# **Transportation & Urban Design Elements**



## **TRANSPORTATION & URBAN DESIGN ELEMENTS**

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The following section highlights the goals of proposed urban design and transportation elements for the 72nd Avenue Study. This includes general roadway and streetscape improvements, furnishings and fixtures, landscape elements, and crossing treatments. Additional feasibility and implementation studies are recommended for all described elements. In addition to the upfront installation costs, these elements will require ongoing maintenance to ensure the 72nd Avenue streetscape continues to be a safe, high-quality environment for users in the years to come. See <u>The Plan for 72nd Avenue</u> section for location-specific recommendations for each of the urban design and transportation elements.

## **Transportation Elements**

#### **Repurposing Travel Lanes**

Goal: Accommodate multimodal travel and enhance safety outcomes through removing and repurposing through-travel lanes, center lanes, striped bike lanes, and right-turn lanes.

#### **Pedestrian Travel Improvements**

Goal: Provide a connected, continuous, and safe route for pedestrians by widening sidewalks, separating walkways from the roadway with planting and/or amenity areas, and transforming sidewalks into multi-use paths to accommodate two-way pedestrian travel as well as bicyclists.

#### **Bikeway Improvements**

Goal: Provide a connected, continuous, and safe route for bicyclists in-line with proposed future facilities by upgrading existing striped bike lanes and utilizing wayfinding to direct bicyclists to parallel alternative routes where roadway widths and available right-of-way do not allow for desired upgrades on 72nd Avenue itself.



Figure 16: Widened Sidewalk16



Figure 17: Neighborhood Bikeway

#### **Crossing Materials and Signage Enhancements**

Goal: Apply simple, low-cost treatments to existing or new crossings to increase pedestrian safety and motorist awareness.

#### **Crossing Infrastructure**

Goal: Modify existing crossing facilities to be safer and more visible to both pedestrians and motorists.

Median Refuges aid in shortening crossing distances, reduce the time a pedestrian is exposed to traffic, and can allow for two-stage crossings for those unable to clear the intersection in one phase.

**Raised Crosswalks** provide several benefits to users, including greater pedestrian visibility for drivers, slowing down vehicles approaching the intersection, and enhancing accessibility for users.

#### **Medians**

Goal: Encourage safe driving conditions by limiting cross-lane car-on-car collisions, while accommodating plantings as appropriate widths exist, ensuring appropriate sight distances are mainted for all users, and including clear zones for maintenance vehicles.

Where feasible at crossings, medians should provide refuge. Medians can either be hardscape or planted, with planted medians raised in sloped tiers to allow for greater soil depth. Plantings are recommended for medians with a width of greater than 8 feet.

#### **Enhanced Transit Stops**

Goal: Recognizing that RTD route 72 is an important regional route, enhance the user experience at critical stops by adding amenities such as new seating, new signage and/or map and timetable information, trash receptacles, and shelters or awnings to provide shade/ refuge for users.

Currently, RTD route 72 runs on an hourly frequency and does not operate on Sundays. Reducing headways to 30 minutes or higher frequency and adding Sunday service would increase reliability and may increase ridership.





Figure 18: Widened Sidewalk



Figure 19: Water-Wise Landscaped Median



Figure 20: Enhanced Transit Stop

72nd AVENUE CORRIDOR STUDY

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#### **Enhanced Driveway Crossings**

Goal: Make driveway crossings more visually evident to both vehicles and pedestrians by adding colored concrete or pavers.

#### **Traffic Signals**

Goal: Increase multimodal visibility and safety through signalization tweaks or modifications.

#### Leading Pedestrian Interval (LPI)

LPIs are phase adjustments that give pedestrians a 3- to 7-second advanced walk phase to enter an intersection prior to the parallel green signal beginning. This head start establishes the pedestrian's right of way in the crosswalk and makes them more visible to turning vehicles. LPIs have been shown to reduce the chance of a vehicle-pedestrian collision by as much as 60 percent. Westminster staff should evaluate and implement LPIs at all feasible signalized intersections along the 72nd Avenue corridor.

#### Pedestrian Hybrid Beacon (PHB)

PHBs are a preferred pedestrian crossing treatment when higher-speed traffic is present and a need exists for a crossing between existing enhanced or signalized crossings. When a PHB is activated (either by pedestrians pushing a button or through passive detection), the signal head activates flashing yellow lights to warn vehicles to slow down, then switches to a solid yellow light, finally switching to solid red to indicate the need for vehicles to stop. At this point, a walk signal appears to indicate pedestrians can begin crossing.



Figure 21: Leading Pedestrian Interval



Figure 22: Pedestrian Hybrid Beacon

### **Urban Design Elements**

#### **Urban Design and Streetscape** Improvements

Goal: Enhance sidewalk and amenity zones in a highly commercialized portion of the study area from Meade Street to Eliot Circle to foster business revitalization, promote beautification, reduce the urban heat island effect, and provide an enhanced experience for corridor users.

Another consideration for this area is to recycle and/or repurpose the existing concrete planters. Currently, most of these are empty and unused, with only a few containing soil and tree plantings. Additional investment into the reuse or recycling of these fixtures into platforms for seating, public art, lighting, and/or planting should be explored where feasible or aligned with other public realm investments.

#### Landscaping

Goal: Provide beautification alongside safety, comfort, and health benefits by reducing the urban heat island effect, improving air quality, reducing stormwater runoff, and lowering vehicle speeds.

Planting should generally be hardy, low-water, and low-maintenance species, with a preference toward native species. Native species are more resilient to Colorado's climate and can benefit local flora and fauna.

Choosing a range of species is recommended, including those with notable features in spring, summer, or fall, to ensure year-round visual appeal. In all planting areas, rock mulch is the recommended planting medium, as it allows for easy maintenance. Within medians, plantings should be clustered with decorative rock or mulch between clusters to allow for easy maintenance. Median plantings should require low maintenance and water needs and be small and hardy to survive harsh conditions, especially in winter months. A range of low-lying native species fit this need, while also providing varied colors, blooms, and forms for general aesthetic appearance and seasonal interest.





Figure 23: Amenity Zone Landscaping



Figure 24: Compact Seating Areas



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#### Trees should be placed strategically to limit maintenance, preserve views, and keep sight lines clear. Where possible, trees should be evenly placed, set back from intersections and driveways, and only be located in planting areas large enough to support their growth. In amenity zones, trees can generally be larger than traditional street tree species. In medians, trees should be smaller species to maintain safety for motorists traveling the corridor.

#### Signage and Wayfinding Improvements

Goal: Create a distinctive corridor branding presence that fosters placemaking, orients all users to key amenities/destinations, and increases road safety and motorist awareness.

Directional and route signage is recommended for those traveling along major sidewalks and multi-use paths. Markers noting amenities within the area such as parks and open spaces, civic and cultural destinations/services, and grocery stores are recommended.

Placemaking signage is also encouraged and could promote key neighborhoods or districts (such as the Westminster Station Area). This signage can be integrated into lighting fixtures or public art.

#### Lighting

Goal: Provide an appropriately-scaled lighting environment to encourage corridor activity during nighttime and low-lighting periods and enhance corridor user safety.

In addition to larger street fixtures, smaller pedestrian lights should be considered along wider multi-use paths at England Park, and along the streetscape improvement zone between Meade Street and Eliot Circle.



Figure 26: Dark Sky Roadway Lighting

Figure 25: Example Wayfinding Signage

#### **Public Art**

Goal: Create a cohesive, attractive, and recognizable character area along 72nd Avenue. Art should be integrated within streetscape elements, including furnishings, fences and utility screens, lighting, signage, and wayfinding elements. Further coordination and engagement with community members on art fixtures and placement is recommended.



Figure 28: Decorative Space-Conscious Art



Figure 29: Mobility-Themed Art





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Figure 27: Path Integrated Art Installation

