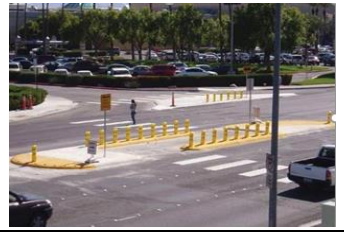
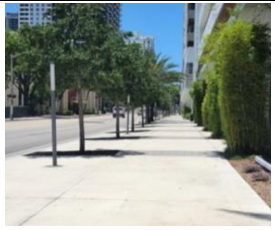
Example	Tool	Category	Definition	Guidance
	Roundabout	Intersection	Circular intersections with specific design and traffic control features. These features include yield control of all entering traffic, channelized approaches, and appropriate geometric curvature to ensure that travel speeds on the circulatory roadway are typically less than 30 mph.	At intersections: With heavy left-turn traffic or with similar traffic volumes on each leg With crashes involving conflicting through and left-turn vehicles With limited room for storing vehicles Where there are limited nearby driveways
	Street Trees	Pedestrian	Trees planted in public right of way to provide shade for pedestrians and cyclists.	Appropriate for sidewalks with enough width to allow unobstructed ADA access. Important in high-pedestrian traffic areas, mixed use districts and downtowns. May also be planted in medians.
	Pedestrian Refuge Island	Pedestrian	A median in the roadway that can accommodate pedestrians crossing the street.	Should be located at intersections and mid-block locations: -With excessive roadway widths -With high pedestrian traffic -Where available right-of-way is present -With known pedestrian safety issues
	Furnishings	Pedestrian	Benches, bus shelters, trash receptacles, tables, chairs, and water fountain installations along sidewalks which are designed to enhance walking environments.	Can be located on sidewalks, plazas, park and transit stop locations to create outdoor community space, waiting areas for transit, and other pedestrian amenities.
	Micromobility Parking	Bicycle	Designated areas to park micromobility devices. Usually located on wide sidewalks, repurposed parallel parking spots, or other areas which provide easy access to micromobility devices.	Should be located on sidewalk and intersection locations which don't impede pedestrian access or ADA compliance. Typically should be located at micromobility trip generators.

Example	Tool	Category	Definition	Guidance
	Raised Crosswalk	Pedestrian	A crosswalk that is raised from the roadway elevation, usually to the height of the adjacent sidewalk, to slow traffic.	At intersections and mid-block locations with known safety issues and excessive traffic speeds. Typically located in areas with pedestrian trip generators.
	Wayfinding	Pedestrian	Permanent signs which direct pedestrians or cyclists to important neighborhood amenities and provide other useful information.	Typically located on trails, near transit stops, downtown/commercial areas to direct pedestrians and cyclists to neighborhood amenities and complimentary transportation options.
	Separated Bike Lane	Bicycle	A bike lane that is clearly delineated from automobile traffic, usually with paint or other vertical elements.	Ideal for corridors with: -Available right of way or streets where a road diet is possible -Cycling trip generators - Downtown/commercial areas with high traffic volumes -Primary bike routes identified in a bike master plan Permanent vertical separation, such as parking stops, concrete medians, parallel parking lanes and other devices should be used when possible to provide added protection for cyclists.
	Drop off / up Zones Curbside Management	Roadway	Curbside Management seeks to inventory, optimize, allocate, and manage the curb space to maximize mobility, safety, and access for the wide variety of curb demands	Ideal for downtown and commercial areas where many users/modes are competing for curbside space. Requires right-of-way so curb side uses don't impede traffic flow or pedestrian access.
	Bike box	Bicycle	A designated area marked on roadway pavement where cyclists stop at an intersection in front of automobile traffic.	Used on corridors with existing bike lanes where there may be automobile/cycling conflicts at intersections. Also ideal where cyclists have high left turn volumes at intersections.

Example	Tool	Category	Definition	Guidance
	Bike parking - Bicycle and micromobility parking and storage	Bicycle	Dedicated parking areas for bikes and micromobility devices. May also include lockers to secure devices.	Used at cycling/micromobility trip generators, typical transit stations, commercials areas and downtown to securely store devices.
	Shared Lane Markings	Bicycle	Roadway markings which help identify a designated bike route where cyclists do not have a dedicated bike lane.	Should be used only on low-volume local streets where street design already facilitates slow traffic speeds. Not a substitute for bike infrastructure on primary bike routes, collectors or arterials.
	Bike rack	Bicycle	A metal frame for securing bicycles when they are not in use. They are often placed at bicycle trip generators, including commercial areas, transit stops, high-density residential complexes and recreational areas.	Used at cycling trip generators, typical in commercial areas, high-density residential areas and downtowns. Should be highly visibility and within proximity of front entrances.
	Sidewalks greater than 5 feet in width	Pedestrian	“Pedestrian lanes” that provide people with space to travel within the public right-of-way that is separated from roadway vehicles. Allows for additional street amenities.	Should be standard in high pedestrian traffic areas like downtowns, mixed use neighborhoods and TODs.
	Pedestrian scaled lighting	Pedestrian	Pedestrian lighting specifically shines light on the sidewalk and important to include in street design along with roadway lighting.	Used in commercial districts, downtowns, and residential areas where sidewalks already exist. Also used to improve personal safety in areas with known crime issues.

Example	Tool	Category	Definition	Guidance
	Enhanced Crosswalks	Pedestrian	Pedestrian crossing countermeasures typically used at pedestrian crossings not controlled by a traffic signal or STOP sign. May include pedestrian hybrid beacons, high visibility crosswalks, raised crosswalks, additional lighting, and other features.	May be used in high pedestrian traffic areas such as downtowns, commercial districts and high-density residential areas. Also appropriate for intersections and mid-block areas with known pedestrian safety issues.
	TOD - Transit Oriented Development	Pedestrian	Compact, walkable, pedestrian-oriented, mixed-use communities centered around train stations or BRT stations.	Zoning codes, comprehensive plans and public support are important for TOD implementation. Train and BRT stations with high ridership should be prioritized for increased density and mixed use development. Should be planned in conjunction with rail/BRT service.
	Speed table/cushion	Roadway	Vertical traffic calming used to slow vehicles on local roadways. Wider and flatter than a speed bump in order to improve visibility and reduce wear on cars.	Can be used on local and collector streets where speeding is an issue. Emergency vehicle access will need to be considered during the planning phase. Temporary or movable speed tables can be used to expedite installation.
	Lane Repurposing ("Road Diet")	Roadway	A reduction in the number of traffic lanes on a road in order to allocate additional right-of-way to other modes such as transit, cyclists and pedestrians.	Appropriate on streets where safety and multimodal access should be improved. Specifically where: -Average daily traffic volumes are less than 25,000 per day on a 4 lane road -In higher density commercial, mixed-use and downtown districts where cyclists and transit service conflict with automobile traffic -On high crash 4+ lane urban corridors -On designated primary bike routes where additional right-of-way is needed for bike lanes
	Bump outs	Roadway	Narrowing of a roadway, typically at intersections or mid-block pedestrian crossing locations.	At intersections and mid-block locations: -With visibility issues between drivers and pedestrians -Areas with high pedestrian traffic and known safety issues -At excessively wide intersections with large turn radii

Example	Tool	Category	Definition	Guidance
	Quick-Build infrastructure	Pedestrian	Interim street improvements that are built with low(er) cost, short term materials. It is intended to provide quicker, temporary installation of mobility improvements including bike lanes, crosswalks, curb extensions, and mini-roundabouts.	Can be used for a variety of street components, including bump outs, roundabouts, road diets, bike lanes and pedestrian spaces. Sufficient right of way should exist to accommodate designs. Materials may only last less than a year, so a long term permanent buildout should be planned and funded in conjunction with quick-build projects.
	Rectangular Rapid-Flashing Beacon (RRFB)	Pedestrian	A pedestrian-activated device typically used in combination with a warning sign to improve safety at uncontrolled, marked crosswalks	At mid-block crosswalk locations with known safety issues and excessive traffic speeds. Typically located in areas with pedestrian trip generators. Should not be used when HAWKs/PHBs are warranted, such as on roadways with 4 or more lanes and high traffic volumes/speeds.
	Leading Pedestrian Interval (LPI)	Pedestrian	Adjustments to signal timing to increase pedestrian safety at signalized intersections.	Ideal for downtown areas, commercial districts and high-density residential areas where pedestrian and automobile conflicts exist. Can be used throughout entire districts to improve pedestrian safety, or at known high-crash intersections. Also useful at T-intersections where turning traffic often conflicts with pedestrian movements.
	Art in the Right of Way	Roadway	Engaging the public, supporting economic development, and localizing design are all positive aspects of incorporating art into transportation and creating a sense of place. (Source: FHWA) Public art is a form of traffic calming. (Source: Baltimore DOT) "Art is a way of humanizing infrastructure, a way to communicate and personalize identity and location." Source: NYCDOT	Across the spectrum of surface transportation -- from transit-oriented development and multimodal nodes to highways, interchanges, streets, sidewalks, and trails -- infrastructure design needs to balance myriad secondary objectives with the primary goal of getting people where they need to go safely and efficiently. These other objectives include pleasing the community and stakeholders, plus maximizing the value of adjacent properties. Infusions of art into transportation infrastructure can help generate a sense of place, engage communities, and support economic development. (Source: FHWA)
	Commuter Rail	Pedestrian	Short-haul rail passenger transportation in metropolitan and suburban areas usually having reduced fare, multiple ride, and commuter tickets and morning and evening peak period operations	Commuter rail often runs on rail lines also used by freight and long distance passenger service. Compared to Heavy Rail, it involves longer services lines and less frequent service. It moves passengers between communities rather than within them.

Example	Tool	Category	Definition	Guidance
	Bus Rapid Transit (BRT)	Pedestrian	Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast and efficient service that may include dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms and enhanced stations	Major components of BRT: **Wide choice of running ways** BRT systems can operate on all types of running ways— mixed flow arterials, mixed flow freeways, dedicated arterial lanes, at-grade transit ways, fully grade-separated surface transit ways, managed lanes, and in tunnels. **Enhanced stations A**esthetically-designed stations make BRT systems attractive while providing passenger amenities such as shelters, benches, lighting, ticket vending machines, security features, and next vehicle arrival information. **Innovative vehicles** Stylized and specialized buses can operate along BRT corridors, with emphasis on comfort, aesthetic enhancements, easy access, passenger circulation, and environmentally-friendly propulsion. Purchase costs for higher end BRT vehicles can range from $370,000 to $1.6 million, depending on the size and propulsion technology. **Improved fare collection** Electronic fare cards, off-board fare collection, or proof of-payment options allow for shorter dwell times and shorter overall travel times. **state-of-the-art technologies** BRT incorporates ITS (intelligent transportation system) applications such as transit signal priority, advanced communication systems, automated scheduling and dispatch systems, and real-time traveler information at stations and on vehicles for faster and more convenient trips. **Improved service** BRT systems generally include rapid transit features such as all-day service spans, greater spacing between stations, and more frequent service than local bus service. The flexibility and lower-cost of BRT allow it to provide greater network coverage. **Modern branding and marketing** Distinctive logos, colors, styling and technologies for vehicles and facilities help develop a system identity. BRT services can be marketed as a new bus route or a new tier of service or as part of a multi-modal rapid transit network.