



# complete streets

TUCSON

## SECTION 1.

## VISION, INTENT, AND GUIDING PRINCIPLES

### VISION AND INTENT

The City of Tucson views all transportation improvements as opportunities to foster a vibrant, healthy, equitable, interconnected, accessible, environmentally sustainable, and more livable city where everyone can move about safely, comfortably, and with dignity. The City of Tucson's Complete Streets Policy shall guide the development of a safe, connected, and equitable transportation network that promotes greater mobility for people of all ages and abilities including, but not limited to, people walking, biking, using transit, driving, or using wheelchairs or other mobility devices. This includes integrating and prioritizing multimodal street improvements such as bicycle boulevards, protected bicycle lanes, high capacity transit corridors (such as bus rapid transit or streetcar/light rail lines), connected and accessible networks of sidewalks/walking paths, safe and convenient street crossings, and comfortable and inviting streetscapes.

The City shall consistently fund, plan, design, construct, and operate an interconnected transportation network that safely accommodates all anticipated users and transportation modes. Specific attention shall be given to the safety and comfort needs of the most vulnerable individuals on our streets—people walking, biking, taking transit, and using wheelchairs or other mobility devices—while still balancing the needs of those driving private, commercial, freight, and emergency vehicles. This policy recognizes that all modes cannot receive the same type of accommodation on every street, but the overall goal is that everyone can safely and comfortably travel throughout the network. To accomplish this goal, the City is committed to rebalancing transportation investments in order to make walking, biking, public transit, and shared mobility safe, attractive, and viable travel options in Tucson.

In addition to their transportation function, streets are the largest form of public space in the City. Therefore, in implementing this Policy, the City intends to enhance the potential of our streets to become healthy, vibrant, and inviting "places to be" with pedestrian-scale lighting, green stormwater infrastructure supporting shade trees and landscaping, public art, walkable destinations, street furniture (such as benches, bus shelters, planters, drinking fountains, trash cans, etc.), and other amenities.

## GUIDING PRINCIPLES

This Policy is built upon the following six guiding principles and provides a framework for integrating a Complete Streets approach into the plans, policies, decision-making processes, funding priorities, and other everyday practices of the Department of Transportation as well as other relevant city departments.

1. **SAFETY:** Complete Streets provide a safe travel experience to all and designing Complete Streets is a safety strategy to eliminate preventable traffic fatalities.
2. **ACCESSIBILITY:** Complete Streets serve people of all ages and abilities.
3. **EQUITY, DIVERSITY, AND INCLUSIVITY:** Complete Streets elements are implemented equitably and inclusively throughout the city.
4. **LAND USE:** Complete Streets incorporate context sensitive, flexible design approaches and consider the surrounding community's current and expected land use and transportation needs in an interconnected manner.
5. **ENVIRONMENT AND HEALTH:** Complete Streets support the health and well-being of Tucson's residents and environment by enhancing sustainable transportation options, providing opportunities for physical activity through active transportation (such as walking and biking), improving air quality through reduced vehicle emissions, mitigating urban heat island effect, utilizing stormwater runoff and decreasing stormwater pollutants, and maximizing shade trees and vegetation.
6. **ECONOMIC VITALITY:** Complete Streets help spur economic development by supporting business and job creation and fostering a more resilient workforce that has greater access to employment opportunities through improved travel options.

## SECTION 2.

## COMMITMENT IN ALL PROJECTS AND PHASES

All transportation projects are potential opportunities to make the transportation network safer, as well as more accessible, convenient, affordable, and reliable. Therefore, this Complete Streets Policy shall inform decision making throughout all phases of all transportation projects. This includes new construction and reconstruction/retrofit projects as well as maintenance projects and ongoing operations like resurfacing, repaving, restriping, rehabilitation, and signal upgrades.

Construction and repair work can create a burden especially for people walking, biking, or using wheelchairs or other mobility devices. Therefore, the City shall require that all public departments and private contractors provide accommodations for people using all modes of transportation to continue to use the street safely and efficiently during any construction or repair work that infringes on the right-of-way, sidewalk, bicycle lanes, transit stops, or accessibility infrastructure such as curb ramps.

## SECTION 3.

## EQUITY

The City of Tucson is committed to advancing transportation equity through the Complete Streets approach by investing in the most underserved communities, involving the people who have historically been excluded from the transportation planning process, and prioritizing projects and roadway designs that serve the most vulnerable users of the transportation network.

There are populations and communities within our City that face higher transportation burdens and experience greater barriers to accessing resources and opportunities, as well as disenfranchised populations and communities that have traditionally been underrepresented in city planning and decision-making processes. These populations include low-income individuals, people of color, older adults, children, youth, people with disabilities, and people living in households without access to a private automobile. Each of these groups are either at higher risk of injury or death while walking or biking and/or more likely to walk, bike or use public transit than the population as a whole and, therefore, needs to be considered specifically when improving the transportation environment. To begin to address these inequities, the City shall incorporate equity criteria into the project prioritizing process (as outlined in Section 9) and develop an inclusive community engagement plan (as outlined in Section 10) to reach our most vulnerable users and underrepresented populations.

## SECTION 4.

## CLEAR, ACCOUNTABLE EXCEPTIONS

Exceptions to this Policy may be granted upon review and approval under the following circumstances:

1. Accommodation is not necessary on roadways where specific users are prohibited, such as bicycles on interstate freeways.
2. The cost of accommodating the needs of a particular user group for the transportation project would be disproportionately high relative to the current or future need or probable use of the facilities by the particular user group. This determination should be made with due consideration to future users, latent demand, and the social and economic value of providing a safer and more convenient transportation system for all users.
3. There is a documented absence of current and future need.
4. Funding source is restricted in terms of how it can be used.
5. Project is in final design or construction as of the effective date of this Policy.
6. Project involves emergency repairs that require immediate, rapid response (such as a water main leak). Temporary accommodations for all modes shall still be made whenever feasible. Depending on severity and/or length of

time required to complete the repairs, opportunities to improve multimodal access shall still be considered where possible as funding allows.

7. Project involves routine maintenance that does not change the roadway geometry or operations, such as mowing, sweeping, or spot repair.

Any request for exceptions within categories 1-5 above shall be reviewed by the Complete Streets Technical Review Committee in consultation with the Complete Streets Coordinating Council (to be established in accordance with Section 10). City staff or private developers shall put into writing a request for an exception and provide supporting documentation on how the project fits into one of the aforementioned exception categories. The request shall be made publicly available. The Tucson Department of Transportation (TDOT) Director shall provide the final ruling on whether or not to grant the exception after receiving comments from the Technical Review Committee and the Coordinating Council. The decision shall be documented with supporting data that indicates the basis for the decision, and all documents shall be made publicly available. Categories 6-7 do not require the exceptions review process as outlined above.

## SECTION 5.

## JURISDICTION

Implementing the Complete Streets Policy is the work of various City departments, as well as private partners who manage or fund projects that impact the right-of-way, the transportation network, and/or the public realm. Therefore, collaborations among multiple city departments and other entities are necessary to identify opportunities to incorporate Complete Streets elements and to implement them. To that end, the City shall ensure internal coordination among its departments to effectively and opportunistically implement the Complete Streets Policy while making the best use of fiscal resources.

The City shall make every effort to work with other entities such as Pima County, Pima Association of Governments, the Regional Transportation Authority, adjacent municipalities, school districts, and public and private utilities to develop facilities and accommodations that further the City's vision of a connected, integrated transportation network. In addition, to the extent possible, the City shall work closely with relevant entities to incorporate Complete Streets elements into transportation projects that are located within the City boundaries but are not under the direct control of the city, such as state-owned roadways.

In some cases, projects that impact the right-of-way are managed and funded by private partners. Therefore, to ensure consistency in the new construction or reconstruction of public streets, the City shall ensure that private development will comply with this Policy through design and development standards to be incorporated into the Unified Development Code, Technical Standards Manual, and other documents as applicable.

## SECTION 6.

## DESIGN

The City strives to use the best and latest design standards and guidelines to maximize design flexibility and innovation, and to ensure that design solutions are proactively applied to address the safety and comfort of everyone using our streets. Therefore, the City shall follow established design standards that provide guidance on multimodal street design and support Complete Streets. These may include, but are not limited to, the following:

- The National Association of City Transportation Officials (NACTO), *Urban Street Design Guide*
- The National Association of City Transportation Officials (NACTO), *Urban Bikeway Design Guide*
- The National Association of City Transportation Officials (NACTO), *Transit Street Design Guide*
- The Institute of Transportation Engineers (ITE), *Implementing Context Sensitive Design on Multimodal Corridors: A Practitioner's Handbook*
- The Institute of Transportation Engineers (ITE), *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*
- United States Access Board, *ADA Accessibility Guidelines (ADAAG)* and other legally applicable guidelines for accessible design

## SECTION 7.

## LAND USE AND CONTEXT SENSITIVITY

The Complete Streets approach is not a one-size-fits-all solution and doesn't mean that every street will have exactly the same elements to accommodate all modes of transportation in the same manner. Implementation of Complete Streets design elements must be done in a context-sensitive manner with respect to the surrounding community, its natural and built environments, demographics, current and future land uses, and transportation needs. In addition to improving safety and mobility, this approach to process and design aims to support a range of goals—such as enhancing scenic, historic, and environmental resources, ensuring access to business, and allowing for roadway designs to be flexible and sensitive to community needs and values—to better balance economic, social, and environmental objectives.

There is an inextricable connection between land use and transportation. Transportation facilities and investments influence development and neighborhood character. In turn, land use and development patterns affect travel behavior and help determine whether walking, biking, and public transportation are appealing and convenient transportation options. Therefore, complementary land use policies and zoning ordinances are needed for effective Complete Streets Policy implementation to occur, for example, by facilitating the creation of walkable

neighborhood destinations as well as higher density, mixed-use, transit-oriented development in appropriate locations (such as along high capacity transit corridors).

To this end:

1. The City shall continue to support coordination between its Transportation and Planning and Development Services departments to identify opportunities to integrate land use and transportation in plans, policies, and practices.
2. The City shall review and, in coordination with our development community, revise land use policies, plans, zoning ordinances, and/or other relevant documents and procedures to incorporate the vision of the Complete Streets Policy. This could include the City's General & Sustainability Plan, Unified Development Code, and Major Streets and Routes Plan. After a comprehensive review of existing documents, a timeline shall be established for the revisions to be completed.
3. In revising existing, or developing new, transportation plans and/or design guidelines, the City shall specify how transportation projects will serve current and future land uses and shall consider developing new street typologies that take into account the adjacent land uses, densities, context, and local character of the surrounding neighborhoods, as well as natural environments and hydrological characteristics for integration of green stormwater infrastructure.
4. In certain instances, significant public investment in transportation infrastructure can trigger an increase in land values and housing costs. In the planning phases of large-scale transportation projects, the City shall ensure collaboration between its Transportation, Planning and Development Services, and Housing and Community Development departments to thoroughly consider measures to preserve housing affordability and increase new affordable housing options in order to help meet community needs and mitigate unintended consequences such as involuntary displacement tied to gentrification.

## SECTION 8.

## PERFORMANCE MEASUREMENT, REPORTING, AND ACCOUNTABILITY

The City is committed to tracking and evaluating the progress of its Complete Streets Policy implementation. The Complete Streets Technical Review Committee shall establish performance targets and identify performance measures under the following categories, in consultation with the Complete Streets Coordinating Council and any additional experts, as needed.

1. CHANGES TO THE TRANSPORTATION PLANNING PROCESS TO MAKE THE COMPLETE STREETS APPROACH A ROUTINE PART OF DAY-TO-DAY DECISION MAKING: The performance measures in this category will include, but are not limited to, progress on updating existing documents and procedures, training and hiring staff, and facilitating robust and inclusive community engagement.

2. NEW COMPLETE STREETS INVESTMENTS: The performance measures in this category will include, but are not limited to, progress on funding and implementing infrastructure projects that improve multimodal mobility, enhance network connectivity, improve accessibility, and increase shade/street trees and green stormwater infrastructure.
3. COMMUNITY BENEFITS: The performance measures in this category will include, but are not limited to, benefits in such areas as safety, equity, quality of life, economic vitality, health, and environment as well as changes in modes of travel.

The performance measure development process will involve considerations such as data availability and strategies for systematic collection of data over time, and will include entities responsible for collecting it as well as possible partnerships with entities outside of the City, such as the Pima County Health Department, hospital systems, economic development organizations, local advocacy organizations, the University of Arizona, and other educational institutions. Performance measure tracking and reporting may start with utilizing existing data, and the collection of additional important data may be phased in.

Performance measures presented in the following table shall be considered as candidate performance measures. These include measures that utilize both quantitative and qualitative data collection methods (such as intercept surveys, focus groups, and interviews) that highlight the perspectives and experiences of individuals, thereby painting a more holistic picture of how Complete Streets Policy implementation impacts people's lives. Measures of equity shall be integrated into the performance measures to track progress on inclusive community engagement and the relative share of projects implemented in low-income communities, communities of color, and low-vehicle-ownership neighborhoods, in accordance with the project prioritization tool referenced in Section 9.

In partnership with the Complete Streets Coordinating Council, the Complete Streets Technical Review Committee shall produce a biennial report documenting the progress of Complete Streets Policy implementation—including performance targets, performance measures to be collected every two years, exceptions granted to this Policy along with documented reasons, and an update on the items outlined in the implementation chart in Section 10. The report shall be released publicly and presented to the Mayor and Council.

**TABLE 1**

**RECOMMENDED PERFORMANCE MEASURES**

CHANGES TO THE TRANSPORTATION PLANNING PROCESS	NEW COMPLETE STREETS INVESTMENTS	COMMUNITY BENEFITS	
		PROJECT-BASED	LONG-TERM/ BENCHMARKING
<p><b>UPDATING DOCUMENTS</b> Review/revision of plans, policies, design standards, and other relevant documents and procedures (as outlined in Section 10) to support a Complete Streets approach</p> <p><b>TRAINING AND HIRING STAFF</b> Percentage of staff trained, hours and content of trainings; incorporation of "Complete Streets expertise" in Tucson Department of Transportation hiring criteria</p> <p><b>ENGAGING THE PUBLIC</b> Quality and quantity of community engagement throughout all phases of transportation projects, to facilitate inclusive participation that is representative of populations affected by such projects and/or related policy decisions, in accordance with the community engagement plan referenced in Section 10; incorporation of "non-traditional" or creative public engagement opportunities such as "pop-up" demonstrations of proposed street redesigns, block parties, working with paid community liaisons to facilitate outreach, and other ways of "going to the people" and meeting community members where they naturally convene rather than solely holding meetings and expecting them to come; community input expressly integrated into projects and policies</p>	<p><b>PROJECTS</b> Mileage, type, and location of new or improved walking, biking, and transit facilities that increase pedestrian, bicycle, and/or transit level of service (for example Highway Capacity Manual 2010 pedestrian level of service); relative share of projects implemented in low-income communities/ communities of color/low-vehicle-ownership neighborhoods (in accordance with project prioritization tool referenced in Section 9) to track equitable implementation; changes in people's perceptions of safety and comfort levels, reported through intercept surveys or similar methods; amount and character of maintenance work and responsiveness to maintenance requests</p> <p><b>FUNDING</b> Total and percentage of transportation funding allocated to projects that improve pedestrian, bicycle, and/or transit level of service (for example Highway Capacity Manual 2010 pedestrian level of service); distribution of funding with respect to equity criteria (in accordance with project prioritization tool referenced in Section 9)</p> <p><b>GREEN INFRASTRUCTURE AND SHADE</b> Amount of green stormwater infrastructure (number of features, change in pervious area, and retention volume), supported number of shade trees, and change in shade tree canopy incorporated in transportation projects</p> <p><b>ACCESSIBILITY AND CONNECTIVITY</b> Progress on construction or installation of accessibility features in compliance with the requirements of the Americans with Disabilities Act (ADA) and Rehabilitation Act (may be through implementation of the ADA Transition Plan), progress on implementation of the Bicycle Boulevard Master Plan; gaps filled in walking, biking, and public transit networks (as referenced in Item 11 of the Implementation Chart in Section 10); first mile/last mile transit access connections; improved access to jobs and community destinations</p>	<p><b>TRAVEL BEHAVIOR</b> Changes in walking/biking volumes and/or transit ridership and average daily traffic (ADT) as appropriate</p> <p><b>SAFETY</b> Changes in the number and rate of crashes by mode and severity; changes in motor vehicle speed and travel times; number and types of citations issued and/or traffic violations observed; people's perceptions of safety, measured through intercept surveys or similar methods; changes in violent crime rates as a measure of non-traffic safety, as appropriate</p> <p><b>EQUITY</b> Changes in combined costs of housing and transportation where major Complete Streets improvements are implemented (in addition to the equity criteria associated with project selection, funding allocation, and community engagement, as outlined in the previous two columns)</p> <p><b>QUALITY OF LIFE</b> Changes in the perceived quality of life of residents in neighborhoods adjacent to implemented projects</p> <p><b>ECONOMIC VITALITY</b> Changes in property values, vacancy rates, retail sales, number of overall business establishments and local businesses, and associated jobs attracted to the project area; business owner and customer perceptions and travel mode choices measured through surveys; temporary construction jobs created</p>	<p><b>TRAVEL BEHAVIOR</b> City-wide changes in mode split and vehicle miles traveled (VMT) and/or single occupancy auto commute trips over time</p> <p><b>SAFETY</b> Number, rate, and location of crashes by mode and severity; injury and fatality rates by population characteristics such as race, income, gender, and age</p> <p><b>EQUITY</b> Percent of populations/ communities identified in the project prioritization tool (referenced in Section 9) that is served by and has direct access to Complete Streets facilities; changes in housing and transportation costs over time for these populations/communities</p> <p><b>HEALTH</b> Rates of hypertension, heart disease, diabetes, obesity, asthma, depression, and other chronic illnesses by race and income over time; rates of meeting physical activity recommendations by race and income over time</p> <p><b>ENVIRONMENT</b> Annual changes in the Air Quality Index levels; changes in the shade canopy coverage to mitigate urban heat island effect and heat stress of vulnerable populations</p>

## SECTION 9.

## PROJECT SELECTION CRITERIA

Allocating funding to projects with Complete Streets design elements is key to building a safe and interconnected transportation network. To facilitate this, the Complete Streets Technical Review Committee and the Complete Streets Coordinating Council shall develop a project prioritization tool based on a point system to prioritize projects that improve safety and increase multimodal level of service.

Any regional or local projects already prioritized for funding in the Transportation Improvement Program (TIP) prior to developing the project prioritization tool shall automatically be included in the priority list but shall include as many Complete Streets elements as possible within the criteria set by the funding source.

The tool shall incorporate various ranking criteria including an analysis of walking/ bicycling/transit demand, network connectivity, existing crashes/fatalities, multimodal level of service improvements, and inclusion of Complete Streets elements. The tool shall also incorporate criteria to ensure equitable implementation of this Policy, to help alleviate disparities by prioritizing geographic areas and communities that have had the least investment in Complete Streets infrastructure. Additionally, the tool shall further prioritize projects with Complete Streets elements in neighborhoods where residents disproportionately rely on low-cost mobility options and shall, at a minimum, include criteria to direct investment to neighborhoods with higher concentrations of low-income individuals, people of color, and households without access to a private automobile. The tool shall also include additional equity-focused criteria to prioritize projects that directly benefit other vulnerable users of the transportation system such as children, older adults, and people with disabilities. Health impact assessments may also be utilized during the project decision-making processes as a way to evaluate the health effects of proposed projects and to promote health equity.

## SECTION 10.

## IMPLEMENTATION STEPS

In implementing this Policy, the City shall make the Complete Streets approach a routine and integral part of its everyday practices and shall approach every transportation project as an opportunity to enhance mobility for people using all modes of transportation.

The City shall establish a Complete Streets Technical Review Committee and a Complete Streets Coordinating Council to oversee the implementation of this policy. The Technical Review Committee shall be responsible for overseeing internal operations and ensuring inter-departmental

coordination and shall comprise the following representatives:

- Transportation Director (Chair of the Committee)
- Transit System General Manager
- Director of Planning and Development Services
- Director of Parks and Recreation
- A City Manager's Office representative
- Housing and Community Development Director
- Tucson Fire Department Chief
- Tucson Police Department Chief
- Director of the Environmental and General Services Department
- A representative from the Complete Streets Coordinating Council
- External issue area experts, such as representatives from academic institutions, other public entities, advocacy groups, community organizations, or local and national planning and transportation organizations, as needed

The Complete Streets Technical Review Committee will meet at the request of the Chair as frequently as required to perform its duties and at least once per quarter.

As a critical accountability measure, the City shall also establish a Complete Streets Coordinating Council to work in tandem with the Complete Streets Technical Review Committee. The Complete Streets Coordinating Council shall be modeled after the Complete Streets Task Force that was convened in 2018 to collaboratively develop this Complete Streets Policy and shall consist of diverse stakeholders, including Mayor and Council appointees, and representatives from different sectors, industries, and issue areas (such as transportation, health, environment, environmental justice, social equity, public art, economic development, business, and construction), as well as from advocacy groups and organizations working with communities/populations prioritized through this Policy, such as communities of color, older adults, youth, low-income communities, and people with disabilities. To the extent possible, the Coordinating Council shall provide a holistic representation of Tucson's diversity and, if possible, include representatives from these communities/populations themselves. Senior level staff from Tucson Department of Transportation and other appropriate City departments will participate in Coordinating Council meetings to ensure accountability, communication, and action.

The Complete Streets Coordinating Council shall have an active role in overseeing Complete Streets Policy implementation and shall bring accountability to the process by providing input on the implementation steps identified below, as well as on the review of exceptions, project prioritization and selection, funding allocation, and advocacy and engagement around Complete Streets projects. Within 90 days of policy adoption, Tucson Department of Transportation, in consultation with the Complete Streets Task Force, shall draft enabling legislation that clearly defines the roles, responsibilities, and makeup of the Complete Streets

Coordinating Council. This document will also describe how the Coordinating Council will interface with the Technical Review Committee. The structure of the Coordinating Council shall be guided by the following principles:

- follows best practices in collaborative decision making
- includes representation from key stakeholder groups mentioned above
- brings accountability to the implementation of this Complete Streets Policy
- empowers community decision making
- is modeled after the Complete Streets Task Force in fostering collaboration between City staff and external stakeholders
- is facilitated by a neutral, professional facilitator

The Complete Streets Coordinating Council and the Complete Streets Technical Review Committee shall take the lead on implementation of this Complete Streets Policy. Within six months of policy adoption, the Technical Review Committee and the Coordinating Council shall start developing a Complete Streets Implementation Plan addressing all items in the chart below and shall identify a deadline for the completion of the implementation plan. The progress on implementation shall be documented in biennial reports, and timelines for completing identified tasks (such as reviews and revisions of existing documents and development of new plans, tools, or performance measures) shall be established.

**TABLE 2**

**IMPLEMENTATION CHART**

<b>1.</b>	Hire a Complete Streets Project Manager to oversee all aspects of the Complete Streets Policy including its implementation.
<b>2.</b>	Offer training opportunities at least once per fiscal year to boost staff capacity in Complete Streets Policy implementation. Trainings can focus on Complete Streets design and implementation, community engagement, equity, smart technology, or other relevant topics. The City shall also encourage and facilitate professional development in the Complete Streets approach by sending staff to national conferences or other trainings. Complete Streets Coordinating Council members shall be included in these trainings, as appropriate. The general public may also be included in these trainings, whenever feasible.
<b>3.</b>	Identify, review, and revise existing relevant procedures, plans, regulations, and other processes for consistency with the Complete Streets Policy.
<b>4.</b>	Review and revise street design standards currently used in the planning, designing, and implementation phases of transportation projects to ensure that they reflect the best available design guidelines for effectively implementing Complete Streets facilities. Draft a Complete Streets Design Manual, pulling from nationally recognized best practices, by September 2019.
<b>5.</b>	Develop a project prioritization tool as outlined in Section 9.
<b>6.</b>	Identify performance targets and select performance measures as outlined in Section 8.
<b>7.</b>	Develop and adopt other tools, such as a Complete Streets Checklist, as necessary to help guide project implementation.
<b>8.</b>	Identify ways to improve other City practices to better align with the vision and intent of the Complete Streets Policy and changing trends in the industry, including smart technologies, parking regulations, and guidelines for transportation impact studies that include multimodal metrics (such as multimodal level of service analysis and multimodal/urban trip generation methods).
<b>9.</b>	Proactively implement automobile speed-management strategies—such as right-sizing, striping narrower lanes, narrowing turn radii, and adding traffic-calming/green stormwater infrastructure features like speed tables, neighborhood traffic circles, curb extensions, and chicanes—during planned maintenance and operations as well as retrofitting projects.
<b>10.</b>	Experiment with the use of "tactical urbanism" and "lighter, quicker, cheaper" techniques utilizing temporary materials—like paint, planters, and portable street furnishings—for a variety of Complete Streets enhancements (such as protected bike lanes, traffic calming and management features, plazas, parklets, and intersection safety improvements), to test out ideas, implement pilot projects, and gather community input more quickly.
<b>11.</b>	Develop a plan for accommodating each mode of transportation at a network or system level, in addition to such considerations at the project level. This process may include the completion of a Mobility Master Plan, a Pedestrian Master Plan, a Bicycle Master Plan, a Transit Master Plan, and/or a Freight Master Plan. It may also include the adoption of an Expanded Functional Classification System and/or a of street typology system to provide a multi-modal emphasis and a context-sensitive approach in the way streets are classified and designed.
<b>12.</b>	Facilitate coordinated implementation of both the Complete Streets Policy and existing plans and policies that support the creation of Complete Streets, including but not limited to Plan Tucson, the Bicycle Boulevard Master Plan, the Americans with Disabilities Act (ADA) Transition Plan, the Pedestrian Safety Action Plan, and Green Streets Active Practice Guidelines, as well as future plans that may relate to Complete Streets implementation.
<b>13.</b>	Create a plan to ensure robust, meaningful, and inclusive community engagement, with a particular emphasis on engagement of communities that have traditionally been underrepresented in city planning and decision-making processes. The plan shall include specific strategies for overcoming barriers to engagement associated with race/ethnicity, income, age, disability, English language proficiency, vehicle access, and other factors linked to historic disenfranchisement.
<b>14.</b>	Actively seek sources of public and private funding to assist in the implementation of this Policy.

**Accessibility:** Accessibility refers to both how well the transportation infrastructure (such as sidewalks, street crossings, public transit vehicles, etc.) serves people with disabilities and, in a broader sense, the ease of reaching destinations for all people regardless of their level of ability.

**Air Quality Index (AQI):** Air Quality Index is a national system used to measure and report daily air quality. It indicates how clean or polluted the air is in a given geographical area and the health concerns associated with different levels of pollution.

**Bicycle boulevard:** A bicycle boulevard is a street with low motorized traffic volumes and speeds that has been modified with additional features such as traffic calming, signs, pavement markings, major street crossing improvements, and other amenities to prioritize the safety, comfort, and convenience of people biking.

**Built environment:** Built environment refers to the human-made surroundings as opposed to the natural environment. It includes buildings, parks, streets, transportation facilities, and more.

**Bus Rapid Transit:** Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast and efficient service. BRT characteristics include dedicated lanes, efficient stop spacing, traffic signal priority at intersections, off-board fare collection, reduced headways, real-time information displays, enhanced stations, and elevated platforms for quick, easy, and accessible boarding.

**Chicane:** A chicane is a curb extension that slows traffic by visually and physically narrowing the street. To maximize their effect, chicanes are often installed in a series, offset from one another on each side of the street, directing drivers to follow a curving, S-shaped path. They can double up as a green stormwater infrastructure solution by reducing impervious surfaces and incorporating stormwater harvesting to support shade trees and other plants.

**Context-sensitive design:** Context-sensitive design, also known as context-sensitive solutions, is a collaborative and interdisciplinary approach to transportation projects that involves all stakeholders, offers flexibility, and integrates historic, aesthetic, environmental, economic, cultural, and other community considerations with transportation safety and mobility goals.

**Curb extension:** A curb extension, or a bulb-out, is a term for street design features where the existing curb line is extended into the parking lane of a street. Curb extensions can be a section of sidewalk, a landscaped area, or

a transit boarding area, and can be located mid-block or at an intersection. Depending on how they are used, curb extensions can shorten crossing distances for people walking and make them more visible to people driving, while encouraging slower turning movements for people driving by tightening curb radii.

**Curb radius:** The curb radius is the radius of the curb at a street corner. A corner curb with a large radius has a broad arc, while a curb with a smaller radius has a sharper curve. Smaller curb radii generally encourage slower, safer vehicular turning movements and reduce the crossing distance for people walking.

**Curb ramp:** A curb ramp is a ramp built into the curb providing access between the sidewalk and the street to people using wheelchairs and other mobility devices. Curb ramps also improve access for other people such as those carrying luggage and pushing baby strollers or delivery dollies.

**Equity:** As defined by the National Complete Streets Coalition, equity in Complete Streets means "investing in the most underserved communities, involving the people who have been systemically excluded from the transportation planning process, and prioritizing projects that serve those most vulnerable to poor roadway design."

**Expanded Functional Classification System:** Functional classification is a system traditionally used to classify streets based on the character of service they are intended to provide for motor vehicle travel, including cross-town mobility and property access. Traditional functional classification systems focus almost exclusively on vehicular mobility and access while neglecting other modes of travel. Expanded Functional Classification System is an improved framework that incorporates the surrounding context (such as density, land use, building setbacks), user needs, and street functions while providing a multimodal design approach that accommodates people walking, biking, and driving at both a corridor and a system-wide level.

**First mile/Last mile (FLM):** First and last mile refer to the first and last leg of a person's trip to and from a transit stop. First and last mile connections are crucial to support a multimodal transportation system. Safe and inviting walking/biking conditions, ADA accessible infrastructure, mixed-use, transit-oriented development that supports walking, secure bike parking at transit stops, bikeshare, and ability to carry bicycles onto transit are different ways to improve first and last mile transit connections.

**Focus group:** A focus group is a qualitative data collection method used to gauge public opinion and perceptions where a small group of people is assembled to participate in a guided discussion. Focus groups can be used to inform policy or project decisions related to transportation.

**Green stormwater infrastructure/ Low impact development:** Green stormwater infrastructure describes an array of practices that use or

mimic natural systems to manage rainfall/stormwater runoff by reducing, capturing, and filtering it at its source. In the context of Complete Streets, the most applicable green stormwater infrastructure practice is stormwater harvesting within the right-of-way to support shade trees and plants. This involves physical features such as curb cuts and vegetated basins which are depressed, planted areas designed to collect rainwater from adjacent paved surfaces like the roadway or sidewalk. In addition to the environmental benefits, these features also provide a buffer between the sidewalk and the roadway, create more inviting streetscapes with shade trees and other vegetation, and promote safer street conditions by reducing flooding. Green stormwater infrastructure practices can be integrated into traffic calming features such as traffic circles, curb extensions, medians, and chicanes.

**Health Impact Assessment (HIA):** Health impact assessment is a process used to evaluate the potential health effects of proposed policies, plans, or projects to help inform decision making.

**High capacity transit:** High capacity transit is public transit that is characterized by faster and more frequent service carrying a larger number of passengers compared to conventional bus service. It can include rail or Bus Rapid Transit.

**Intercept surveys:** Intercept surveys are surveys that are conducted in person to gather on-site feedback, generally in a public place or business. For example, interviewers may approach people walking along a street to find out about their perceptions of a recent Complete Streets project that was implemented and how it has influenced the way they travel.

**Level of Service (LOS):** Level of service is a term used to describe the operating conditions of a roadway based on factors such as speed, travel time, freedom to maneuver, comfort, and convenience. In simple terms, it is a measure of delay and congestion experienced by drivers on a street or at an intersection. It is expressed on a scale from "A" to "F," with LOS "A" indicating free-flow traffic while LOS "F" indicates severe congestion. Conventional level of service calculation methods focus only on the experience of people driving and flow of automobile traffic, resulting in automobile-centric roadway designs and neglecting other types of travel. To address this deficiency, multimodal level of service (MMLOS) models have been developed to assess how well a street meets the safety, comfort, and access needs of all of its users.

**Mixed-use development:** Mixed-use development is a type of development that blends residential, commercial, cultural, institutional, entertainment and/or other uses. It can take the form of a single building, a city block, or an entire neighborhood. Mixed-use neighborhoods are characterized as walkable. By putting residential, commercial, and other uses in close proximity to one another and providing pedestrian-friendly access to businesses and services they make walking a viable alternative to driving. Mixed land uses also provide a population base for supporting public transit.

**Mode split:** Mode split, also called mode-share, is the percentage of people using each mode of transportation in a particular geographic area.

**Multimodal:** Multimodal is a term that refers to having more than one mode of transportation. A multimodal transportation system provides travelers with multiple viable transportation options.

**Neighborhood traffic circle:** A neighborhood traffic circle is a traffic calming treatment consisting of a circular island located at the intersection of two neighborhood streets that directs traffic in a one-way direction and encourages slower speeds. In addition to safety benefits like reduced crashes, they can provide space for green stormwater infrastructure and landscaping.

**Parklet:** A parklet is an extension of the sidewalk into the roadway to create more space and amenities for people. Parklets are generally installed on parking lanes and use one or more on-street parking spaces. In addition to public seating, a parklet may incorporate plantings, bicycle parking, play equipment, and other creative features.

**Protected bicycle lane:** A protected bicycle lane, also called a cycle track, is a bicycle lane that is physically separated from motor traffic with some form of a vertical barrier such as curbs, vegetated medians, planters or posts to offer people on bikes a higher level of comfort and protection.

**Right-of-way:** Right-of-way is the strip of land owned or controlled by public agencies for the purposes of constructing, operating, and maintaining public facilities such as streets, alleys, sidewalks, curbs, bike lanes, utilities, and other public infrastructure.

**Right-sizing:** Right-sizing refers to reallocating a street's curb-to-curb width to better serve a full range of users. A typical rightsizing project involves converting an existing four-lane, undivided roadway to three lanes with one travel lane in each direction and a continuous center turn lane. Reconfiguration frees up space that can be reallocated to other uses such as sidewalks, bike lanes, dedicated transit lanes or on-street parking. Depending on the context, rightsizing may be redesigning a street with new amenities like sidewalks or landscaping, or it may be as simple as restriping the road to provide bike lanes or on-street parking. These changes help make the street safer by reducing crashes typically without adding travel delays.

**Shared mobility:** Shared mobility refers to the shared use of a car, bicycle, scooter or other transportation vehicle among different people. It allows people to gain short-term access to transportation services as needed. Shared mobility services include carsharing, bikesharing, peer-to-peer ridesharing (such as carpooling), and on-demand ride services (such as ride-hailing apps that allow multiple people to share a ride).

**Speed hump/speed table:** A speed hump/table is a traffic calming treatment which consists of a raised pavement area across a roadway to encourage

drivers to slow down. Speed tables are longer than speed humps and flat-topped, making them more suitable for emergency vehicle routes.

**Street typology:** A street typology is a classification of streets based on their function and transportation characteristics as well as the surrounding context including the natural and the built environment. This classification approach recognizes that land uses, densities, environmental features, and travel needs and patterns vary along a street as it transects the city from urban to suburban areas. Street typologies can be used to supplement functional classification systems to ensure that street designs are more closely aligned with their existing and desired context accommodating the full range of users.

**Streetscape:** Streetscape is a term used to describe the collective appearance of all the different elements along a street that define its character such as buildings, sidewalks, roadway, trees/landscaping, lighting, transit stops, and street furnishings like benches, planters, trash receptacles, etc.

**Stormwater harvesting:** (See "green stormwater infrastructure.")

**Tactical urbanism:** Tactical urbanism is a strategy for improving streets, plazas, and other public places through different types of low-cost, temporary changes to the built environment, often intended to catalyze long-term change. Tactical urbanism projects utilize a "lighter, quicker, cheaper" approach to get improvements on the ground quickly, using low-cost materials such as paint, planters, posts, chairs, traffic cones, old tires, wooden crates, etc. depending on the nature of the project. Tactical urbanism projects can be led by governments, non-profits, or neighborhood groups to quickly transform a street or a public space. Applications range from "pop-up" demonstrations lasting for a few hours to pilot/interim projects lasting several months. Tactical urbanism projects allow for experimentation and can be implemented to gather public input on potential street design changes.

**Traffic calming:** Traffic calming is the practice of installing vertical features in the roadway, like speed humps, chicanes, and traffic circles, to encourage people to drive slowly. Traffic calming can also include full or partial streets closures to reduce cut-through traffic with the goal of making neighborhood streets safer for all people.

**Transit-Oriented Development:** Transit-oriented development (TOD) is a type of development that includes a mix of residential, commercial, office, entertainment and/or other uses integrated into a walkable neighborhood and centered around or located in the vicinity of quality public transit such as rail (light rail, streetcar, etc.) or Bus Rapid Transit stations.

**Transportation burden:** Transportation burden is used to describe the share of total household income spent on transportation expenditures, and commute time/distance to access jobs, services, and amenities. Transportation burden is determined by a number of factors, including the availability of affordable and reliable transportation options.

**Transportation Impact Study:** A Transportation Impact Study assesses the potential effects of a proposed development on its surrounding streets, traffic conditions, and the transportation system. Transportation impact studies have historically focused on motor vehicle trips to estimate the amount of traffic (trip generation analysis); however, there is growing interest in incorporating multimodal trip generation methods that consider other modes of transportation.

**Transportation Improvement Program (TIP):** Transportation Improvement Program is a list of regionally funded transportation projects, which is maintained by the Pima Association of Governments and covers a period of at least four years.

**Transportation network:** Transportation network refers to the entire infrastructure that facilitates the mobility of people and goods such as streets and public transportation systems.

**Urban heat island:** An urban heat island is a metropolitan area which is significantly warmer than its surroundings. The urban heat island effect occurs as a result of buildings, roads, and other impervious surfaces absorbing the heat during the day and releasing it back slowly at night, thus increasing temperatures in urban areas.

**Vehicle miles traveled (VMT):** VMT is a measure to estimate the annual amount of travel by all vehicles in a particular geographic area.