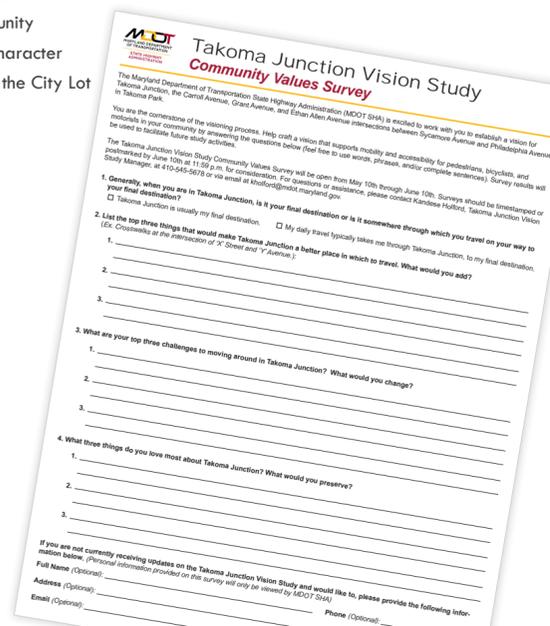
**What is a challenge to moving around or through Takoma Junction?** Many of the challenges were a starting point for understanding the experience of traveling to and around Takoma Junction. Currently, challenges include perceptions of unsafe conditions for cyclists, difficulty crossing the roadway, excessive traffic, limited parking, and sidewalk gaps and other limitations of the sidewalk network.

**What do you love about Takoma Junction?** There was strong agreement on what people love about Takoma Junction, which included the small and local businesses, the general walkability of the community, and a small town scale that gives Takoma Junction character.

MAJOR THEMES EXISTING CHALLENGES
Unsafe for bikers
Difficulty crossing streets safely as pedestrians
Sidewalks perceived unsafe or uncomfortable
Poor signal timing—green cycles are too short, red lights are too long, individual signals are seemingly not coordinated
Confusing intersection—too many converging streets and signals
Excessive vehicular traffic
Access and egress from Co-op and City parking lots need improving
Bus stops hold up traffic
Additional parking needed

At its conclusion, the survey asked whether participants were typically passing through or if Takoma Junction was their destination. Responses showed a somewhat even split of destination versus traveling through; participants did have the option to select both.

MAJOR THEMES STRENGTHS + AMENITIES
Walkability
Local, independent businesses
Co-op serves the community
Small town feel, local character
Outdoor events held at the City Lot





## PUBLIC WORKSHOPS

In early June 2019, MDOT SHA hosted two public workshops to help shape the transportation vision for Takoma Junction. Held at the Takoma Park Seventh Day Adventist Church Center, these evening workshops invited attendees to participate in group discussions. Unique activities were organized for each evening, encouraging participants to attend one or both nights. Each was attended by over 100 people.

### Crafting A Vision Statement

The first session, held on Tuesday, June 4, was titled *Crafting A Vision Statement*. Working in groups of eight to ten people, participants identified the unique characteristics of Takoma Junction, typical users of the Junction, how people spend time there, and what makes it a special place. From the discussions, each group drafted a vision statement for the Junction.

### Bringing the Vision to Life

The second night, on Monday, June 10, was titled *Bringing the Vision to Life*. Attendees voted on the vision statements crafted at the first session. The top three vision statements became the basis for a final vision statement.

Additionally, facilitators asked participants to mark any desired changes to the Junction on maps provided at tables. These changes could range from adding street trees or benches, to realigning roadways. Equipped with stickers to represent desired improvements, and markers and post-it notes for open-ended comments, participants joined together in groups to envision potential improvements. In some cases, tables came to one consensus about large-scale and cohesive improvements. In others, individual participants held onto unique ideas, sometimes conflicting with other ideas presented in the group. In either case, the team captured every idea, reflected in the maps to the right.

While every idea was unique to the individual participants expressing their thoughts, there were indeed similarities among suggestions. Using seven categories of improvement, individual input maps consolidate the ideas from participants at all thirteen public meeting tables. When viewed together, these seven maps reveal clustering locations for improvements.

The first set of maps (Figures 12-17) illustrates all proposed ideas, sorted into categories of improvements, including bicycle improvements, pedestrian improvements, transit suggestions, streetscaping amenities, placemaking, and traffic management. An initial layered map revealed both the overlaps and the nuances of different suggestions. For the study team to pull a clear concept from this input, their analysis merged and consolidated overlaps, creating the final input takeaways map (figure 18).

## ADDITIONAL OUTREACH

MDOT SHA also met with various stakeholders in the Study Area: Old Takoma Business Association, Victory Tower Apartments, the school crossing guards, and the City of Takoma Park.



Figure 12. Bicycle Improvement Suggestions



Figure 15. Streetscaping + Planting Suggestions

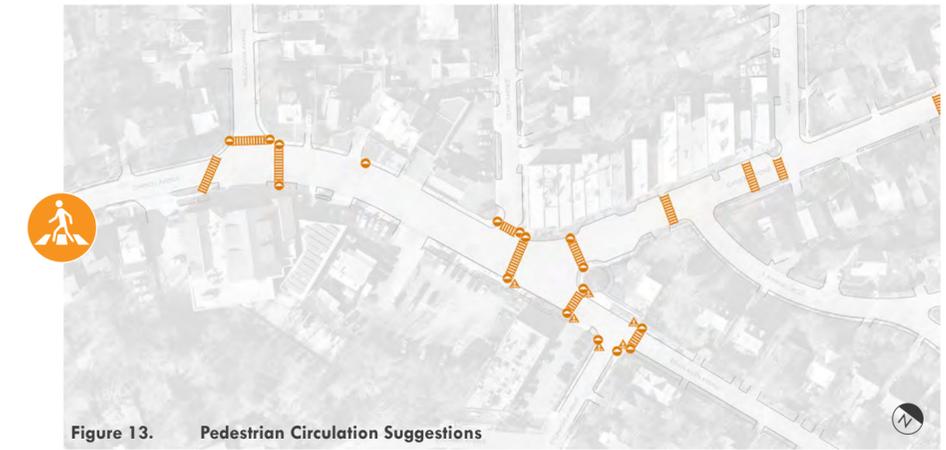


Figure 13. Pedestrian Circulation Suggestions

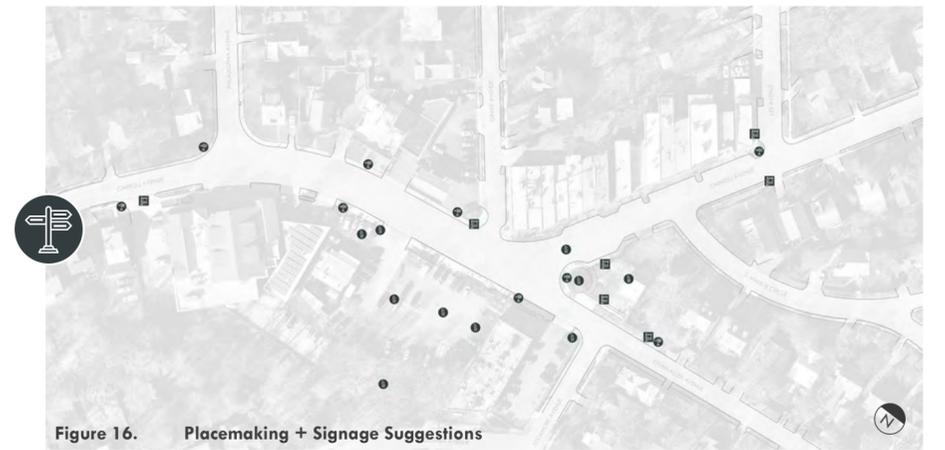


Figure 16. Placemaking + Signage Suggestions



Figure 14. Transit Suggestions



Figure 17. Traffic-Related Suggestions

Figure 18. Public Outreach Recommendations, Merged



# LAYERING INPUT: WHERE WE SHOULD BE

## Key Takeaways

Reviewing, layering, and analyzing outcomes of previous efforts, existing conditions, and input from the community illuminated that Takoma Junction is an attractive place to visit, work, and live. The area boasts a rich history, to which the vibrant character of the community can often be attributed. For as many stories and people as one will find, there are as many layers of complexity added to the landscape by movement patterns through and around the Junction. Beyond perceptions, these layers in the landscape are very real and measured challenges to movement. The current infrastructure, for example, struggles to balance the needs of all roadway users, while complex geometries further complicate movement through the intersections.

Public involvement was the cornerstone of this visioning process. Input from residents and other stakeholders informed the study and expressed the need to improve mobility and accessibility for pedestrians, bicyclists, and motorists in

the Junction. The Community recognizes there is much to treasure about Takoma Junction, but (at present) barriers discourage more frequent or longer visits. Some of the greatest concerns center around unclear and confusing routes of travel, gaps, and other obstacles in existing pedestrian and bicycle networks, and conflicts between the many different roadway users.

As challenges are noted, strengths are also recognized. In the strengths, there are opportunities. For the amenities it offers, Takoma Junction is a loved destination. Making this place better starts with improved safety. By employing a variety of transportation and placemaking strategies—each one appropriate for the land use context and people who move throughout Takoma Junction—circulation can become more predictable, safe, organized, and efficient.



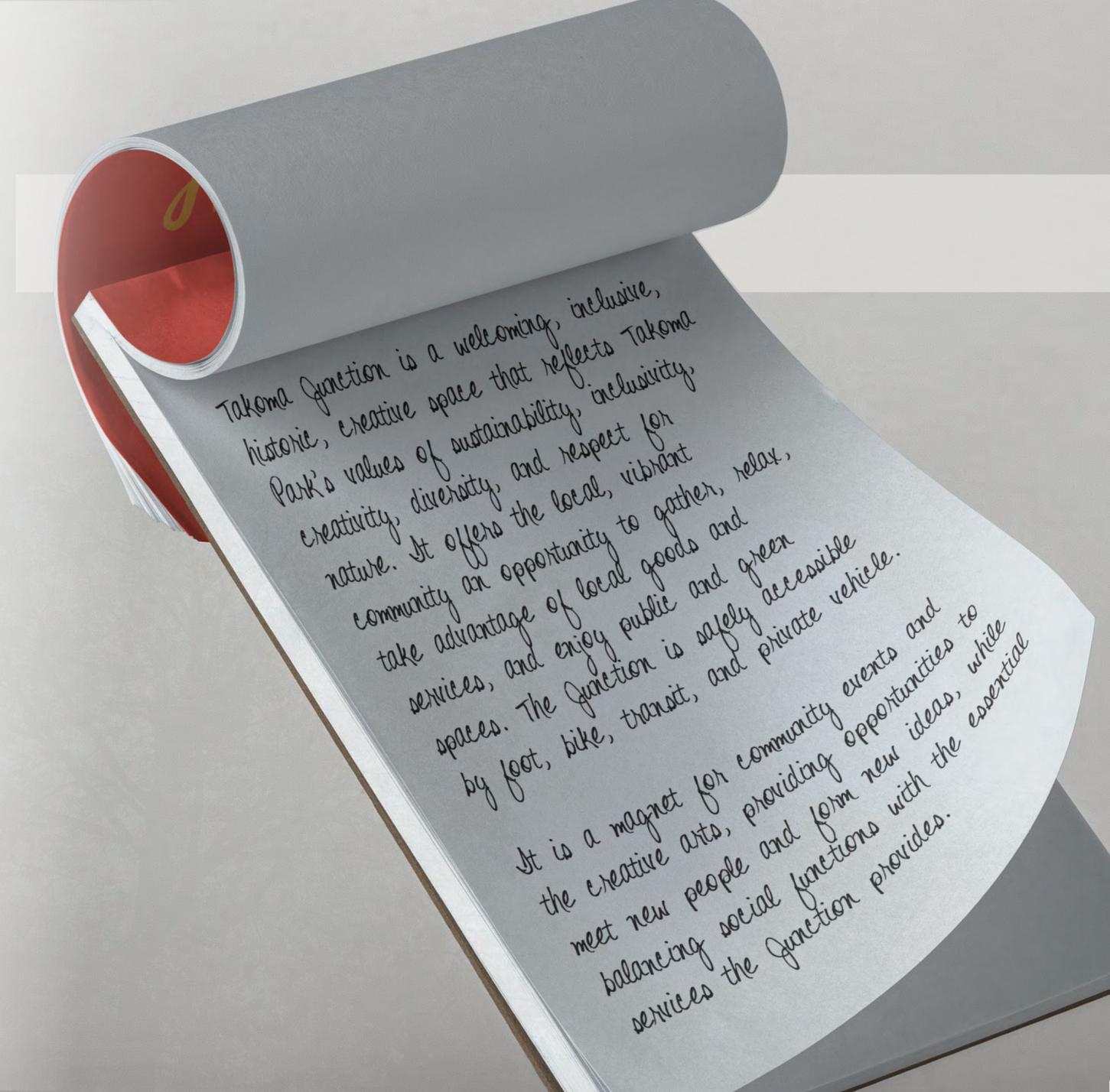
# VISION

## THE VISION: WHERE WE WANT TO BE

A vision study is human-centric design at its core. Carefully crafted recommendations stem from the thoughts, desires, challenges, and ideas of the people who live, work, and play in Takoma Junction. With limited space to modify the roadway and a variety of demands on the space, it is critical to consult the people who experience Takoma daily. Whether commuting through the Junction, walking to a local destination, dining with friends, picking up dinner items at the Co-op, or hopping on a Capital Bikeshare Bike, safety is paramount to the experience. To arrive at an understanding of what kind of environment Takoma Junction should be—now and in the future—the community collaborated to write a vision statement. This compilation of thoughtful words conveys the essence of a place that is not defined by a roadway; rather, it is defined by the experience of moving through space and the people encountered there.

As the cornerstone for future improvements and recommendations, the process by which the statement was edited, revised, and vetted was purposeful and thorough. Defining characteristics, people, sense of place, and community intention were solicited from the public as part of the planning process. As key themes and vocabulary surfaced, a final statement was written to reflect the voices of Takoma Junction residents and visitors.

This voice and the sense of place is captured in the following recommendations and will fuel collaborative efforts by MDOT SHA, the local government, business owners, stakeholders, elected officials, and, most importantly, the Community. The purpose of this study process is to create a vision for a welcoming, safe, and sustainable community can be used for years to come.



*Takoma Junction is a welcoming, inclusive, historic, creative space that reflects Takoma Park's values of sustainability, inclusivity, creativity, diversity, and respect for nature. It offers the local, vibrant community an opportunity to gather, take advantage of local goods and services, and enjoy public and green spaces. The Junction is safely accessible by foot, bike, transit, and private vehicle.*

*It is a magnet for community events and the creative arts, providing opportunities to meet new people and form new ideas, while balancing social functions with the essential services the Junction provides.*

## From Vision to Reality

With a crafted vision, the community is prepared to re-imagine how the built environment can manifest ideas of safety, inclusion, and creativity. While MDOT SHA and the City and County can work to make infrastructure improvements, members of the community will continue to play a key role in celebrating the neighborhood. The recommendations in this study are a combination of projects driven by MDOT SHA, the City of Takoma Park, Montgomery County, and community voices and inspired by the vision statement, public engagement, and technical analysis of the area. These recommendations are founded in creating great streets which reflect the context of the area. From land use and trip types to density of users and mobility, creating a Great Street will play a supporting role in realizing the vision.

## Components of a Context-Driven Corridor

A street serves as both a place and a link. Most roadways in the United States have been designed with the primary function of serving automobile travel. Roadways designed in this fashion typically function as efficient conduits for motor vehicle travel but are often poor links for other modes of transportation. More than a conveyance, roadways can function as social spaces by establishing a relationship to the places where people live, work, and play. A great street enables safe, convenient, and comfortable travel and access for users of all ages and abilities—regardless of their mode of transportation. It is a human-centric design philosophy that seeks to facilitate safe travel and a sense of place for those walking, bicycling, driving an automobile, or riding public transportation. As recommendations are crafted, it is critical to consider both the movement zone and the placemaking zone in Takoma Junction, pairing appropriate treatments with the function of the space. The following pages illustrate potential treatments for designing great streets.

## ACCESS ZONE



## MOBILITY ZONE

PEDESTRIAN AMENITY SPACES

PLANTERS WITH SEASONAL COLOR

CURB EXTENSION AT MID-BLOCK CROSSWALK

CONTINENTAL CROSSWALK

SIGNALIZED CROSSING

ADA-COMPLIANT CURB RAMP

SHARED LANE MARKINGS

Figure 19. Typical Elements of a Great Street



## DESIGNING FOR PEDESTRIANS

A transportation network should accommodate pedestrians of all needs and abilities. Age is one major factor that affects pedestrians' physical ability, walking speed, and environmental perception. Children have lower eye height and walk at slower speeds than adults. They also perceive the environment differently at various stages of their cognitive development. Older adults walk more slowly and may require assistive devices for walking stability, sight, and hearing.

The Manual of Uniform Traffic Control Devices (MUTCD) recommends a normal walking speed of three and a half feet per second when calculating the pedestrian clearance interval at traffic signals. Typical walking speeds can drop to three feet per second in areas with older populations and persons with mobility challenges. While the type and degree of mobility challenges varies greatly across the population, the transportation system should accommodate these users to the greatest reasonable extent.



## Sidewalks

As the most fundamental element of the walking network, sidewalks provide a zone for pedestrian travel that is separated from vehicle traffic, typically by a curb and gutter as the most basic element of division. Attributes of well-designed sidewalks include the following:

**ACCESSIBILITY:** A network of sidewalks should be accessible to all users. Roadway crossing distances and distances between crossings should be minimized to integrate and encourage pedestrian travel. Features that are compliant with the Americans with Disabilities Act (ADA), such as curb ramps, are necessary to improve accessibility.

**SAFETY:** Design features of the sidewalk should allow pedestrians to have a sense of security and predictability. Sidewalk users should not feel at risk of harm due to the presence of adjacent traffic. Edge conditions play a large role in either contributing to or detracting from an overall sense of safety.

**CONTINUITY:** Walking routes should be obvious and should not require pedestrians to travel out of their way unnecessarily.

**LANDSCAPING:** Plantings and street trees contribute to the overall psychological and visual comfort of sidewalk users and should be designed in a manner that contributes to the safety of pedestrians.

**DRAINAGE:** Sidewalks and curb ramps should be designed so that standing water is eliminated or minimized.

**SOCIAL SPACE:** There should be places for standing, walking, and sitting. The sidewalk area should be a place where adults and children can safely participate in public life.

**QUALITY OF PLACE:** Sidewalks should contribute to the character of neighborhoods and business districts.

**WIDTH:** Two people should be able to walk side-by-side along a sidewalk—either as a pair walking together or as one person passing another. In areas of high pedestrian use, sidewalks should accommodate the larger volume of walkers.

## Sidewalk Zones

The sidewalk area can be segmented into four distinct zones. The concept of sidewalk zones should be strictly followed for a sidewalk to function properly and provide safe passage for all users. Other important considerations include sidewalk obstructions, driveways, roadway width, and access through construction zones.



The frontage zone describes the section of the sidewalk that functions as an extension of the building, whether through entryways and doors or sidewalk cafés and sandwich boards. The frontage zone consists of both the structure and the facade of the building fronting the street, as well as the space immediately adjacent to the building.

The pedestrian through zone is the primary, accessible pathway that runs parallel to the street. The through zone ensures that pedestrians have a safe and adequate place to walk and should be five to seven feet wide in residential settings and eight to twelve feet wide in downtown or commercial areas.

The street furniture zone is defined as the section of the sidewalk between the curb and the through zone in which street furniture and amenities, such as lighting, benches, newspaper kiosks, utility poles, tree pits, and bicycle parking are provided. The street furniture zone may also consist of green infrastructure elements, such as rain gardens or flow-through planters.

The enhancement/buffer zone is the space immediately next to the sidewalk that may consist of a variety of different elements. These include curb extensions, parklets, stormwater management features, parking, bike racks, bike share stations, and curbside bike lanes or cycle tracks.

Graphic and text from NACTO and Global Design Cities Initiative.

## Corners and Crossings

The point where a person comes to cross a roadway is a critical moment for ensuring pedestrian safety. Attributes of pedestrian-friendly corner and crossing design include:

**CLEAR SPACE:** Roadway corners should be clear of obstructions. They should have enough room for ADA-compliant curb ramps, for transit stops (where appropriate), and for street conversations where pedestrians might congregate.

**ACCESSIBILITY:** All corner features, such as curb ramps, landings, call buttons, signs, symbols, markings, and textures, should meet accessibility standards.

**VISIBILITY:** It is critical that pedestrians on the corner have a clear view of vehicle travel lanes and that motorists in the travel lanes can easily see waiting pedestrians.

**LEGIBILITY:** Symbols, markings, and signs used at corners should clearly indicate what actions the pedestrian should take.

**SEPARATION FROM TRAFFIC:** Corner design should effectively discourage turning vehicles from driving over the pedestrian area. Crossing distances should be minimized.

**LIGHTING:** Good lighting contributes significantly to overall visibility, legibility, and accessibility.

These attributes will vary with context but should be considered in all design processes.



## DESIGNING FOR BICYCLISTS

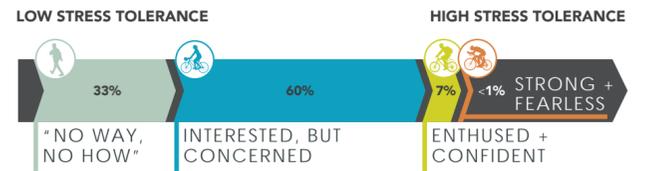
Bicyclists are much more affected by poor facility design, construction, and maintenance practices than motor vehicle drivers. By understanding the unique characteristics and needs of bicyclists, a design can provide high quality facilities and reduce threats to bicyclists.

There are a range of bicycle sizes and configurations that vary based on the type of vehicle (such as a conventional bicycle, a recumbent bicycle, or a tricycle). Bicyclists and their behaviors will also vary (for instance, based on their comfort levels as a cyclist). The design of a bike facility should consider the anticipated users first, but should consider the range of users who might use the facility.

It is important to consider bicyclists of all skill levels. A bicyclist's skill level greatly influences expected speeds and behavior, both in separated bikeways and on shared roadways. Bicycle infrastructure should accommodate as many user types as possible, with decisions for separate or parallel facilities based on their abilities to provide a comfortable experience for the greatest number of people.

The bicycle planning and engineering professions currently use several systems to classify the population, which can assist in understanding the characteristics and infrastructure preferences of different bicyclists. The conventional framework classifies the riding level of the "design cyclist" as Advanced, Basic, or Children. However, a more nuanced understanding of the bicycling population was developed by Roger Geller in Portland, Oregon, and is supported by data collected nationally since 2005. This classification provides the following alternative categories to address varying attitudes towards bicycling in the United States:

**STRONG AND FEARLESS** (approximately 1%): Characterized by bicyclists that will typically ride anywhere regardless of roadway conditions or weather. These bicyclists can ride faster than other user types, prefer direct routes and will typically choose roadway connections—even if shared with vehicles—over separate bicycle facilities such as shared use paths.



**Figure 20. Bicyclist Level of Comfort**

Source: Adapted from Roger Geller.

It is important to consider bicyclists of all skill levels when designing a street. Bicycle infrastructure should accommodate as many user types as possible, with decisions for separate or parallel facilities based on providing a comfortable experience for the greatest number of people.

**ENTHUSED AND CONFIDENT** (5-10%): This user group encompasses bicyclists who are comfortable riding on all types of bikeways but usually choose low traffic streets or shared use paths when available. These bicyclists may deviate from a more direct route in favor of a preferred facility type. This group includes all kinds of bicyclists such as commuters, recreationalists, racers and utilitarian bicyclists.

**INTERESTED BUT CONCERNED** (approximately 60%): This user type comprises the bulk of the cycling population and represents bicyclists who typically only ride a bicycle on low traffic streets or multi-use trails under favorable weather conditions. These bicyclists perceive significant barriers to their increased use of cycling, specifically traffic and other safety issues. These people may become "Enthused & Confident" with encouragement, education and experience and higher-level facilities, such as buffered and protected bike lanes.

**NO WAY, NO HOW** (approximately 30%): Persons in this category are not bicyclists and perceive severe safety issues with riding in traffic. Some people in this group may eventually become regular cyclists with time and education. A significant portion of these people will not ride a bicycle under any circumstances.

### Bicycle Parking

Bicyclists expect a safe, convenient place to secure their bicycle when they reach their destination. This may be short-term parking of two hours or less, or longer periods of parking for employees, students, residents, and commuters. Parking may include racks, or bicycle corrals—multiple racks in a marked space within the street.

### Bicycle Facilities

Consistent with bicycle facility classifications throughout the nation, including Montgomery County, the facility types presented in the figures below identify classes of facilities by degree of separation from motor vehicle traffic. In general, the wider the roadway, the higher the traffic volume, and the greater the traffic speed, the more separation is necessary to provide safe and comfortable riding conditions for bicyclists. The most common bicycle facility types are as follows:

**SHARED ROADWAYS** are bikeways where bicyclists and cars operate within the same travel lane, either side by side or in single file depending on roadway configuration. A signed shared roadway is the most basic type of bikeway. This facility provides continuity with other bicycle facilities (usually bike lanes) or designates preferred routes through high-demand corridors.



**SHARED ROADWAYS WITH PAVEMENT MARKINGS** designate the bikeway with pavement markings, signage, and other treatments, including directional signage, traffic diverters, chicanes, chokers, and/or other traffic calming devices that effectively reduce vehicle speeds or volumes. Such treatments often are associated with Neighborhood Greenways (also known as “Bicycle Boulevards”).



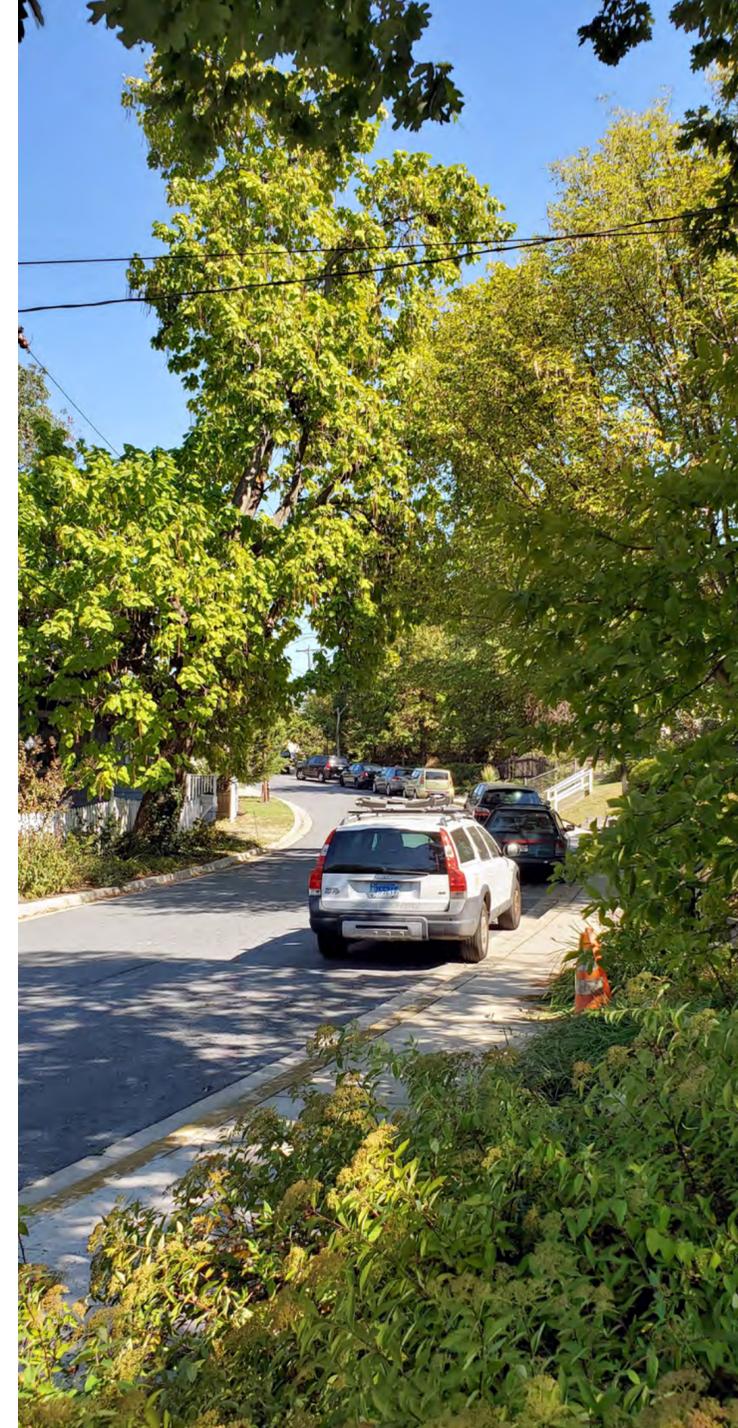
**SEPARATED BIKEWAYS**, such as bike lanes and buffered bike lanes, use signage and striping to delineate the right-of-way assigned to bicyclists and motorists. Bike lanes encourage predictable movements by both bicyclists and motorists.

**CYCLE TRACKS** are facilities exclusively for cyclists that combine the user experience of a separated path with the on-street infrastructure of conventional bike lanes. These are also referred to as “Protected Bicycle Lanes.”

**SHARED-USE PATHS** are facilities separated from roadways for use by bicyclists and pedestrians. As a type of Shared-Use Path, “Sidepaths” usually refer to a path immediately adjacent to the roadway.



Given the narrow widths along Carroll Avenue, providing comfort for the majority of bicyclists will be a challenge. When this occurs, tactics include: not giving bicyclists a false sense of security with sub-par facilities, making the presence of confident bicyclists clear to motorists by providing signage and striping that indicates, “bicyclists belong in this space.”



### VEHICLE + TRAFFIC CALMING DESIGN

Motor vehicle speeds affect the frequency and severity of bicycle and pedestrian crashes that can occur on a roadway. Slower vehicular speeds improve a motorist’s ability to see and react to non-motorized users, minimize conflicts at driveways and other turning locations, and, in many cases, improve vehicular throughput. Maintaining slower motor vehicle speeds and reducing traffic in areas where pedestrian and bicycle traffic are typically high can greatly improve comfort and safety for non-motorized users on a street.

### Traffic Calming

This section presents an overview of traffic calming treatments, divided into two different types. “Hard” traffic calming refers to engineered measures taken with the sole intent of slowing traffic and reducing conflict. “Soft” traffic calming includes educational and enforcement measures, as well as placemaking design measures that have the added effect of traffic calming.

The tactics below may be employed in combination to help calm traffic through Takoma Junction.

### Hard Traffic Calming Treatments

- Lane narrowing: Lane narrowing is when roadway lane width is reduced through the striping of a shoulder or the addition of bike lanes. This helps reduce traffic speed and adds dedicated space for bicyclists.
- Pinchpoints/neckdowns: These are curb extensions placed on both sides of the street, narrowing the travel lane and encouraging all road users to slow down. When placed at intersections, pinchpoints are known as chokers or neckdowns. They reduce curb radii and further lower motor vehicle speeds.

### Soft Traffic Calming Treatments

- Street trees, landscaping, and beautification: Street trees, landscaping and other aesthetic elements such as art or banners produce a feeling of enclosure and add visual stimuli along a roadway corridor. Green elements often have added environmental benefits.

- Street material: Textured street materials, such as pavers, create visual stimuli and a feeling of a special district or pedestrian-oriented area which can help to calm traffic.
- Appropriately-scaled street lighting: Appropriately scaled street lighting can provide a safer, more inviting and more visible environment for all roadway users. Pedestrian scaled street lighting along with other improvements, such as street trees, can alert motorists to a potential presence of pedestrians and bicycles, slowing down traffic in these areas.
- Enforcement and awareness measures: Enforcement and awareness measures—such as signage, speed traps, and educational programs—can help to reduce speeding in problem areas. However, the effectiveness of these programs depends on adequate frequency and duration.

### Intersection Improvements

The quality of treatments at an intersection can significantly affect the efficiency, comfort, and safety of all modes as they pass through the area. The treatments needed to improve an intersection will depend on factors such as vehicle traffic, the importance of the connection, and the age and abilities of users. Special attention should be paid to the design and material treatments to provide comfortable and safe bicycle and pedestrian crossings. Intersection improvements include:

**MINIMIZE CURB RADIUS:** The size of a curb’s radius can have a significant impact on pedestrian comfort and safety. A smaller curb radius provides more pedestrian area at the corner, allows more flexibility in the placement of curb ramps, results in a shorter crossing distance, and requires vehicles to slow more on the intersection approach. During the design phase, the chosen radius should be the smallest possible for the circumstances. One effective way of minimizing the curb ramp radius is by adding curb extensions.

**CONTINENTAL CROSSWALKS:** A marked crosswalk signals to motorists that they must stop for pedestrians. It also encourages pedestrians to cross at designated locations. Installing crosswalks, alone, will not necessarily make crossings safer, especially on multi-lane roadways. However, continental crosswalks make crossings more visible to motorists and add a sense of security for pedestrians. Continental crosswalks should be combined with advanced stop

bars and other tools to increase safety. At mid-block locations, crosswalks can be marked where there is a demand for crossing and there are no nearby marked crosswalks.

**MEDIAN PEDESTRIAN REFUGE:** Median pedestrian refuges at intersections provide pedestrians with a secure place to stand in case they are unable to walk the entire distance of the crossing in one movement. This is especially important for young, elderly, and disabled users in areas where crossing distances are great. Refuge islands allow pedestrians to cross one direction of traffic at a time, minimizing pedestrian exposure by shortening crossing distance.

**CURB EXTENSIONS/BULB OUTS:** Curb extensions minimize pedestrian exposure during crossing by shortening crossing distance and giving pedestrians a better chance to see and be seen before committing to crossing. They are appropriate for any crosswalk where it is desirable to shorten the crossing distance and there is a parking lane adjacent to the curb.

**INTERSECTION PARKING CONTROL:** Parking control involves restricting or reducing on-street parking near intersections with high pedestrian activity. Locating parking away from the intersection improves motorists' visibility on the approach to the intersection and crosswalk. Improved sight lines at intersections reduces conflicts between motorists and pedestrians. This can be accomplished, in part, through the use of bulb outs.

**ADA-COMPLIANT CURB RAMPS:** Curb ramps are design elements that allow all users to make the transition from the street to the sidewalk. There are several factors to be considered in the design and placement of curb ramps at corners. Properly designed curb ramps ensure that the sidewalk is accessible from the roadway. A sidewalk without a curb ramp can be useless to someone in a wheelchair, forcing them back to a driveway and out into the street for access.

*Mid-block Crossing Treatments*

**ACTIVE WARNING BEACONS:** Active warning beacons are pedestrian or bicyclist actuated illuminated devices designed to increase motor vehicle yielding compliance at crossings of multi-lane or high volume roadways. Types of active warning beacons include conventional circular yellow flashing beacons, in-roadway warning lights, or Rectangular Rapid Flash Beacons (RRFB).

**IN-STREET PEDESTRIAN CROSSING SIGNS:** In-street pedestrian crossing signs reinforce the presence of crosswalks and remind motorists of their legal obligation to yield for pedestrians in marked or unmarked crosswalks. This signage is often placed at high-volume pedestrian crossings that are not signalized. This is a low-cost treatment that has shown significant improvements to driver slowing and yielding rates at crosswalks.

*Bicycle and Pedestrian Signalized Crossings*

**COUNTDOWN PEDESTRIAN SIGNALS:** Pedestrian signal indicators demonstrate to pedestrians when to cross at a signalized crosswalk. Ideally, all traffic signals should be equipped with pedestrian signal indications except where pedestrian crossing is prohibited by signage.

Countdown pedestrian signals are particularly valuable for pedestrians, as they indicate whether a pedestrian has time to cross the street before the signal phase ends. Countdown signals should be used at all signalized intersections. Designers should allow greater signal timing for crossing along large roadways, areas with a high frequency of pedestrian crossing and areas where seniors or disabled persons are expected.

Accessible pedestrian signals should be used in locations where visual or hearing-impaired individuals can be expected. A leading pedestrian interval can be used whereby pedestrians are allowed in the intersection three seconds in advance of vehicles, in areas with frequent motor vehicle and pedestrian traffic.



Rapid flashing beacon at a McDaniel Road crossing in Charles County. Photo courtesy Charles County, Maryland.



TRANSIT DESIGN

There are six common elements to successful transit design. These include:

- **Integration into the contextual fabric:** ensuring that transit stops are coherent with surrounding visual themes and that transit stops serve transit-compatible land uses such as daycares, shopping areas, employment areas, and schools.
- **Accessibility via multiple modes:** making sure that transit stations and routes connect other modes such as pedestrians, bicyclists, park and ride centers, and airports.
- **Functional simplicity:** Transit stops should provide users with clear and informative system information and provide easy access and payment options.
- **Security:** Transit stops and systems should look and feel clean and secure. A sense of security can be established by maintaining visibility of spaces and providing adequate lighting.
- **Comprehensive systems sustainability:** The design of transit should be environmentally-conscious and be a tool to promote sustainable development.
- **Articulation of form and identity:** Transit stops should respond to public art or community landmarks. Alternatively, local, relevant art should be incorporated into the stops and stations themselves.
- **The incorporation of art in transit:** Incorporating art and design into all aspects of the transit system will provide users with an attractive place to wait for transit and may increase user traffic.

In most cases, transit shelters and waiting platforms should be placed in the Street Furniture Zone. Transit stops can be incorporated into curb extensions, where appropriate. It is important to also consider the accommodation of bicycles at transit stops. Designs that reduce bicycle travel/bus stop conflict, include secure bicycle parking, and provide ample loading space for bicycles on bus-mounted bicycle racks are all part of bicycle-friendly transit system design.

The location and design of transit stops along a block are important considerations. Where feasible, transit stops should be located immediately after the intersection to reduce conflict with turning vehicles and resolve sight line issues at the intersection.



## PLACEMAKING AND QUALITY OF LIFE

The Street Furnishing Zone of a sidewalk buffers pedestrians from the adjacent roadway and is an import area for pedestrian and placemaking amenities such as street trees, signal poles, and street furniture.

### Street Trees

A robust tree canopy is one of the great contributors to a healthy and livable urban landscape. Trees provide many ecological benefits in terms of stormwater flow regulation and water quality treatment. Mechanisms for these benefits include interception, transpiration, and increased infiltration. Additional benefits provided by trees include enhancing the visual and spatial character of a



place; improving air quality; reducing noise and light pollution; traffic-calming; reducing the heat island effect; and encouraging foot traffic in commercial areas. Trees provide numerous habitat benefits, including refuge from predators, habitat patches, and food and nesting resources. Trees enhance the quality of open space and provide visual relief within the urban environment, leading to stress reduction and other health benefits. A healthy urban forest also increases property values. Because trees can take many years to develop a full canopy, preserving healthy existing trees wherever practicable is a cost effective and efficient way to obtain the most value from trees.

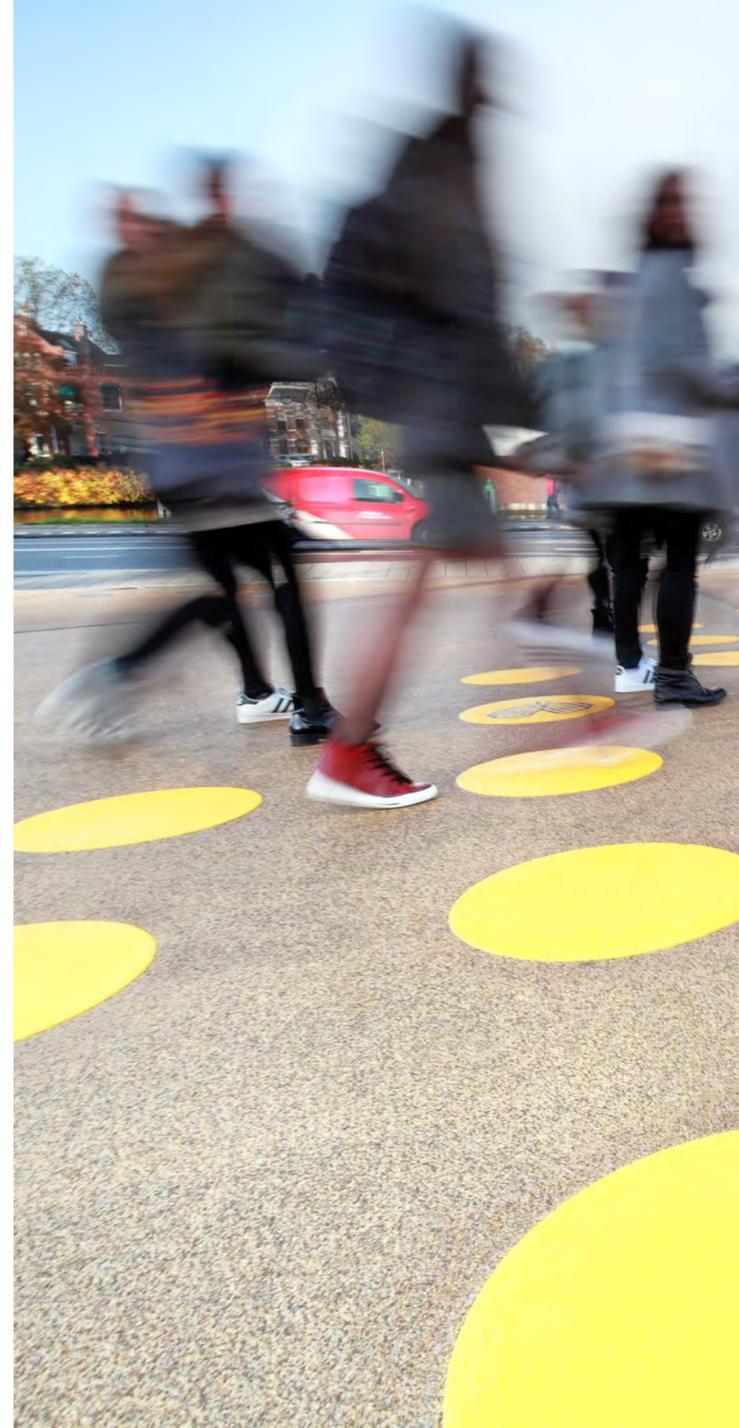
### Lighting

Pedestrian-scale lighting improves visibility for both pedestrians and motorists, particularly at intersections. Pedestrian-scale lighting can provide a vertical buffer between the sidewalk and the street, defining pedestrian areas. Pedestrian-scale lighting should be used in areas of high pedestrian activity.

Pedestrian-scale lighting should be in the Street Furniture Zone so as not to impede pedestrian traffic in the through area. Lamp fixtures should be at a height of about 12-14 feet, and poles should be spaced approximately 25-50 feet apart depending on the intensity of lights. Lamp fixtures should be shaded so as to project light downward and provide sufficient illumination of the sidewalk while limiting excess light pollution. Illumination should be warm and moderate, rather than dim or glaring, and provide a balanced coverage of the corridor and surrounding area for comfort and security.

### Site Furnishings

Site furnishings are critical components of a socially and economically vibrant streetscape, accommodating a wide range of needs and activities. Providing benches at key rest areas and viewpoints encourages people of all ages to use the walkways by ensuring that they have a place to rest along the way. Bike racks accommodate bicyclists traveling to their destinations. Trash and recycle receptacles promote cleanliness and sustainability. Landscaped planters and movable furniture also offer aesthetic and placemaking benefits to the sidewalk.



### Parklets

A parklet re-purposes part of the street into an extension of the sidewalk to provide amenities and green space for people using the street. The nature of parklets is oftentimes temporary but particularly successful parklets sometimes become permanent. Parklets are typically the size of several parking spaces and are intended as aesthetic enhancements to the streetscape in an economical package. Parklets offer a place to stop, to sit, and to rest while taking in the activities of the street. A parklet may also provide greenery, art, or some other visual amenity.



Parklet image from spokanecity.org.

### Wayfinding

The ability to navigate through a place is informed by landmarks, natural features, and other visual cues. Signs along a corridor exist to raise awareness of a topic and to provide wayfinding for all modes. Wayfinding signage should indicate the location of destinations, the travel distance/time to those destinations, and the location of travel. Wayfinding signage can also improve the safety and awareness of bicyclists and pedestrians by alerting motorists that they are driving along a bicycle route or pedestrian-trafficked area.

Wayfinding signs are typically placed at key locations leading to and along important transportation routes. It is recommended that these signs be posted at a level where the intended users may best view the information. As such, pedestrian, bicyclists, and motor vehicle wayfinding signs will be posted at various levels.

Gateway signage is also an important component to a wayfinding system. A gateway sign reflects the City's brand and should be designed to reflect the historical aspects of Takoma Park. A family of sign types based on the gateway logo and color palette can also be created to establish an easily-recognizable theme to complement streetscaping elements and wayfinding clarity.



Bioswales remove silt and contaminants from surface water runoff and are commonly implemented near parking lots where vehicle pollution is aggregated.

### Bioretention

Bioretention facilities use amended soils and vegetation to absorb, hold, evaporate, and clean polluted runoff from the streets. By reducing the peak rate and the total runoff volume, these facilities decrease the negative downstream or downslope impacts of storm events. With the right underlying geologic conditions, bioretention systems can be designed to clean stormwater then allow it to infiltrate, thus decreasing transport of some pollutants and recharging groundwater supply. In the right-of-way, bioretention systems can be integrated into site design as linear features (e.g. bioretention swales) or as cells (e.g. rain gardens and stormwater planters). Additional community benefits from bioretention facilities can include improved property values, increased habitat, a better environment for walking, and traffic calming.

Opportunity areas for using bioretention systems in streets include within traffic calming curb bulb outs, in roadside bioswales, and in place of standard landscape plantings on streets.

### Bioretention Planters

Bioretention planters have a defined shape and vertical sides, and may employ an impermeable bottom layer or enclosure. The planters are often constructed

of concrete, making them well-suited for urban applications where water needs to be directed away from building foundations. Stormwater planters consist of a planter box made of sturdy material, amended soils, a gravel drainage layer, and plants. An overflow is incorporated to manage higher flows and convey runoff to the public storm drain system, either via a perforated pipe or via surface flow. Although stormwater planters can be designed without a bottom to allow infiltration, they are typically designed to focus on flow control and attenuation to the public storm drain system. They are particularly effective at handling low intensity storms.

In the right-of-way, stormwater planters are recommended adjacent to buildings, sidewalks, and pedestrian plazas where flow control is a significant concern and space is at a premium. Planters can also be designed to serve a conveyance function in the right of way where there is insufficient width to provide sloped sides (i.e., a swale) or the grade would be too steep. Stormwater planters provide aesthetic benefits and, depending on plant selection and design, can provide water, food and nesting materials for birds.

# RECOMMENDATIONS

Informed by the Takoma Junction vision statement, and guided by standards in great street design, recommendations for Takoma Junction consider opportunities to celebrate Takoma Junction, move around in the area, and safely balance transportation needs in the larger area.

The identified opportunities (Figure 20) are a combination of longer-term improvements, as well as some quick-win actions which can be taken in the next one to two years. Many of the larger, long-term improvements might require further study or an accumulation of resources before they can be implemented. The quick-wins, which are summarized at the end of this chapter, on the other hand, present opportunities to see on-the-ground improvement in the near-term.

## Celebrating and Enjoying Takoma Junction

Celebrating the Junction is about enhancing the general quality of the experience in the area. These recommendations include placemaking, streetscaping/ beautification, and wayfinding and Takoma Junction identity elements.

### SITE AMENITIES

Amenities like seating, waste receptacles, lighting, and planters or potted flowers all contribute to a general sense of place and improve the overall experience of someone visiting the Junction. Many amenities already exist throughout the study area. Opportunities to introduce additional elements can carry existing furniture and fixture standards throughout the Junction (e.g., the existing acorn lamp for pedestrian lighting or the existing wood and iron bench design).

Figure 21. Illustrative Recommendations

- KEY**
- |  |  |
|--|--|
| <b>A</b> Establish Gateway Treatments at All Approaches to Takoma Junction | <b>H</b> Improve Bus Stop Amenities  |
| <b>B</b> Explore "Don't Block the Box" Signage & Intersection Markings     | <b>I</b> Consider Placemaking and Beautification Treatments                            |
| <b>C</b> Install Continental Crosswalks with ADA-Accessible Curb Ramps     | <b>J</b> Create Pedestrian Amenity Space in Front of Businesses with Expanded Sidewalk |
| <b>D1</b> Install a Brick Center Median                                    | <b>K</b> Create Pedestrian Amenities on Expanded Sidewalks                             |
| <b>D2</b> Expand Sidewalk Space  | <b>L</b> Explore Bus Stop Re-alignment to Promote Safe Driver Behavior                 |
| <b>E</b> Consider Consolidated and Reduced Curb Openings                   | <b>M</b> Provide Bike Corrals (typical)  |
| <b>F</b> Explore Ways to Activate Public Space                             | <b>N</b> Explore Sidewalk Connectivity   |
| <b>G</b> Install Shared Lane Markings for Bicyclists                       |  |

*"I love the benches, bike share, plants and trees, gazebo - everything that makes it feel like less of an urban intersection, and more of a community space!"*

- STUDY PARTICIPANT



## GATEWAYS AND THE HEART OF TAKOMA JUNCTION

A sense of arrival into Takoma Junction can be created by enhancing the 'heart' of the Junction and marking the gateways as significant points of arrival.

**THE HEART OF TAKOMA JUNCTION:** sometimes referred to as the "100% corner," the heart of an area is its most active intersection. In Takoma Junction, the place where Carroll, Ethan Allen, and Grant Avenues converge is a center of activity and presents an opportunity to be better celebrated with placemaking and beautification treatments—for example, by introducing identity signage and streetscaping or planting elements.

**GATEWAYS:** are the points where a traveler first crosses a threshold into an area. These locations are ideal for introducing identity signage and reflecting Takoma Junction's colorful character through art opportunities and/or planting treatments. Gateway locations include Carroll Avenue at Lee Avenue, Ethan Allen Avenue at Sycamore Avenue, Philadelphia Avenue approaching Carroll Avenue, and Carroll Avenue at Philadelphia Avenue as primary gateways, and a secondary gateway at Grant Avenue approaching Carroll Avenue.

*"THIS IS A SPECIAL PLACE ... it's the gateway to Takoma Park's town center."*

- STUDY PARTICIPANT



Sample gateway treatment in Portland, OR

## IDENTITY SIGNAGE

The existing Main Street Takoma wayfinding signage can be carried throughout the Junction, while new identity signage that is complementary to the existing standards can be introduced. Locations include banners on existing pedestrian-scale lighting, monument signage at primary gateways, and incorporation into any new wayfinding signage.

## LANDSCAPING AND PLANTERS

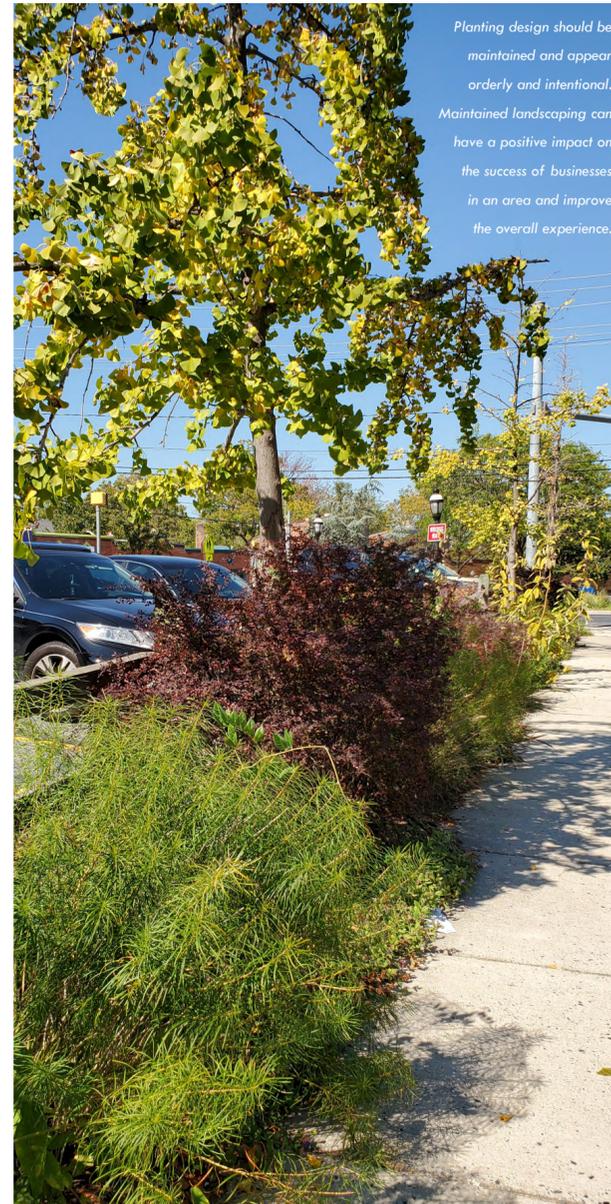
The streets surrounding Takoma Junction are notable for the verdant landscape. From mature trees to plantings on private property, meticulous care is often given to landscaping. The level of care reflects the community's commitment to sustainable values. New opportunities to reduce impervious areas and introduce planting exist in the form of planting beds where curb is being extended. Seasonal color can be introduced through hanging flower baskets on lamp posts or potted arrangements near intersections.

It is important to consider visibility when planting trees and shrubs. Branches can block storefronts, while hidden spaces are often perceived as being less safe. Replacing low-branching trees and shrubs with taller canopy trees will maintain views into public spaces and improve visibility of the local businesses.



### Tree Pruning

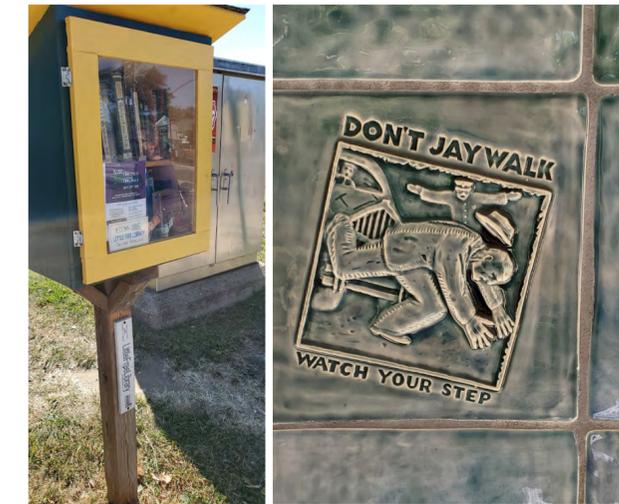
Providing shade, color, and softness, the trees around Takoma Junction are one of the setting's greatest features. If not regularly pruned, however, the trees begin to obstruct walkways and visibility—creating unsafe conditions for people moving about and limiting exposure of local businesses. This is especially true of multi-stemmed flowering trees, such as crape myrtle, found commonly in the City of Takoma Park. In the long-term, consideration should be given to replacing such trees with taller canopy trees where overhead space is available. Annually, and as needed, pruning existing trees and cutting back branches eliminate obstructions to movement on the sidewalks.



*Planting design should be maintained and appear orderly and intentional. Maintained landscaping can have a positive impact on the success of businesses in an area and improve the overall experience.*

## PUBLIC ART

The public art in Takoma Junction, particularly the mural and the colorful tiles beneath the Art Deco pavilion are important features for the community. Additional opportunities for public art can be explored further, including sculptural bus shelters or playful interactive pieces.



## Moving About Takoma Junction

### WAYFINDING & GATEWAY

As residents and visitors move about in Takoma Junction, wayfinding signage offers orientation and gives direction to key destinations. Main Street Takoma signage has been pulled into this area and can be continued and expanded. Key locations for wayfinding signage include monument signs within the gateways and markers at destinations (for instance, at B.Y. Morrison Park).

### SAFER CROSSINGS FOR PEDESTRIANS

**CONTINENTAL CROSSWALKS:** the existing crosswalks throughout the Junction help pedestrians safely cross the street. At Lee Avenue, where it meets Carroll Avenue, there is an opportunity to add a new crosswalk and improve the existing crosswalk. At the time of their analysis, MDOT SHA observed limited crossings at the eastern leg of the Carroll Avenue and Philadelphia Avenue intersection.



However, recognizing the need to improve and maintain pedestrian safety at all legal crossings, this study recommends consideration of formally striping this crossing area to direct pedestrians to the safest, most visible location for a crossing. Before adding a crosswalk, it may be necessary to evaluate impacts to operations and alignment with MDOT SHA's long-term goals

**PEDESTRIAN REFUGE ISLANDS:** adding pedestrian refuge islands at certain intersections, as space allows, can further improve safety for pedestrians. As a low-cost safety countermeasure, "yield to pedestrian" signage can be added at crosswalks.

**ADA-ACCESSIBLE CURB RAMPS:** all existing crosswalks in the Junction are accessible by a curb ramp. Any new crosswalk that is proposed and designed should be accompanied by an ADA-compliant curb ramp.

**ALL-RED PEDESTRIAN CROSSING SIGNAL PHASE:** explore creating an all-red pedestrian crossing phase at the signal at Sycamore and Ethan Allen Avenues.

## SIDEWALK IMPROVEMENTS

The scale of Takoma Junction is intimate, and the sidewalk space is equally so. In many places, the sidewalk is just five feet wide, while movement is obstructed by street lamps, utility poles, fire hydrants, and waste receptacles. There is little room to expand the sidewalk away from the roadway, as sidewalks are typically bound and bordered by building facades or property walls. Especially in front of businesses, adequate sidewalk creates a vibrant pedestrian amenity space which can support café tables, benches, and planters. Where possible, sidewalk space can be recaptured by narrowing the roadway.

In locations where sidewalk replacement and/or repairs are made in the future, the brick banding pattern that is present in front of the storefronts on Carroll Avenue should be carried through.

## BIKE PARKING

Bike parking provides cyclists with a safe location to securely park their bikes when not in use. Cycle corrals can replace a single parking space within a surface parking lot (accommodating 12-24 bikes), or smaller cycle racks can be located within the sidewalk space. Cycle corrals or racks are securely bolted to a concrete surface and are best located near key destinations. In Takoma Junction, the Takoma Park Silver Spring Cooperative is one such location.

## SHARED LANE MARKINGS

Shared Lane Markings, or "sharrows," indicate a shared environment where bicyclists and motorists travel together. Shared Lane markings are painted within the travel lane. Typically, shared lane markings are combined with signage to communicate that bikes may use the entire lane.



## BIKE SIGNAGE & WAYFINDING

Signage is important both for communicating the expected presence of cyclists and also to help cyclists navigate the overall bike network to key destinations. Clear and visible signage is important, but placement should be careful to not clutter or further complicate messaging where there is already an abundance of signs. Wayfinding offers direction and can indicate walk/bike times to nearby destinations.

## Balancing Safety Across Modes of Travel

### RESTRICT TURNING MOVEMENTS

On the stretch of Carroll Avenue between Grant and Philadelphia Avenues (barely 300 feet in length) there are five curb-cuts, or driveways, on the south side of the street and four on the north side—each one increasing chances of collision.

### Consolidate Curb Cuts/Driveways

To the extent possible, a minimum spacing should be maintained between curb cuts. Driveways within Takoma Junction, particularly along Carroll Avenue, break up sidewalk space and increase the likelihood of collisions or conflicts. Explore opportunities to consolidate existing curb cuts and minimize disruption of the walking path. Closing curb cuts will allow for future opportunities to add planting strips and street trees.



*“Give everyone a clearly defined space so they feel safe and welcome.”*

- STUDY PARTICIPANT



### Enforce No-Right-Turn-on-Red Regulations

Except for the turn from Philadelphia Avenue onto westbound Carroll Avenue, all intersections in the area prohibit right turns at red lights. From community engagement, it is understood that motorists do not always adhere to these restrictions. There's opportunity to explore the addition of a No-Right-Turn-on-Red sign at the Carroll Avenue and Philadelphia Avenue intersection and encourage enforcement of the existing restrictions throughout the area.

### DON'T BLOCK THE BOX SIGNAGE

During rush hour, motorists creep forward, leaving cars blocking the intersection where traffic is stopped only to have the light turn red, leaving the car to block the intersection during the next signal phase. This issue is not unique to Takoma Junction, but it is a challenge nonetheless. There is opportunity to integrate “Don't Block the Box” signage at intersections and using a public campaign to educate drivers about appropriate behavior. This is especially important at Philadelphia Avenue, where the Takoma Park Volunteer Fire Department needs the intersection clear for access. Legislation may be required to permit enforcement of this prohibition.



Continue to enforce No Turn on Red Restrictions



### PREVENT ILLEGAL PASSING MANEUVERS AROUND BUSES

At some of the bus stops in the area, space was provided for buses to pull out of the travel lane to pick up their passengers. Bus pull-off areas, however, require the bus driver to navigate back into the travel lane, which can create conflicts with traffic. To ensure the safety of motorists and transit riders, bus stops in the area can accommodate loading and unloading of passengers from the travel lane by removing pull off areas and extending the curb. Illegal passing of buses should be discouraged, as it presents dangerous scenarios, particularly at Sycamore Avenue at Ethan Allen Avenue near the Takoma Park-Silver Spring Food Co-op. Where space is available, explore bus stop and travel lane realignment to promote safe driver behaviors.

### NARROW THE ROADWAY

Where appropriate and as space allows, roadway dimensions can be narrowed to shorten crossing distances and discourage speeding. There is a notable opportunity on Carroll Avenue between Grant Avenue at the east and Philadelphia Avenue at the west. Here, the roadway can be narrowed either by expanding sidewalk dimensions into the road right-of way or installing a center median. If a raised curb median is not feasible due to already narrow roadways or the need for emergency vehicles to make wide turning movements, consideration can be given to a mountable median curb or a painted median instead.

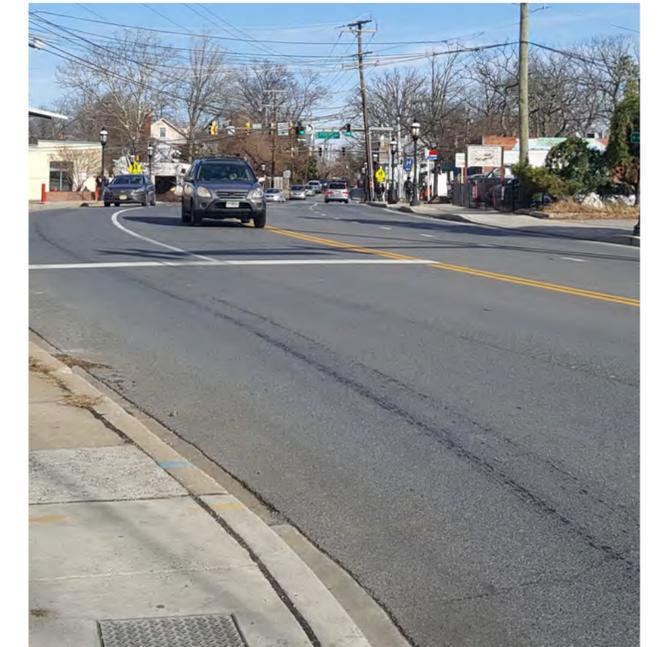




Figure 23. Placemaking Opportunities



# CREATING SAFER PLACES TO LIVE

A great street is made more enjoyable by added amenities and the incorporation of elements that reflect the community's identity and personality. Street furniture, landscaping and plantings, public art, and wayfinding and identity signage are all examples of placemaking improvements that elevate the experience of living, visiting, and being within Takoma Junction. At left, Figure 23 illustrates placemaking improvements that can be enhanced or introduced into the community.



Figure 24. Opportunities for Quick Wins



# QUICK WINS

While some of the potential improvements require further study or a more significant investment, many recommendations can be implemented in the very near term as immediate next steps in the first one-to-two years (Figure 23). These quick-wins are tactical, often low-cost, improvements that make the streetscape and travel environment safer, more accessible, and more enjoyable. Of all the identified recommendations, quick-win projects are listed below.

## Celebrating Takoma Junction

- Gateway Treatments
- Parklets
- Benches and Waste Receptacles
- Planting Improvements (Street Trees, Pruning Branches, Planting Beds)
- Lamp Post Beautification (e.g., Banners or Hanging Flower Pots)

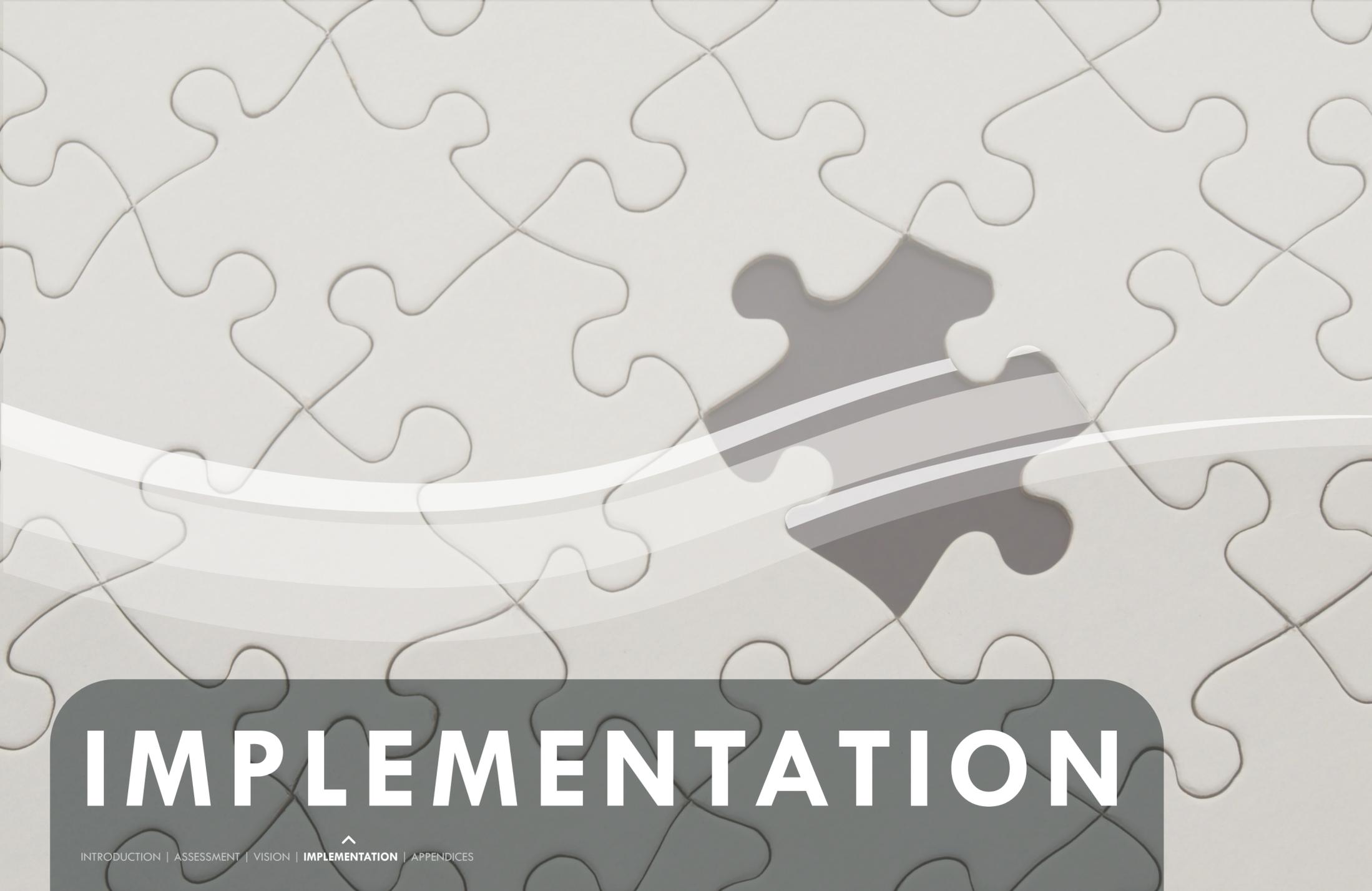
## Moving About Takoma Junction

- Continental Crosswalks
- Painted Bulbouts with Flexposts
- Pedestrian Yield Signage
- Rectangular Rapid Flashing beacons (RRFBs)
- Bus Stop Improvements
- Shared Lane Bike Markings
- Bike Parking

## Balancing Safety Across Modes of Travel

- Enforcement of No-Right-on-Red Restrictions

With existing funding resources, and/or support from stakeholders and community groups, many of these quick-win projects can be implemented immediately. Resources for implementing quick-wins and the longer-term projects are provided in the Implementation chapter that follows.



# IMPLEMENTATION

## IMPLEMENTATION: HOW WE GET THERE

The previous chapters have detailed the process undertaken by community residents and stakeholders to develop a vision for Takoma Junction that incorporates the goals and priorities of community members. With this vision clearly established, the focus now turns to the process of implementing the recommended improvements and bringing this vision to life for Takoma Junction.

Implementation begins with community members, stakeholders, and partners that are committed to carrying this plan's recommendations to the finish line. By understanding the project development process, prioritizing projects based on developed criteria, and establishing a phasing approach for implementation, these stakeholders can lead their communities in fulfilling the Takoma Junction vision. The upcoming sections will examine each of these steps in detail and provide a roadmap for completing the tasks necessary for successful project development and implementation. Several case studies of similar projects are also presented to detail lessons learned and ensure community resources are used in an effective and efficient manner throughout the process. Many of the treatments utilized in these case studies may prove useful in addressing the safety and livability issues described in this report.

The residents of Takoma Junction have worked to establish their vision for a safer, more livable environment. Through successful project implementation, this vision can become a reality!



## SAG Priorities

In February 2019, members of the SAG were invited to participate in a preliminary concept review and refinement meeting at Takoma Park Middle School. In addition to 7 SAG members, this meeting was attended by 21 members of the community.

Following a presentation by SHA, which shared key takeaways from community input and highlights from the draft Vision Study, SAG members were divided into two groups to review the draft concepts, identify concerns, and provide feedback on the recommendations which were organized into 10 “packages.”

In their breakout groups, SAG members engaged in a series of exercises: first, to individually score the ability of various packages to serve the goals of the Vision Study; then to rank their top priorities as a group; and finally to allocate limited resources and “fund” individual packages. The objective of these exercises was to identify priority projects and give some indication of the community’s desires for next steps.

## SUMMARY OF PRIORITIES

The top priorities were similar between groups; both identified transit amenities, sidewalk expansion, and roadway safety + accessibility among the top five priorities. Additionally, group one identified street trees and branding and placemaking as priorities while group two identified traffic calming and bicycling improvements among the top five.

When allocating resources, there was even more overlap. Both groups fully funded the sidewalk expansion/bump-out package, as well as transit amenities. Group one invested in street trees, and group two invested in bicycling improvements. Both groups also invested their resources into roadway safety and accessibility improvements. However, group two preferred to fund the more cost-efficient improvements while re-allocating resources required for the larger improvements to support traffic calming, instead.

table 3. Relationships Between Recommendation Packages

	READY-TO-GO	DEPENDENT
Gateway Treatments	[Hatched Box]	
Branding + Placemaking	[Hatched Box]	
Roadway Safety + Accessibility	[Hatched Box]	
Street Trees (Phase I)	[Hatched Box]	
Bicycling Improvements (Phase I)	[Hatched Box]	
Traffic Calming	[Hatched Box]	
Parklet	[Hatched Box]	Can happen before but cannot happen with Sidewalk Expansion
Sidewalk Expansion/Bulbouts	[Hatched Box]	
Transit Amenities		[Hatched Box]
Benches		[Hatched Box]
Street Trees (Phase II)		[Hatched Box]
Cycling Improvements (Phase II)		[Hatched Box]

Can only happen after permanent Sidewalk Expansion is complete

### WHICH are priorities?

Placing the highest priority package at the top, rank the top five packages.

- Street Trees
- Transit Amenities
- Sidewalk Expansion
- Roadway Safety + Accessibility
- Branding/Placemaking + Gateways

### HOW would you allocate a limited number of resources?

If you had limited funds to implement the packages below, how would you allocate your resources? As a group, use 20 stickers to “fund” the individual packages by filling every circle in that package’s row. Unless there’s a “light-touch” option (\*), packages cannot be partially funded! Additionally, note that the final four packages (†) can only begin after fully-funding the permanent sidewalk expansion package.



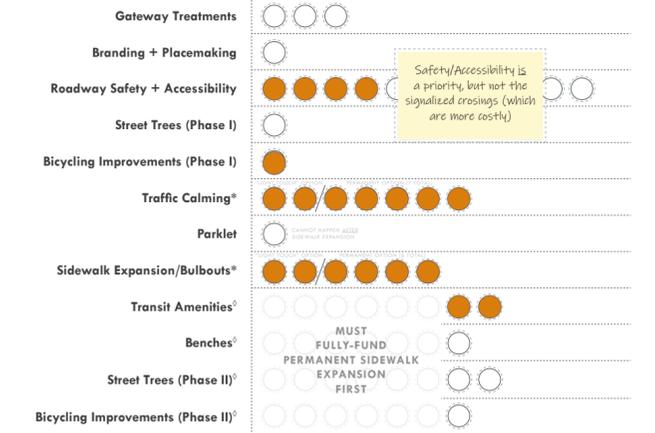
### WHICH are priorities?

Placing the highest priority package at the top, rank the top five packages.

- Traffic Calming
- Sidewalk Expansion
- Roadway Safety + Accessibility
- Transit Amenities
- Bicycling Improvements

### HOW would you allocate a limited number of resources?

If you had limited funds to implement the packages below, how would you allocate your resources? As a group, use 20 stickers to “fund” the individual packages by filling every circle in that package’s row. Unless there’s a “light-touch” option (\*), packages cannot be partially funded! Additionally, note that the final four packages (†) can only begin after fully-funding the permanent sidewalk expansion package.



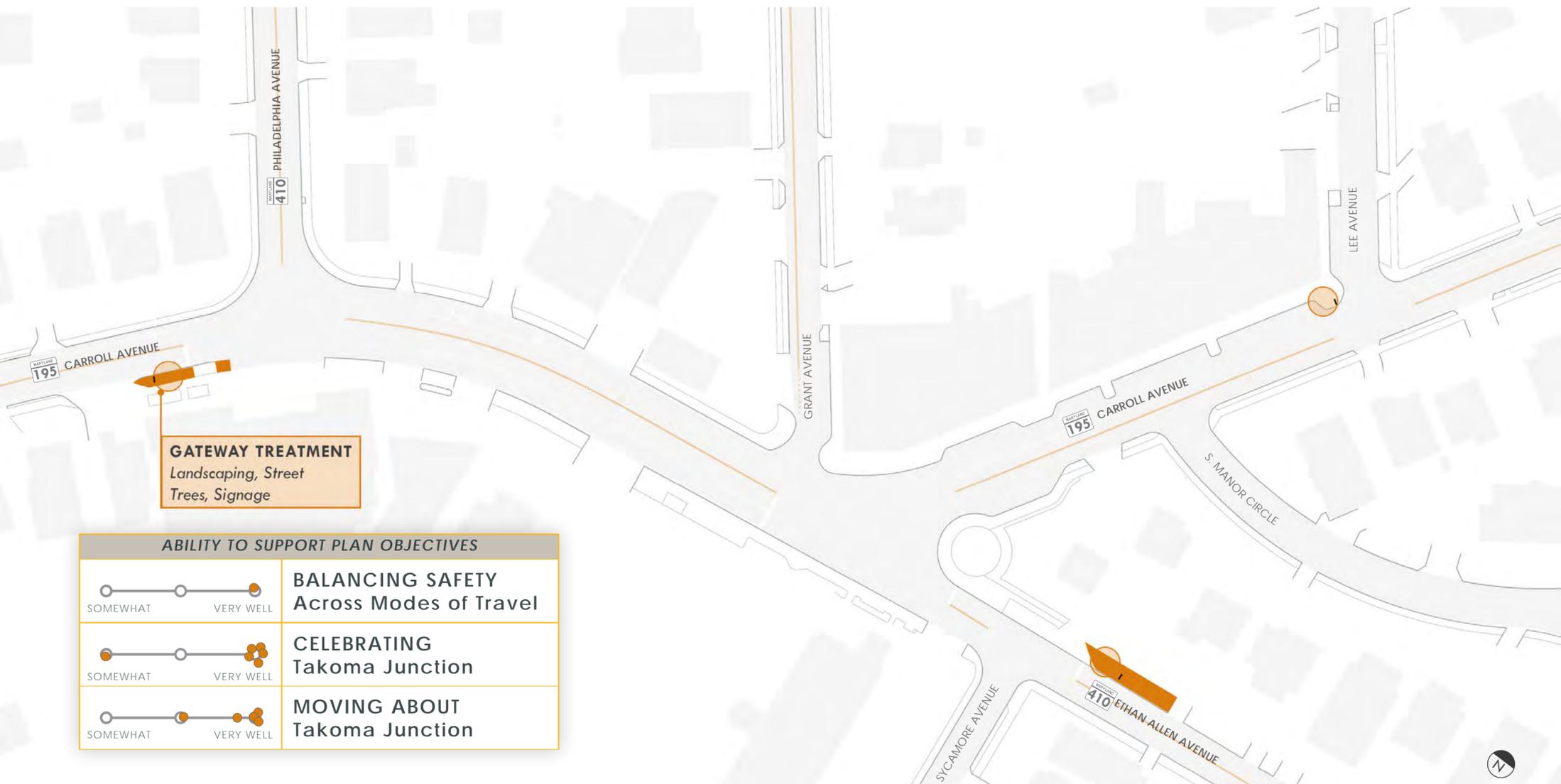


Figure 25. Package 1 - Gateways

- READY-TO-GO
- DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

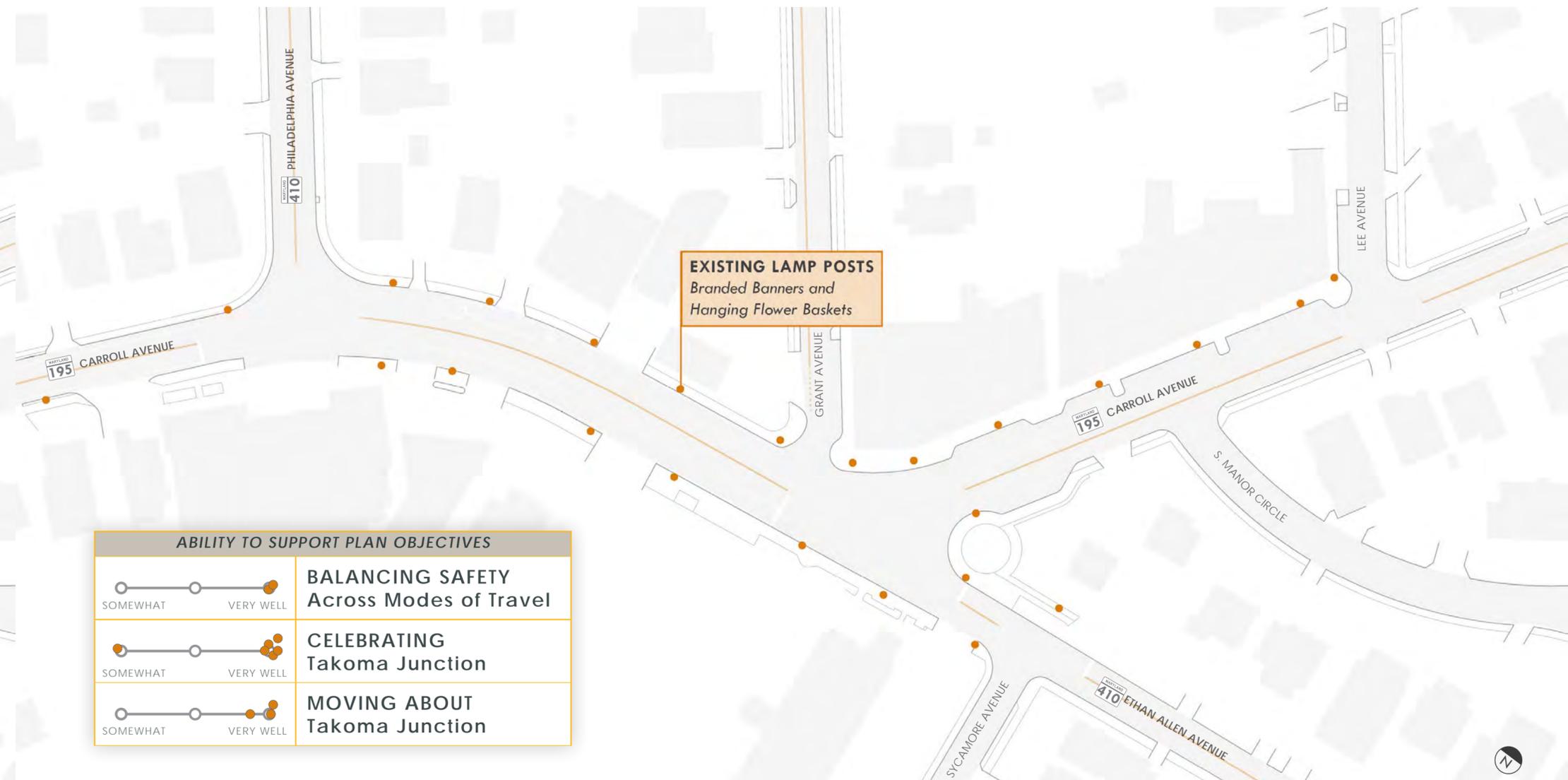


Figure 26. Package 2 - Branding + Placemaking (Street Lamps + Banners)

- READY-TO-GO
- DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

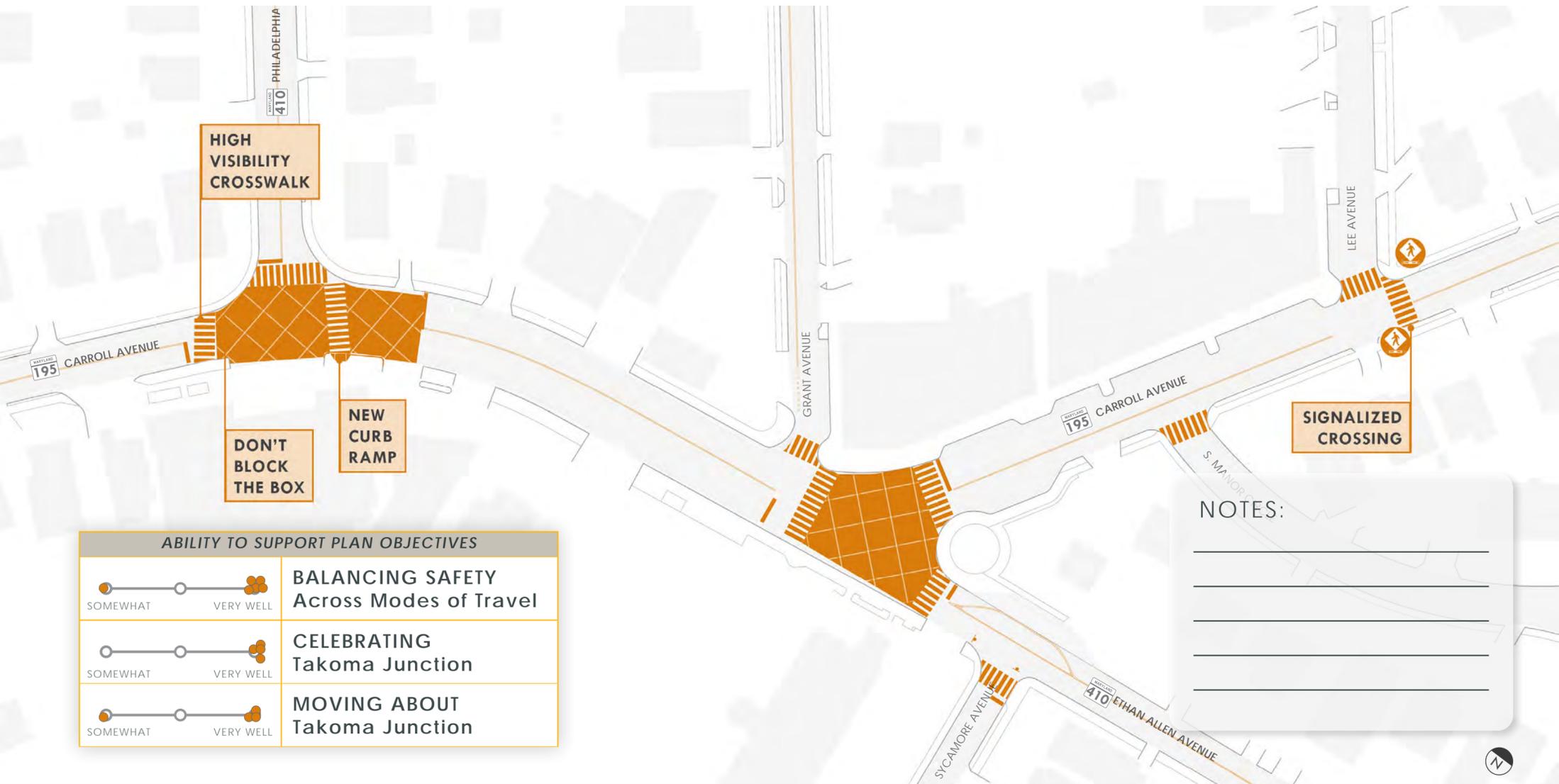


Figure 27. Package 3 - Roadway Safety + Accessibility

READY-TO-GO  
DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

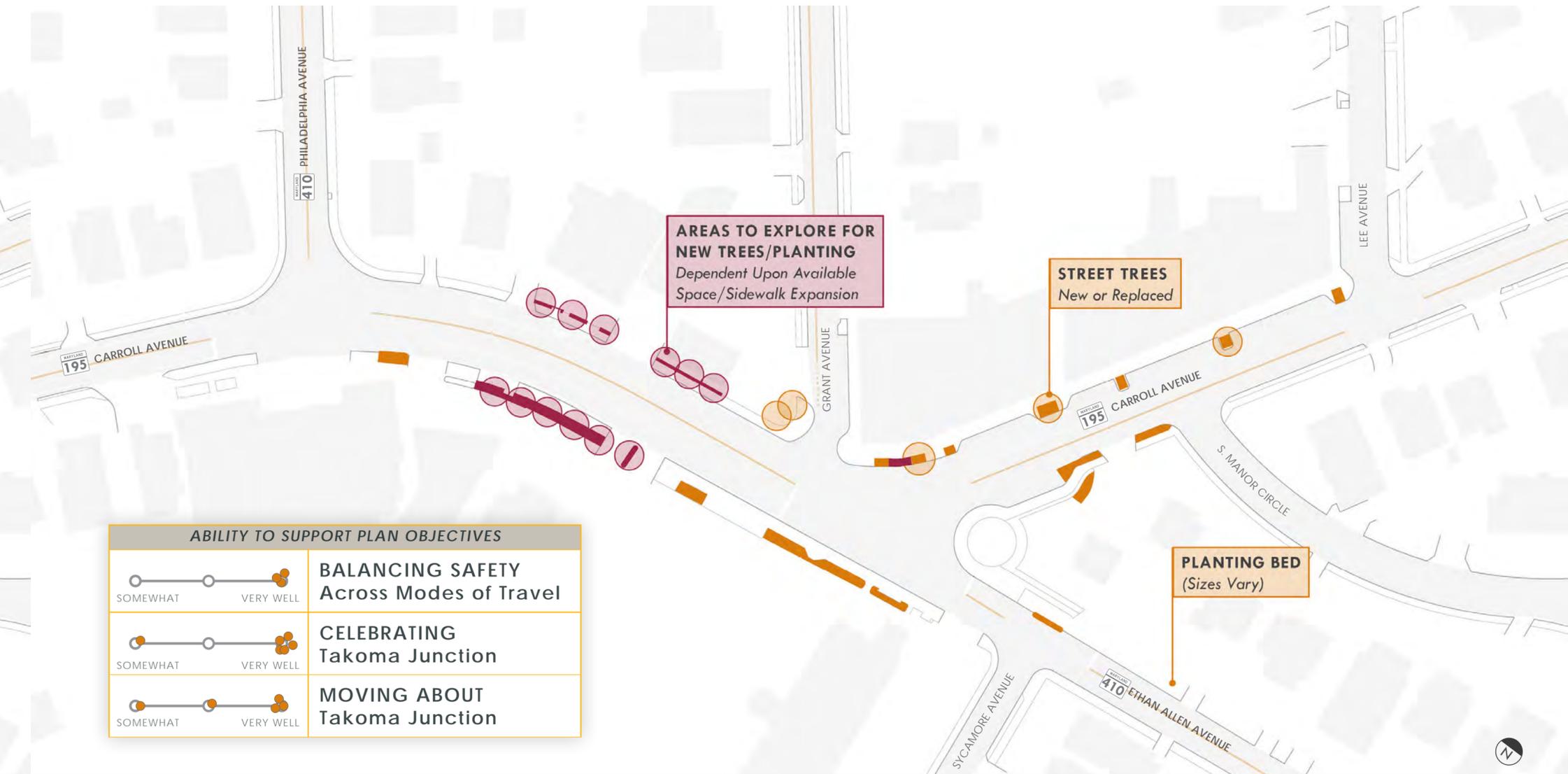


Figure 28. Package 4 - Street Trees + Landscaping

READY-TO-GO  
DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

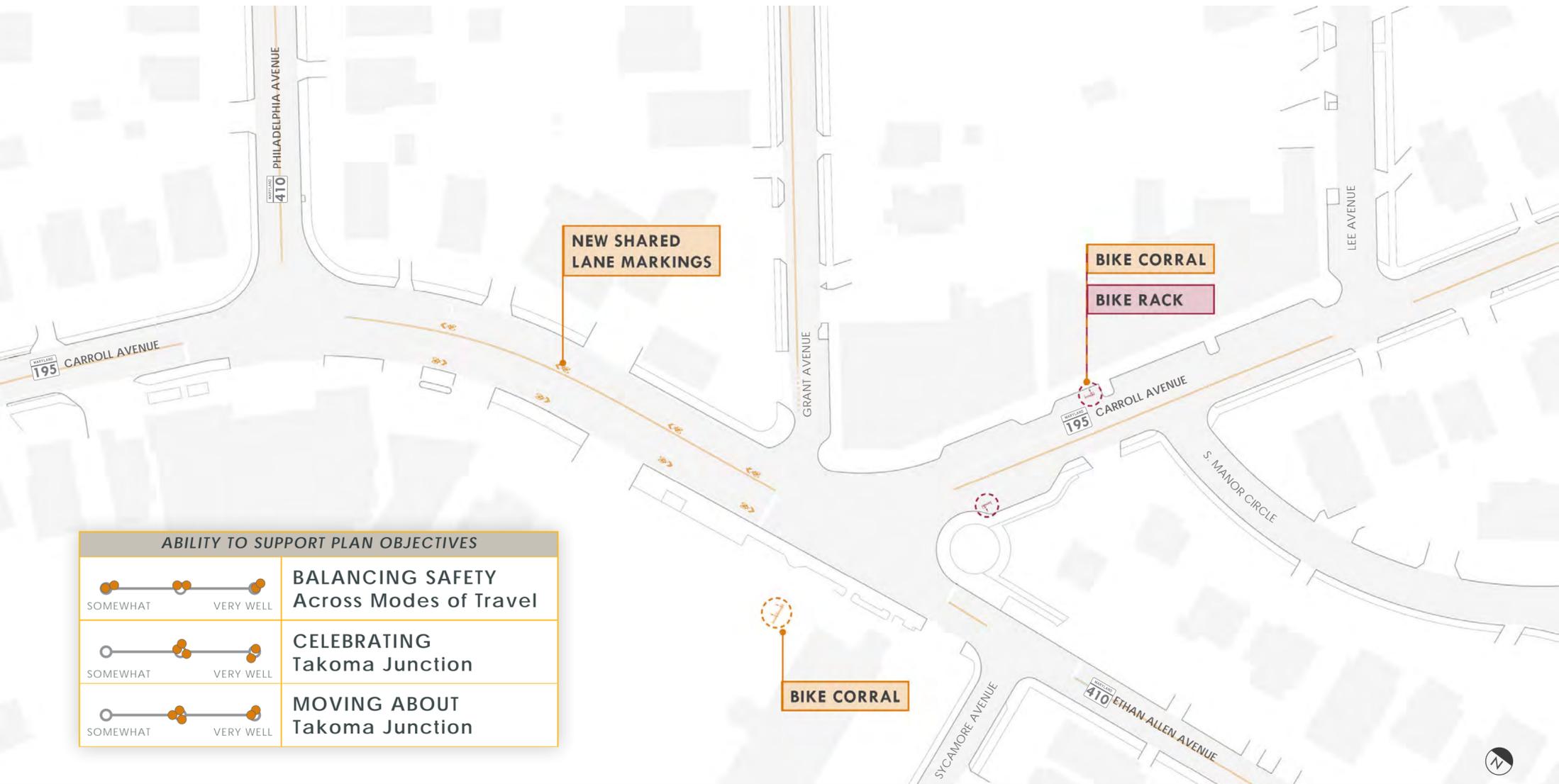


Figure 29. Package 5 (A+B) - Bicycling Improvements - Gateways

■ READY-TO-GO  
■ DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

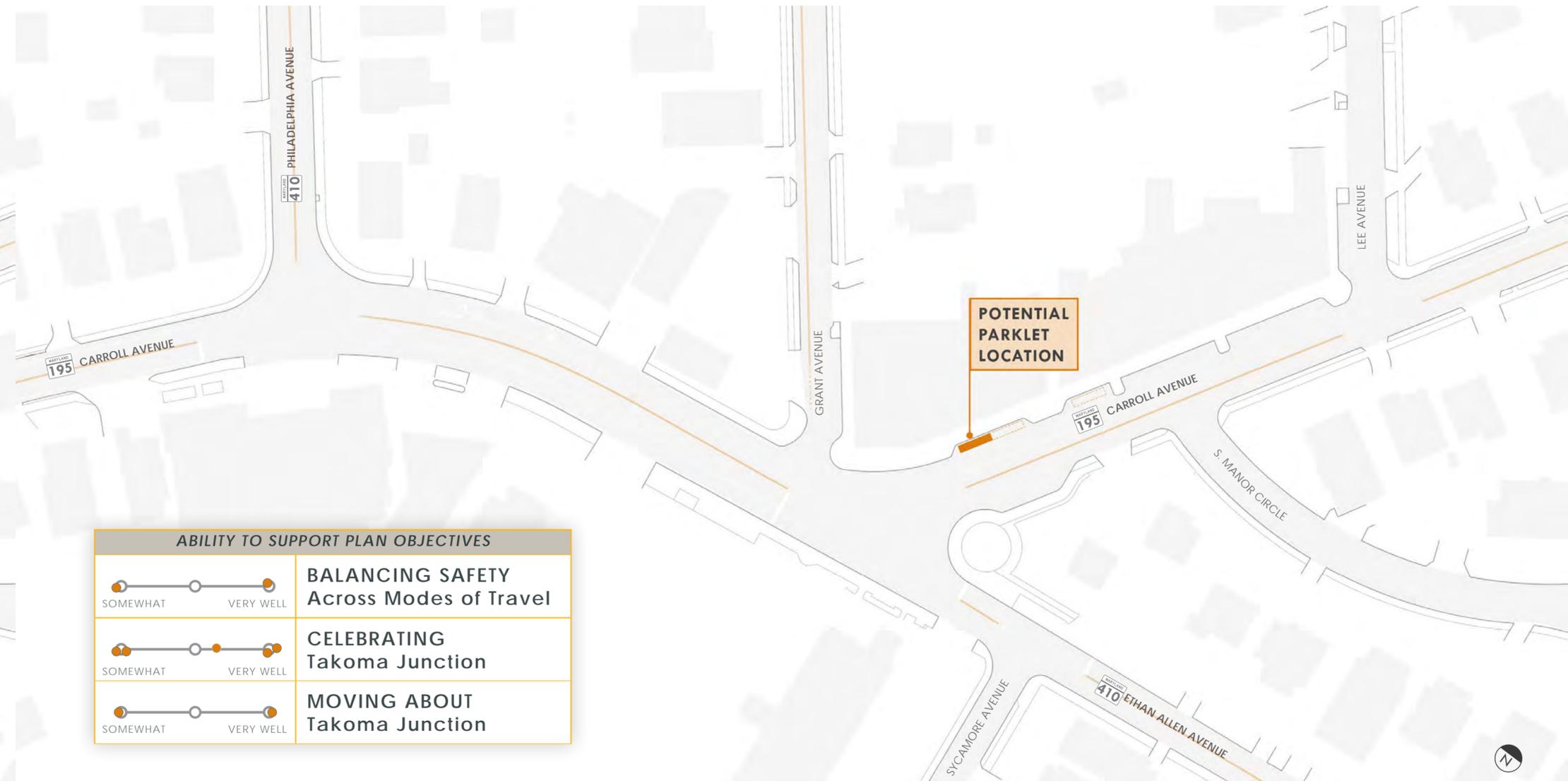


Figure 30. Package 6 - Parklet

■ READY-TO-GO  
■ DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

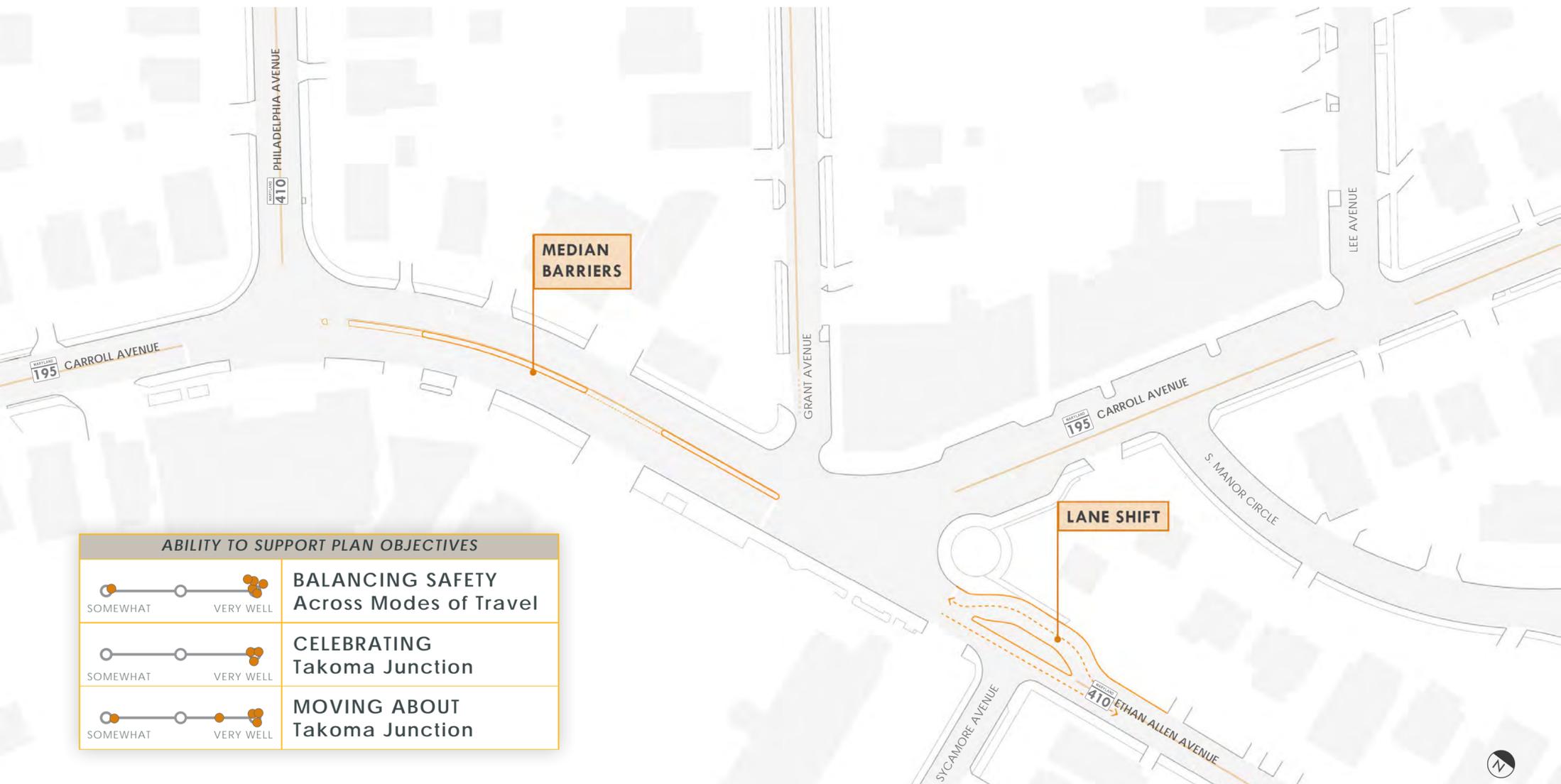


Figure 31. Package 7 - Traffic Calming

■ READY-TO-GO  
■ DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

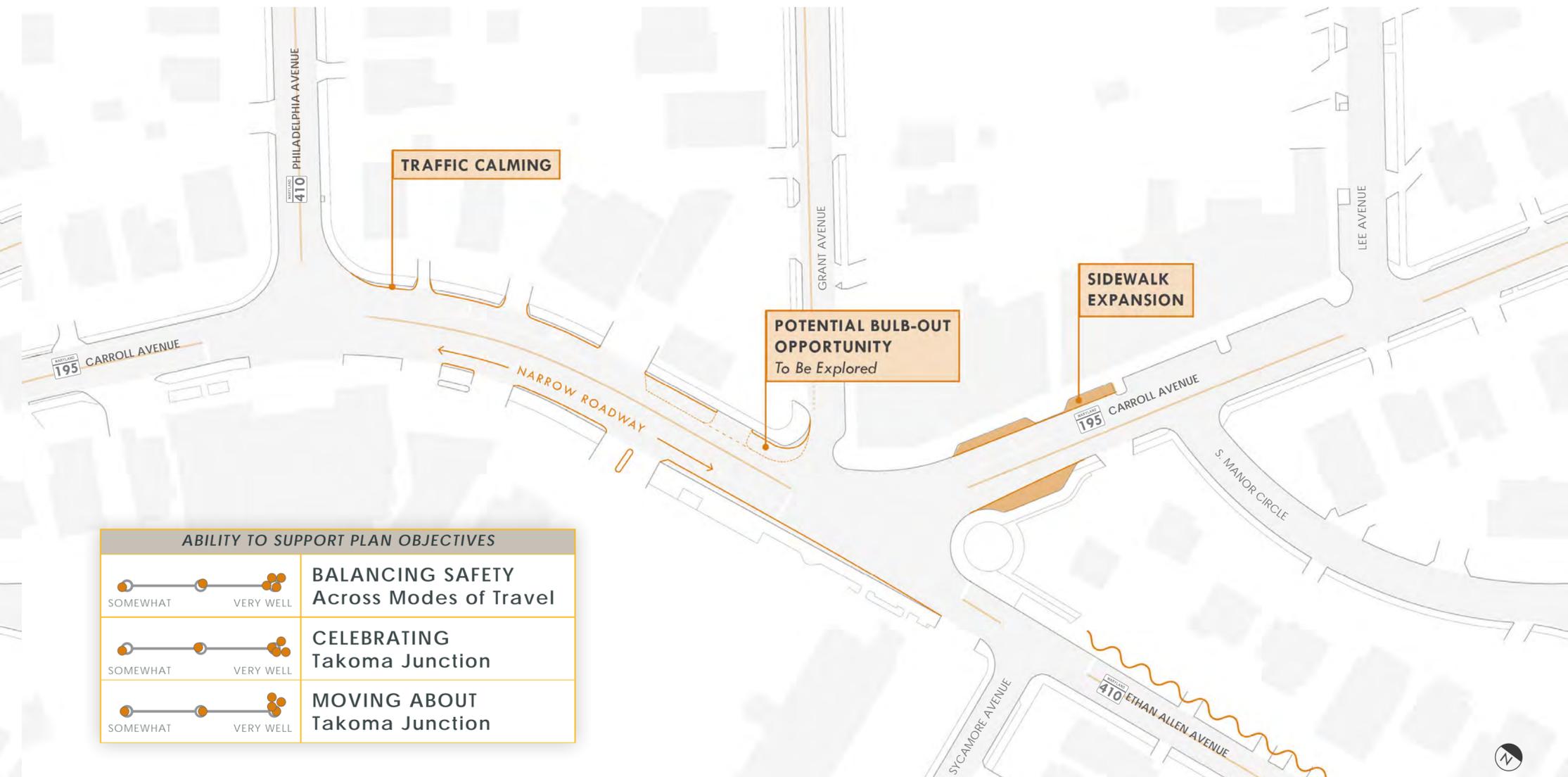


Figure 32. Package 8 - Sidewalk Expansion

■ READY-TO-GO  
■ DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

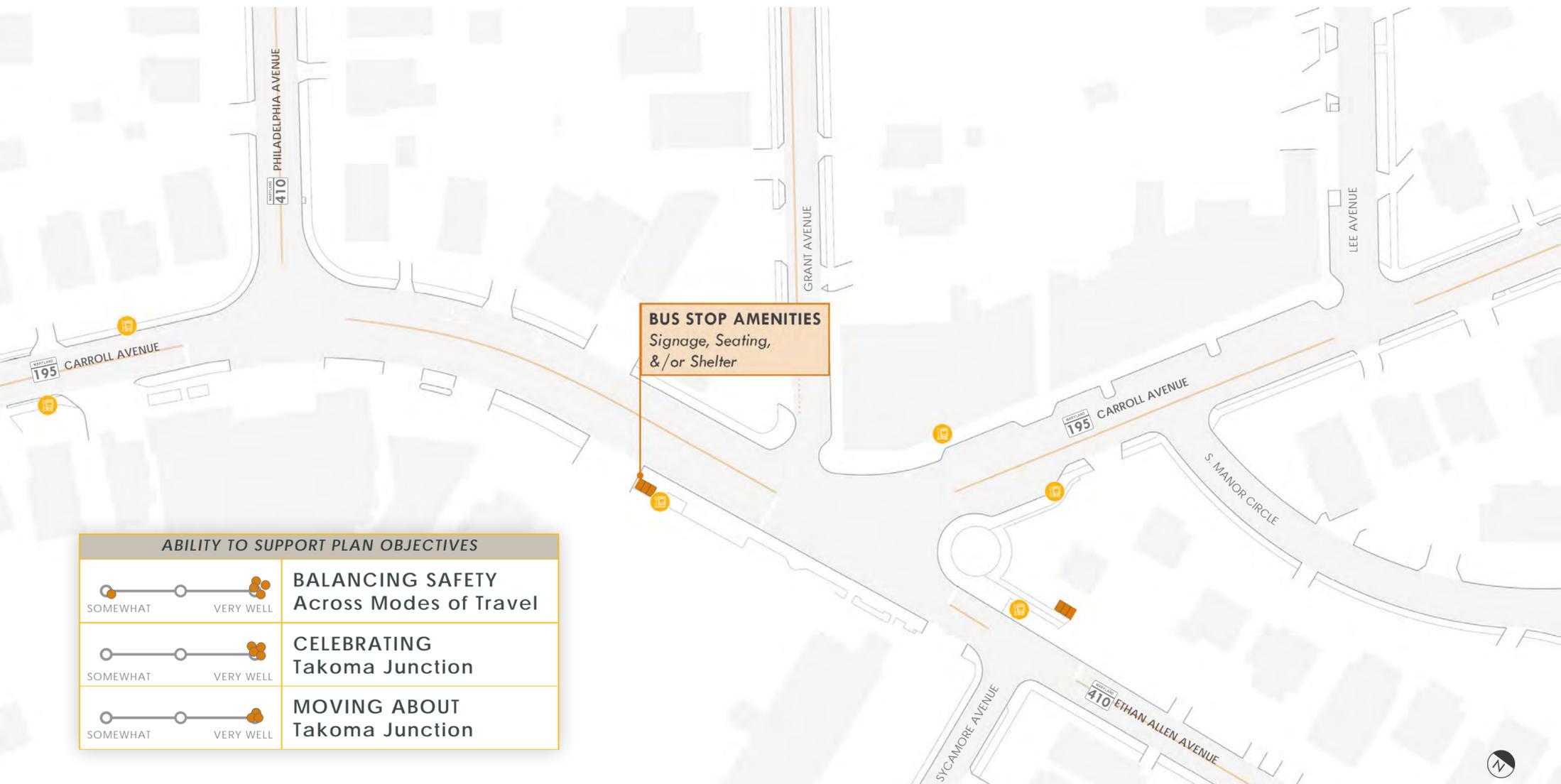


Figure 33. Package 9 - Transit Amenities

- READY-TO-GO
- DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

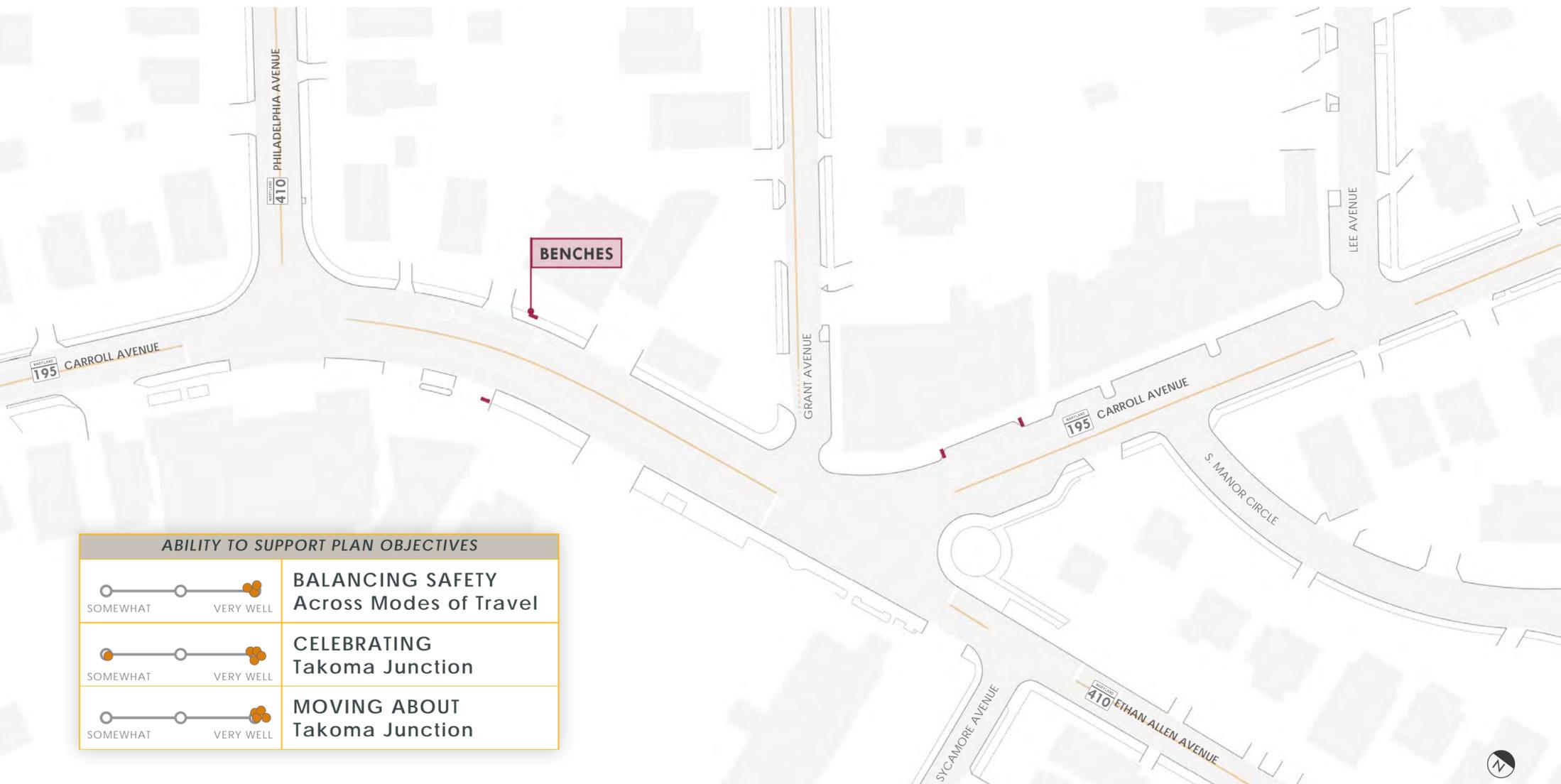


Figure 34. Package 10 - Benches

- READY-TO-GO
- DEPENDENT

Concept above illustrated as shown at the February 25, 2020 SAG Meeting.

## Project Development Process

The best-intentioned projects can ultimately fail if they are not properly planned, developed, and maintained. To this end, it is critical to have an established project development process to ensure the improvements ultimately realized reflect the goals from this study and benefit the community members for years to come.

### PROJECT INITIATION PURPOSE & NEEDS

The vision developed for Takoma Junction is wide-ranging given the amount of community input and diverse values of the community members. Because this vision was developed based on the needs of community members and rooted in the goals they would like addressed, the proposed recommendations provide an excellent starting point for identifying the purpose and needs for projects planned for implementation. As prioritized projects are identified for completion, community members should review the established goals and criteria with agency stakeholder to ensure the proposed project still aligns with the Vision for Takoma Junction.

Although MDOT SHA served as the lead agency in facilitating the *Takoma Junction Vision Study*, other transportation and government agencies at the local and state level may ultimately play a lead role in implementing specific study recommendations. Therefore, once the purpose and needs are confirmed, the next step will be to analyze the stakeholders required throughout the process and determine the key agencies that will be involved in the process. This process can be greatly facilitated by the establishment of a work group that maintains relationships with local agencies and works to solicit resources to assist in the development process. Community members leading the project implementation should also engage any third-party stakeholders (businesses, community groups, government institutions, etc.) early in the process to ensure their goals and values are incorporated into project development.

### “ QUICK WIN ” IMPLEMENTATION

Once the lead community members, government agencies, and external stakeholders have been identified, the proposed recommendations should be examined from a phasing perspective. While many recommendations will require

significant design and engineering work prior to implementation, there are often project components that can be quickly advanced—in the next one-to-two years—without extensive funding or design requirements. These improvements may include flexible bollards, roadway painting, planter/cone bump-outs, and other temporary construction activities that replicate the intended effects of long-term improvements that would take three to ten years, or longer. In many cases, implementing these “quick-win” projects can demonstrate the proposed benefits to community residents and build support for the corresponding long-term implementation. They also provide an excellent opportunity to solicit additional feedback from stakeholders and modify the final design to address community concerns that may arise.

### PLANNING & PRELIMINARY DESIGN

Once a project has been selected for final implementation, the first major step is to complete the preliminary design, including a thorough assessment of existing conditions, needs, challenges, and refined costs. While the preliminary planning completed to date for the proposed recommendations will provide a good starting point, additional stakeholder outreach and field analysis may be required to ensure the project reflects the current goals and values of community members. Design concepts should be generated to solicit additional community input and confirm the project specifics align with overall junction goals. All the design work completed in this step should be rooted in the purpose and need defined for the project by the community members and project stakeholders.

### DATA-DRIVEN ANALYSIS

A project cannot be successfully implemented if there is not a clear understanding of the requirements for implementation, existing environmental constraints, and the potential impact of the final improvements. Carrying the recommendations within this study forward, specific improvements require more extensive operational, safety, and environmental analyses prior to being initiated. During the data-driven analysis phase, stakeholders and agency resources will work to analyze the existing project conditions and develop an action plan for all required documentation and permits. This process will likely involve extensive coordination with partner agencies at the local- and state-level depending on the scope of the project. Project supporters will also analyze the proposed

concept designs to determine if innovative treatments could potentially be included in the final design. Such treatments should be approved by MDOT SHA and clearly documented to ensure they can continue to be used if successful. Finally, stakeholders should review the project area to ensure all required right-of-way has already been acquired. If this is not the case, a plan for obtaining required right-of-way should be formulated and property owners should be engaged.

### PROJECT FUNDING

The most thoroughly planned and well-designed project cannot be built without funding. Thus, it is critical to get a head-start on identifying sources of project funding and mobilizing the key stakeholder agencies. The work group should coordinate directly with MDOT SHA and other local agencies to determine if existing funding is available for potential improvements. Because major projects may require funding from multiple sources, project supporters should establish a preliminary funding plan and ensure stakeholders are coordinating with one another to clearly define funding responsibilities. Community members should also identify non-agency sources of funding, such as grants and fellowships, that can not only be used for the project but leveraged to solicit additional matching funds. In some cases, project supporters may need to develop action plans to engage local officials and encourage them to allocate long-term funding for major project implementation.

### FINAL DESIGN

With funding identified, concepts generated, and detailed data analysis completed, the final design process can begin. During this phase, the existing concepts and analysis are refined to produce final design documents that can be used for project construction. Additional deliverables required for permitting reviews are assembled and reviewed by stakeholders to ensure they are ready for submittal. Time should be allocated for a final round of public input and stakeholder engagement prior to finalizing the project documents. Construction cost estimates and schedules should be finalized and reviewed with the relevant agencies to ensure the funding previously secured is adequate and available.

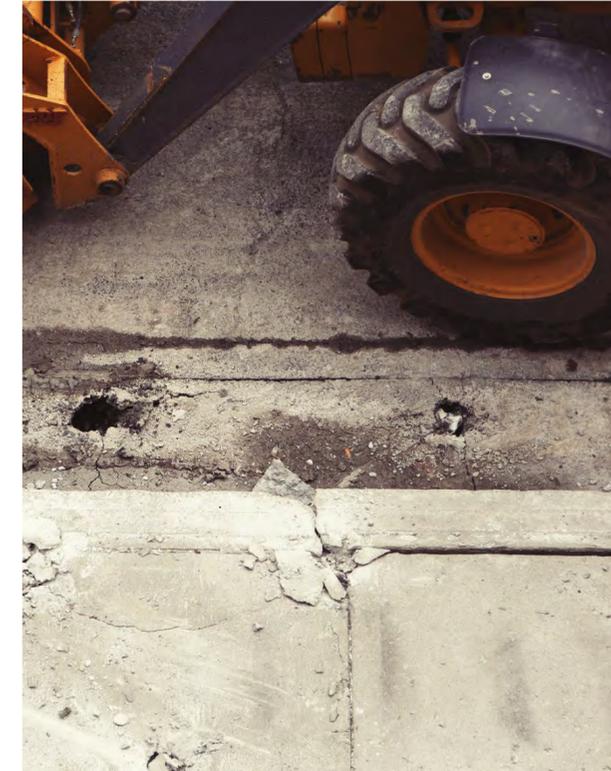
## CONSTRUCTION

Prior to the start of actual construction, community members should coordinate with agencies to fully understand the logistics and potential community impacts throughout the project implementation. Once construction starts, project stakeholders should work to actively communicate progress updates to community members. Maintenance of traffic plans and any potential closings should be posted publicly to mitigate delays and congestions potentially caused by construction. Project supporters should leverage social media and neighborhood meetings to promote the current progress and encourage other community members to provide updates to their networks. This type of proactive communication can help prevent grievances and backlash that could potentially delay project progress.

## Engagement & Innovation

### COMMUNITY CHAMPIONS

Following the project development process established in the previous section will go a long way towards setting up future Takoma Junction improvements for success. However, the best way to ensure a newly constructed project continues to operate and address the initial community vision is to build a sense of local ownership. People who feel involved and connected to a project are more likely to take care of the facility and become active advocates for similar improvements in the future. To establish and promote this sense of ownership, the Takoma Junction community should assemble a group of community champions responsible for mobilizing project support and coordinating stakeholder involvement among residents, community groups, and third-party stakeholders.



“ Enhance the quality of life for Maryland’s citizens by providing a balanced and sustainable multi-modal transportation system for safe, efficient passenger and freight movement.”

*Mission of the Maryland Department of Transportation*

## Context & Innovation

Throughout the project development process, many different types of roadway treatments and infrastructure improvements will likely be proposed by project stakeholders. While many of these proposed solutions may already be established roadway treatments previously implemented elsewhere in Maryland, MDOT SHA recognizes that the unique characteristics and context of Takoma Junction may require new treatments that have yet to be implemented at the State level. Using only treatments previously implemented greatly limits flexibility and may result in projects that do not fully address the goals and vision of community stakeholders.

To this end, the project development process (Figure 24) has been tailored to accommodate the review and analysis of innovative treatments for inclusion in the MDOT SHA Context Toolbox. This Context Toolbox is an ever-changing collection of infrastructure improvements and roadway treatments that are implemented based on the surrounding context area of a given project. They are tools that have been shown to address livability and safety goals based on the surrounding density, land-use, and development types. During the preliminary design and data analysis phases, new treatments can be presented to MDOT SHA for inclusion in the Context Toolbox. While these treatments still must be approved by MDOT SHA prior to actual implementation of any projects, the process enables community members and project stakeholders to develop context-specific solutions to the issues they are facing on a day to day basis. If successful, these treatments can be replicated on future projects and used to inspire additional innovative treatments for Takoma Junction.

## STEPS TO IMPLEMENTING INNOVATIVE TREATMENTS AS DESIGN ELEMENTS

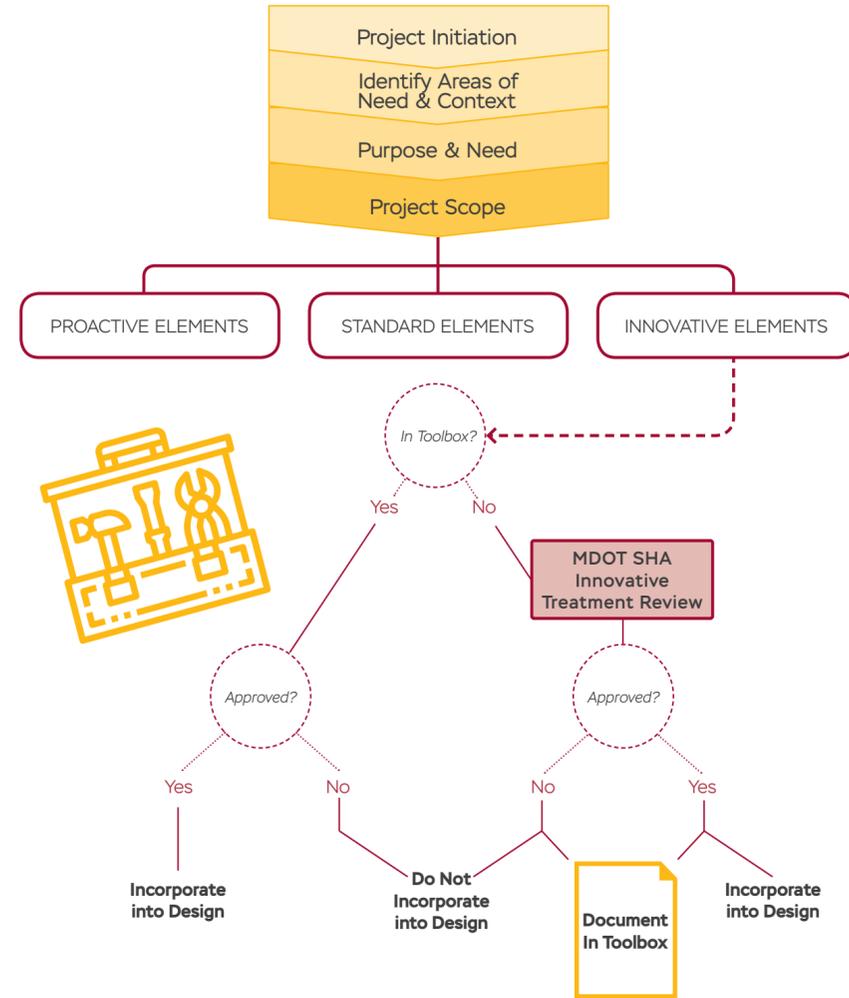


Figure 35. MDOT SHA Project Development Process Diagram



## PROMOTING OWNERSHIP

Community champions can help promote a sense of ownership by establishing re-occurring meetings to review the status of projects and discuss ongoing issues. These discussions can be stand-alone meetings or incorporated into existing community meeting agendas. Such events provide an excellent forum to engage additional stakeholders and develop strategies to advocate for the proper care of new facilities. Additionally, community members can use these meetings to discuss lessons learned during the entire project development process and prioritize future improvements based on current community needs. Some third-parties could even be engaged for sponsorship opportunities in which they pledge ongoing resource support for projects in exchange for promotion and naming opportunities.

## TACTICAL STRATEGIES & INNOVATION

Another potential benefit of establishing community champions is the ability to promote and test innovative strategies. As noted in the project development process, many aspects of potential improvements can be implemented using relatively low-cost infrastructure that required significantly less funding and planning. Once established, community champions can work with project stakeholders to test and implement these types of tactical strategies and determine how effective they are for addressing community concerns. Pilot programs and short-term projects can be established to examine the effects of innovative treatments and identify new methods for creating safer, more livable environments. If effective, community champions can then work with MDOT SHA and other local agencies to incorporate these types of innovative treatments into their transportation toolkits. Establishing more innovative and flexible treatments helps build trust between agencies and community stakeholders while establishing additional low-cost options that are specifically tailored to solve issues faced in the Takoma Junction community.



While the Takoma Junction vision is a unique set of goals and proposed improvements developed by local community members, there are often valuable lessons learned and best practices from similar infrastructure projects that can be leveraged by community members. Communities throughout the United States have embarked on similar efforts to implement Complete Streets, expand walkability, improve livability, and revitalize their neighborhood areas. For a high-level overview of similar projects throughout the United States that can be used to help guide project development for Takoma Junction and offer valuable examples of how improvements can be planned, designed, and successfully implemented, refer to the table in Appendix F.

## Prioritization

Determining which projects to implement at Takoma Junction is a critical step in implementing the vision established in this study. Prioritizing certain projects over others is a complex process that depends on a multitude of external factors including, but not limited to, funding availability, existing project efforts, resource availability, and evolving community needs. One of the best ways to simplify this process and attempt to develop a priority project ranking is to examine how the proposed projects reflect the community values established by Takoma Junction residents. Because the vision for Takoma Junction is rooted in the four values listed here—Complete Streets, Walkability, Livability, and Revitalization—the projects that will have the largest impact in each of these areas should be prioritized for implementation.

Having established these four community values, the proposed improvements in this study can now be evaluated against these prioritization criteria. For each potential project, the scope of work should be analyzed in the context of each value to determine if it will provide significant improvements for the corresponding factor. The projects that provide the greatest combination of benefits in these areas should be prioritized for implementation. Additionally, the prioritization process can help identify scope gaps in existing recommendations that may need to be modified prior to moving forward with a specific project. As with any proposed project reviews, community members and stakeholders should be intimately involved throughout the prioritization review process.

## COMPLETE STREETS

In many communities today, the roads are designed and engineered to accommodate automobile traffic over everything else, creating unsafe conditions for other transportation modes. The philosophy of Complete Streets refers to designing and operating roads to enable safe access for users of all transportation modes, including pedestrians, bicyclists, motorists, and transit riders. A complete street contains infrastructure that support multiple transportation modes, such as bike lanes, concrete bump-outs, transit priority lanes, or narrower travel lanes. This design philosophy helps create a safer, more livable environment for citizens regardless of which transportation mode they utilize most often. Additionally, incorporating complete streets into communities has been shown to provide safety, equity, public health, and quality of life benefits for residents.

## WALKABILITY

At some point during a commute, everyone is a pedestrian. It is therefore extremely difficult for a place to feel safe, livable, and accessible without an adequate pedestrian infrastructure. A neighborhood's walkability is a measure of how easy it is to access different areas of the community by walking and typically reflects the amount of pedestrian-oriented infrastructure present. Studies have shown that walkability offers several benefits to communities, including better public health, a cleaner environment, and economic benefits due to the decreased need of automobile ownership. To improve walkability, neighborhoods should focus on building complete streets that connect major social and cultural institutions together with high-quality, safe infrastructure.

## LIVABILITY

The livability of a given community is a broad term that can refer to many different aspects of the surrounding area. In general, a livable community enables easy access to community features, feels safe to travel in, and has an excellent variety of affordable housing and transportation options. The ability to which residents can engage in the economic, social, and cultural opportunities of a given community is also a major factor for livability. When considering livability as a characteristic for project prioritization, the focus should be largely on existing transportation and placemaking factors since projects addressing these issues are within the scope of this vision study. By creating safe transportation options for residents, projects can improve community livability by providing residents with additional independence, convenience, and opportunity. Other factors such as housing and land-use will likely need to be addressed by different types of projects not included in this prioritization exercise.

## REVITALIZATION

While existing communities may have many assets, just as often they may have blighted or unsafe areas that have suffered from a lack of investment and are undesirable from a quality of life standpoint. Revitalization is the process by which community and external resources are used to transform these blighted areas into safe, accessible, interesting places that will positively contribute to community life. There are multiple strategies and processes by which revitalization takes place, and communities should be sure to establish clear goals and desired outcomes before embarking on revitalization projects. In general, revitalization should aim to address specific areas of concern while ensuring that the newly revitalized areas and resources are still accessible for all community members.

## Phasing

The project prioritization process ensures that the projects implemented will have the largest positive impact on the values and community characteristics established by the *Takoma Junction Vision Study*. However, simply prioritizing projects will not ensure their implementation given existing resource constraints and the multitude of external factors that influence how state and local resources are utilized. To this end, the community members of Takoma Junction should work to develop a project phasing approach. Phasing plans typically segment projects into short, medium, and long-term components that can be implemented at different times. Phasing projects in this manner allows the agencies involved to adequately plan and allocate the resources required to build and maintain the proposed infrastructure. Phasing also enables communities to quickly implement lower-cost solutions and build community momentum for larger projects by showcasing the benefits of these "quick-wins". To the right is a general summary of the typical phasing categories for infrastructure projects.

It is important to remember that project phasing is not set in stone. Because there are many external factors at play, community members should remain engaged with agencies to identify opportunities to fast-track or streamline project implementation where possible. Community members should also be willing to show flexibility when it comes to implementation to help align desired improvements with existing agency resources when possible. Project stakeholders should continually solicit feedback from community members as projects are implemented to update the phasing approach and continue to prioritize improvements that are of the greatest benefit to Takoma Junction.

## Quick Wins (1-2 Years)

Projects classified as short-term are typically improvements that can be implemented for a relatively low cost through existing safety, asset management, or maintenance programs. Unlike long-term projects that may require significant capital funding, short-term projects can typically be mobilized and installed within existing budgets without significantly hindering other infrastructure projects. Short-term projects should typically be focused in areas where the demonstrated impact can be captured and experienced by community members as a way to encourage support for longer term improvements. Examples include painted crosswalks, traffic calming, flex-post bump-outs, and public art installations.

## Long Term (3-10 Years) + Future Projects

Longer-term projects are ones that are more significant in scope and will likely involve more detailed assessment, engineering, and design work than quick-wins. Thus, the timeline for implementation extends beyond two years. Capital budgeting allocations may range, and local and state funding may need to be supplemented by grants or local fundraising. Treatments from these projects will likely be more permanent in nature. As a result, they may require additional stakeholder and agency coordination prior to final design and construction. Examples include concrete bump-outs, ADA-ramp upgrades, painted transit lanes, and new street trees.

Future projects typically have the largest scope, budget, and implementation timeline compared to quick-wins and other shorter-term actions. They can be complex projects that require significant work and resources at each stage of the project development process. A complex project may require right-of-way acquisition or detailed environmental reviews. Due to the size and scope of these projects, an extensive effort may be required to secure funding commitments. Long-term projects will also require extensive community outreach to ensure the final improvements align with the goals of community members. Examples include roadway re-configurations, sidewalk extensions, roadway re-constructions, and protected bike lanes.



## Conclusion & Next Steps

The residents of Takoma Park have established a clear vision for the future of Takoma Junction. An established set of priorities and a range of potential improvement concepts sets the stage to begin implementing the types of livability and safety improvements that will make Takoma Junction a safer and more walkable community.

Residents and businesses should continue to mobilize work groups and engage local agencies. Establish lines of communication to advocate for treatments included in the community vision. Encourage community participation in the local comprehensive planning process to further document the community's long-term vision for Takoma Junction.

Although MDOT has not yet identified funding for future improvements, the foundation laid in this document will help to ensure that potential future projects represent the shared community goals and vision for Takoma Junction.

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# APPENDICES

## Appendix A - Public Outreach

Included in this Appendix are several materials used during the Public Outreach Process. Public meetings were held on June 4th, 2019 and June 10th, 2019.

**MDOT** MARYLAND DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
Takoma Junction Vision Study • June 2019 Workshops  
**Come to one or both of the MDOT SHA Workshops!**

MDOT SHA will host two workshops to help shape the transportation vision for Takoma Junction. Attendees should arrive at 6:00 p.m. and plan to stay for the entire workshop to participate in all the group activities. The workshops will not be the same, as different activities and objectives are planned for each. *While you do not need to attend both, we encourage you to!*

Part I:  
Crafting a Vision Statement  
Tuesday, June 4, 2019  
**Takoma Park Seventh Day Adventist Church Center**  
6810 Eastern Ave., NW  
Washington, DC 20012  
6:00 p.m. – 8:30 p.m.

Part II:  
Bringing the Vision to Life  
Monday, June 10, 2019  
**Takoma Park Seventh Day Adventist Church Center**  
6810 Eastern Ave., NW  
Washington, DC 20012  
6:00 p.m. – 8:30 p.m.

Parking is available in the Takoma Park SDA Church Center's lot located behind the building at 2nd Street and Laurel Street. Please let us know which date(s) you can make, so refreshments can be provided accordingly. You can RSVP at the link below:  
<http://bit.ly/tjvsworkshops> by Friday, May 24, 2019.

**TAKOMA JUNCTION VISION STUDY**  
WORKSHOPS AND SURVEY ANNOUNCEMENT

**TUESDAY JUNE 4**  
PART 1  
CRAFTING A VISION STATEMENT

**MONDAY JUNE 10**  
PART 2  
BRINGING THE VISION TO LIFE

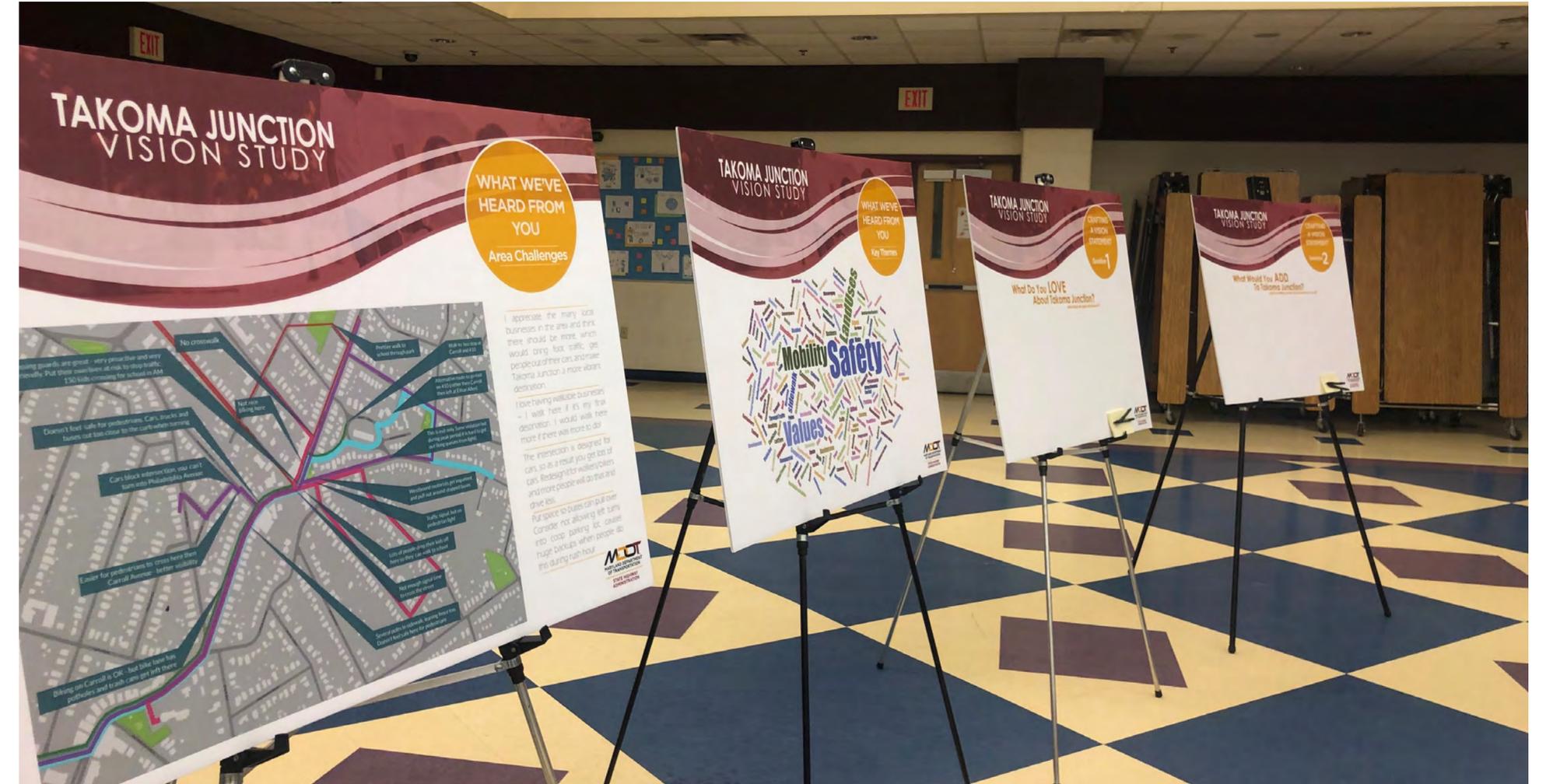
**HELP SHAPE THE FUTURE OF TAKOMA JUNCTION**  
Two workshops will be held this June to help shape the vision for transportation at Takoma Junction. Attendees should arrive at 6:00 p.m. and plan to stay for the remainder of the workshop in order to participate in group activities. The workshops will not be the same, as different activities and objectives are planned for each. While it is not required that you attend both, it is encouraged!

**SURVEY**  
The survey will be open from May 10-June 10. Visit our website to share your long-term vision for transportation and mobility at Takoma Junction.  
<http://bit.ly/tjvs1>

PARKING IS AVAILABLE IN THE TAKOMA PARK SEVENTH DAY ADVENTIST CHURCH CENTER'S LOT LOCATED AT 2ND STREET AND LAUREL STREET

Questions or assistance?  
Kandese Holford, MDOT SHA Regional Planner, Regional & Intermodal Planning Division  
707 North Calvert Street, C-502, Baltimore, Maryland 21202  
kholford@mdot.maryland.gov | 410-545-5678

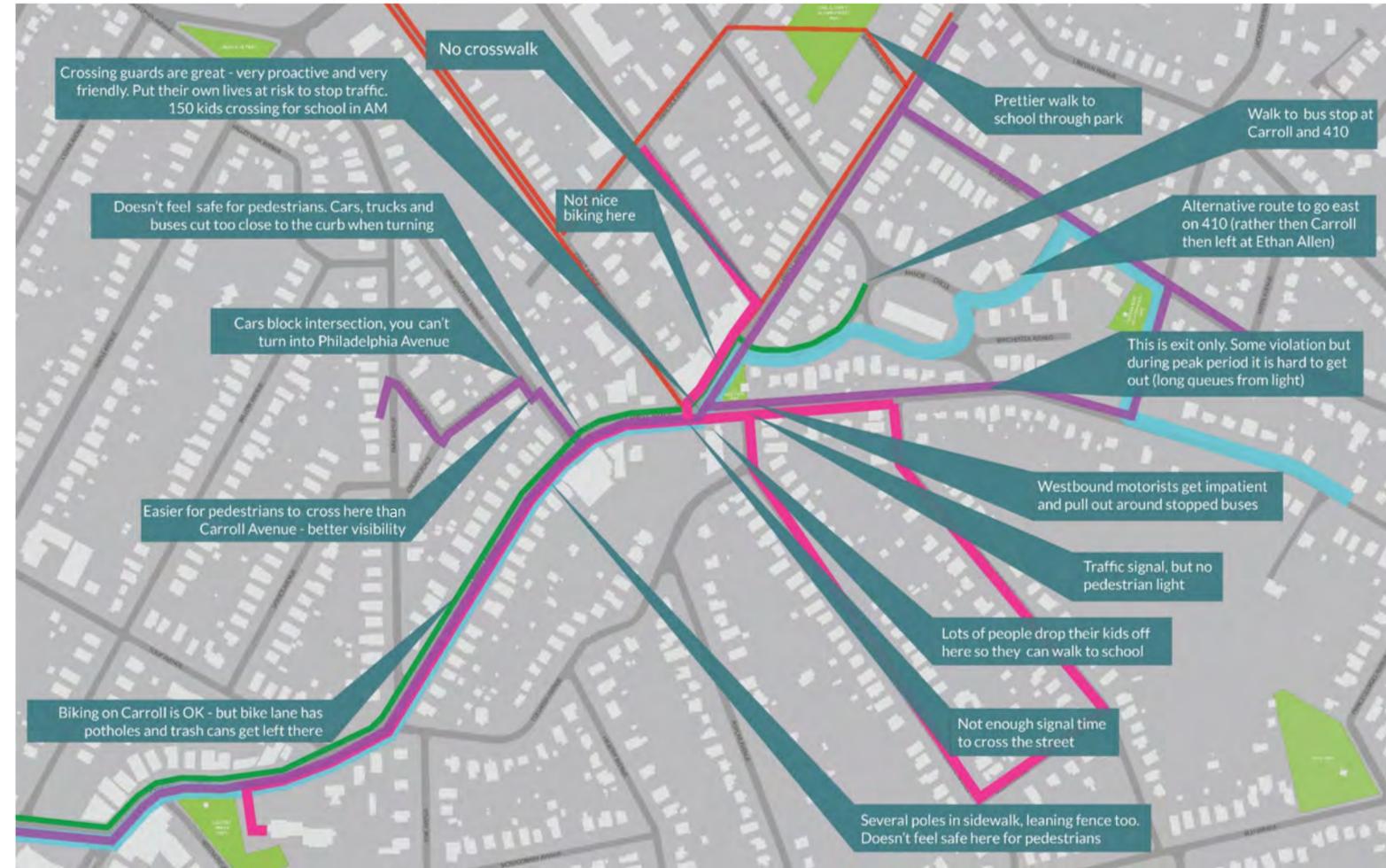
**MDOT** MARYLAND DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION





## Appendix C - Preliminary Comment Map

The map below contains preliminary feedback from local residents regarding safety, livability, and connectivity issues in the Takoma Junction study area. These items were incorporated into the Vision Statements and will ultimately help inform future improvements for Takoma Junction.



## Appendix D - Vision Statements

The following section contains several preliminary Vision Statements that were developed by community members during the public outreach event on June 4th, 2019. These initial statements were reviewed and modified based on additional stakeholder input and certain elements were incorporated into the final Vision Statement for Takoma Junction.



1

Historic Takoma Junction is more than just a commuter route; it is a thriving community and commercial hub, serving residents and visitors of every age, ability, and income with welcoming and independent shops, services, a local natural food store and green, shady public gathering spaces. The junction is safely accessible by foot, bike, transit and private vehicle. It is the physical center of our proudly progressive People's Republic where we can gather, talk politics, hold protests, listen to music, buy our groceries, and eat an ice cream cone in the shade.

2

Takoma Park Junction is a welcoming inclusive, historic, creative space that reflects Takoma Park values of sustainability, inclusivity, creativity, diversity, and respect for nature. It offers the local community an opportunity to meet, relax, take advantage of local goods and services, and enjoy public and green spaces. It is easily accessible to bikers. It is a magnet for community events, artistic output and provides an opportunity to meet people and ideas we would not otherwise meet.

## TAKOMA JUNCTION VISION STUDY

3

Takoma Junction will be a vibrant diverse place of connection where our families, free-range children, elderly, people with disabilities, pedestrians, cyclists and pets will gather to talk, celebrate, sit, eat, and play indoors and outdoors or to safely pass through.

The historic Takoma Junction is more than a commuter through fare. It connects diverse communities and provides a friendly, walkable, attractive, and surprising destinations.

4



## TAKOMA JUNCTION VISION STUDY

5

Takoma Junction is recognized as one of the focal points of the community. It's a place where businesses can thrive, people can gather and interact, all modes of traffic can flow safely and efficiently, and a broad cross-section of residents feel connected, welcome, and want to return regularly. It reflects Takoma Park's commitment to environmental economic and social development, and small-town character and history.

Takoma Junction will transform from a primarily traffic-centric junction to a place prioritizing the intersection of a full diversity of people and honoring the history of the community. It will be vibrant, historic environmentally sustainable, inclusive and human-scaled place where there will be gathering space and a balance of social functions and essential services, including support for minority-owned businesses and a walkable grocery store.

6



## TAKOMA JUNCTION VISION STUDY

7

Takoma Junction is a safe, attractive, diverse, and transformative crossroads that brings a sense of place, where all people can come together to shop, live, and work.

Takoma Junction will be a balanced, warm, welcoming, safe, eclectic, accessible, calming, energizing, less frantic, local neighborhood community center for resources, such as education, food, exercise, community safety services with an emphasis on green spaces, and environmental responsibility with flexibility to sustain existing businesses, residents, and other users (with formal and informal people spaces).

8



## TAKOMA JUNCTION VISION STUDY

9

The word junction is a place where people connect. The Takoma Park Junction will bring the community together for living, working, shopping and socializing for people of all ages and abilities safely. By investing in this neighborhood, the city preserves small town character and community to progress environmental sustainability and diversity for a thriving community.

Takoma Junction is a vibrant, safe and multi-modal sustainable place that balances the tensions between commuters passing through and community members enjoying the eclectic mix of commercial and social opportunities.

10



# TAKOMA JUNCTION VISION STUDY

11

Historic Takoma Junction is an authentic and welcoming community destination in the heart of a neighborhood, with independent small businesses and restaurants, where motorists, pedestrians, cyclists, transit users and school kids can navigate safely, all with a small-town feeling. Large public spaces host community events.

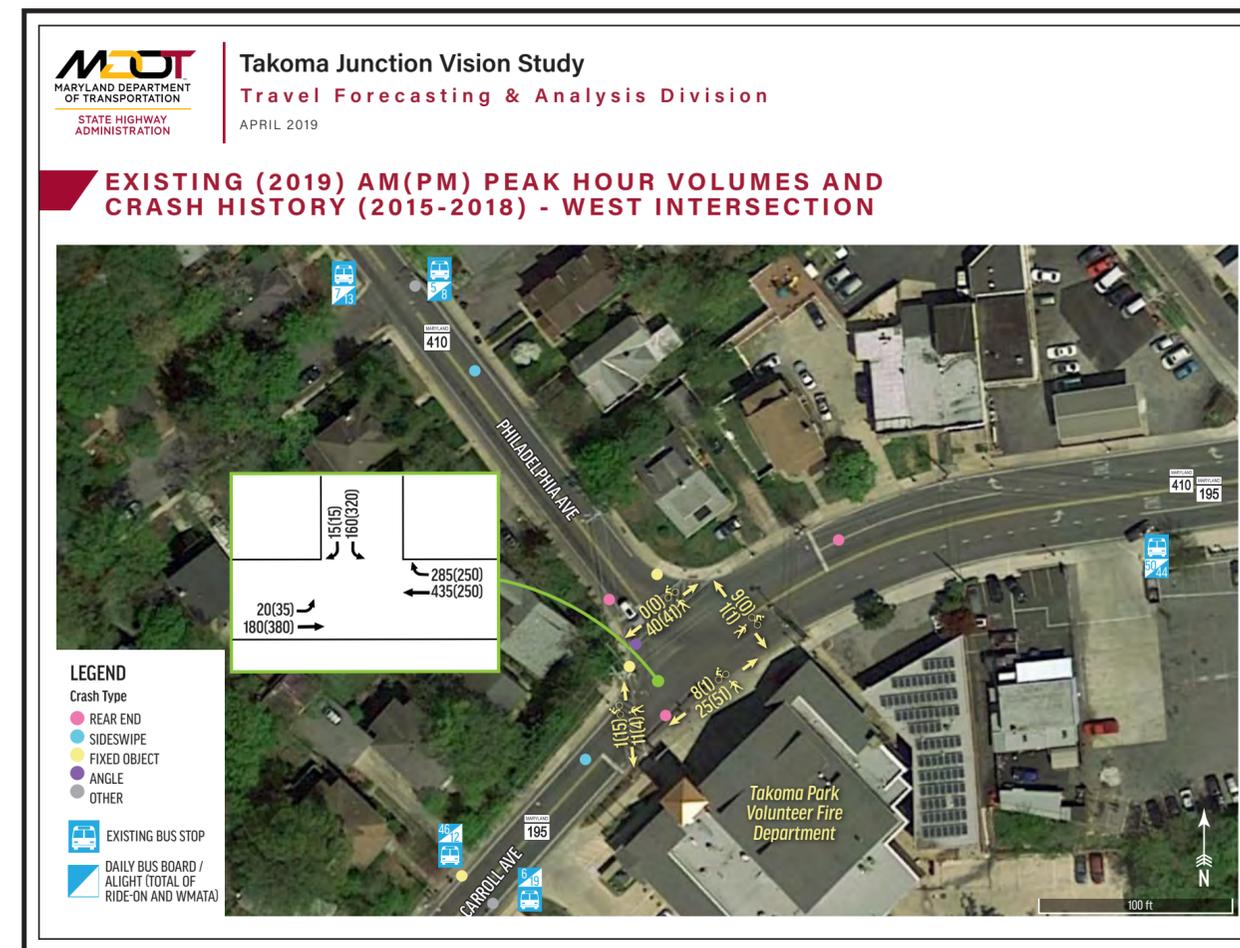
Takoma Junction will be a welcoming, safe, vibrant, funky, accessible, walkable, inclusive community and transit hub, where people of all ages and cultures including residents, consumers, visitors and workers can access locally owned businesses providing goods and services in an attractive, historic and contemporary, environmentally sound location.

12



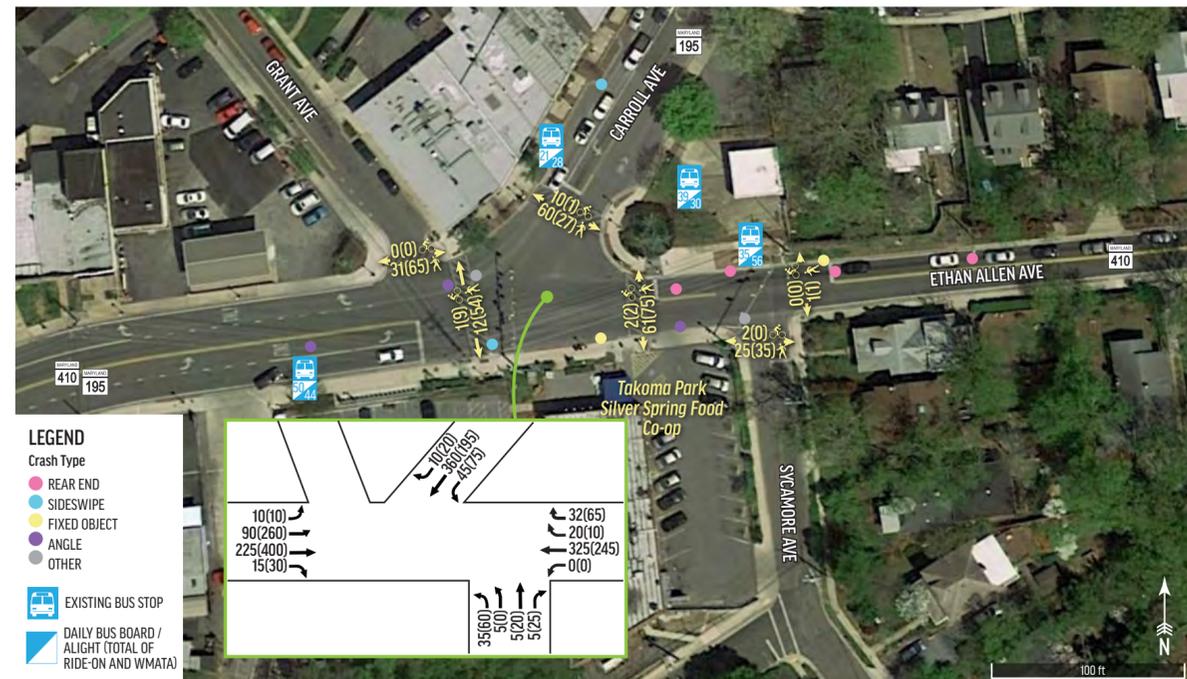
## Appendix E - Traffic Counts

The following maps show traffic counts for vehicles, bicyclists, and pedestrians at locations in Takoma Junction, as well as crash data at those same locations. This analysis was prepared by MDOT SHA's Travel Forecasting & Analysis Division. The maps were presented at public events to display existing traffic conditions and help inform the discussions.





**EXISTING (2019) AM(PM) PEAK HOUR VOLUMES AND CRASH HISTORY (2015-2018) - EAST INTERSECTION**



**Appendix F - Case Studies**

While the vision for Takoma Junction vision is a unique set of goals and proposed improvements developed by local community members, there are often valuable lessons learned and best practices from similar infrastructure projects that can be leveraged by community members. Communities throughout the United States have embarked on similar efforts to implement Complete Streets, expand walkability, improve livability, and revitalize their neighborhood areas. The table below provides a high-level overview of similar projects throughout the United States that can be used to guide project development for Takoma Junction. Although some example projects are more similar in scope than others, all of the implementations noted below provide valuable examples of how community improvements can be planned, designed, and successfully implemented.

PROJECT	GOAL	TREATMENTS IMPLEMENTED	RESULTS	LESSONS LEARNED
West Club Boulevard	<ul style="list-style-type: none"> <li>Improve public safety at a dangerous bus stop directly across from a shopping mall</li> </ul>	<ul style="list-style-type: none"> <li>Continental crosswalks</li> <li>Mid-block crossing with pedestrian refuge island</li> <li>Road diet with additional dedicate space for buses</li> <li>Public art in crosswalks</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in median driving speeds from 33 MPH to 29 MPH</li> <li>Increase in percentage of drivers yielding to pedestrians from 0% to 20%</li> <li>Improved feeling of safety for pedestrian and transit riders</li> </ul>	<ul style="list-style-type: none"> <li>Different outreach methods are preferable depending on the target audience</li> <li>Collaborate with unexpected allies and partners</li> <li>Don't miss chances to keep the momentum going</li> </ul>
4 Mile Post	<ul style="list-style-type: none"> <li>Provide a safe route for pedestrians and cyclists to cross between residential neighborhoods and access a local greenway</li> </ul>	<ul style="list-style-type: none"> <li>Road diet with dedicated shared use path for pedestrians and cyclists</li> <li>Rectangular Rapid Flash Beacon (RRFB)</li> <li>Thermoplastic crosswalk markings</li> <li>Curb extensions</li> </ul>	<ul style="list-style-type: none"> <li>Improved driver yielding behavior at beacon location</li> <li>Reduced number of pedestrian fatalities</li> <li>Leveraged temporary improvements into permanent projects for better pedestrian safety</li> </ul>	<ul style="list-style-type: none"> <li>Communicate early and often</li> <li>Use the project as an opportunity to develop new relationships and partnerships</li> <li>Do not give up after receiving initial push-back (even if from the Dept. of Transportation)</li> </ul>
Lincoln and Frankstown Avenue	<ul style="list-style-type: none"> <li>Implement safety projects and establish new partnerships with neighborhoods that have been historically under-served by the Dept. of Transportation</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian refuge islands</li> <li>Flex post bump-outs</li> <li>Traffic signal modifications for dedicated pedestrian crossing phase</li> <li>Dedicated left-turn lane</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in pedestrian crashes</li> <li>Fewer automobile crashes due to dedicated left turn lane</li> <li>Improved driver awareness of pedestrian at intersections and crossings</li> </ul>	<ul style="list-style-type: none"> <li>Community engagement should be proactive and not responsive</li> <li>Leverage existing partnerships wherever possible</li> <li>Look for win-win opportunities to make the street safer for everyone</li> </ul>
Curry Ford Road	<ul style="list-style-type: none"> <li>Improve crossing safety for pedestrians and cyclists along a commercial arterial with a history of pedestrian-related crashes</li> </ul>	<ul style="list-style-type: none"> <li>Road diet to reduce travel from 5 to 3</li> <li>Protected cycle track</li> <li>Mid-block crossing with public artwork</li> <li>Conflict zone markings</li> </ul>	<ul style="list-style-type: none"> <li>Slower vehicle speeds observed in study area</li> <li>Fewer pedestrian and bicycle related crashes</li> <li>Improved working relationship between city and county</li> <li>No increase in automobile travel times</li> </ul>	<ul style="list-style-type: none"> <li>Collaboration across jurisdictions is critical to project success</li> <li>Utilize thorough community engagement to build support for safety projects especially when these projects come with trade-offs for driving speed</li> <li>Track all public feedback</li> </ul>
Bryan Avenue Intersections	<ul style="list-style-type: none"> <li>Address safety issues created by confusing intersection design along major corridors</li> </ul>	<ul style="list-style-type: none"> <li>Corridor access management using median extensions</li> <li>Pedestrian refuge islands at crossings</li> <li>Bump-outs at intersections</li> <li>Road closures using flex-posts</li> </ul>	<ul style="list-style-type: none"> <li>Slower vehicle speeds observed at all intersections</li> <li>Improved safety for pedestrians, cyclists, and transit riders</li> <li>Limited traffic delays from new closures</li> </ul>	<ul style="list-style-type: none"> <li>Engage the community early and let them lead the way</li> <li>Leverage available resources and partnerships</li> <li>Short term projects provide excellent flexibility for minor modifications</li> </ul>
Traffic Calming Pilots	<ul style="list-style-type: none"> <li>Address recurring, dangerous speeding problems along neighborhood streets</li> </ul>	<ul style="list-style-type: none"> <li>Traffic circles at major intersections</li> <li>Flex-post and planter bump-outs</li> <li>Chicanes along neighborhood roads</li> <li>Public art in bump-outs and intersections</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of drivers traveling 25 MPH or less increased at all project locations</li> <li>Shortened crossing distances for pedestrians</li> <li>Less confusing intersections</li> </ul>	<ul style="list-style-type: none"> <li>Temporary construction projects are a great opportunity to test out new ideas</li> <li>Trust with the community goes both ways</li> <li>Local resources can form an incredible volunteer base</li> </ul>