



IV. GENERAL IMPLEMENTATION

HOW SHOULD THIS GUIDE BE USED?

The Street and Intersection Typologies Design Guide is not perfect, nor is it ever complete. It is a living document that should be updated along with changes to land use plans, zoning ordinances, laws and ordinances, transportation plans, and the habits and goals of the people in Salt Lake City. The typologies webmap (found online at www.slcc.gov/transportation/2021/10/30/typologies/) will also be updated as the City's plans evolve. This section of the Guide provides general recommendations for implementing typology concepts through City procedures and policies.

This Guide's typologies are proposed designs that imagine what could be done if our streets were to be entirely rebuilt. Because the complete implementation of these design ideas is likely only in the event of a reconstruction, and because reconstructions occur only every few generations, the process of transformation may be slow.

The planning, design, and implementation of each street redesign project will still follow the City's rigorous process for selecting, designing, and engaging the public about street reconstruction projects. These typologies are simply starting points for community conversations. They are intended to form the foundations of our discussions about design possibilities, goals, and desired outcomes.



Practitioners and projects may also benefit from gleaning design ideas, direction, and community goals from these typologies as they implement short-term projects, such as tree planting, parking management, intersection and crosswalk updates, signing and striping changes, and planning efforts.



WHAT DOES THIS GUIDE NOT DO?

Intentionally, the Guide does not dictate a timeline, a budget, or a rigid approach to design or reconstruction. It is a book of ideas, a reference manual, and a better starting point for our community conversations about streets, land use, and design.

This Guide is not a prescriptive or absolute approach to designing each and every street and intersection in Salt Lake City. Because of the development history of the city, that task would be extremely difficult. It is simply a book of ideas for how to improve safety, comfort, and the design equity of streets and intersections depending on their unique environments, contexts, and place types. The Guide provides ideas for how to implement the goals and ideals found in the Complete Streets Ordinance, the zoning ordinance, community and neighborhood plans, and various transportation plans.

Nearly all public streets within the city limits as of 2019 have been included in the design and development of this Guide, its map, and its typologies. However, there are some exceptions:

- Private streets have not been assigned a typology. Those who own and maintain private streets may choose to apply the designs developed for a similarly-sized typology in the right context, if they choose.
- Some public streets, such as those in parks and open space, at the Salt Lake City International Airport, at the University of Utah, and in other special circumstances, have not been assigned a typology.

Because this is a design guide, engineering standards and details will also need to be updated so that they are in accordance with the goals and design intent of this Guide.



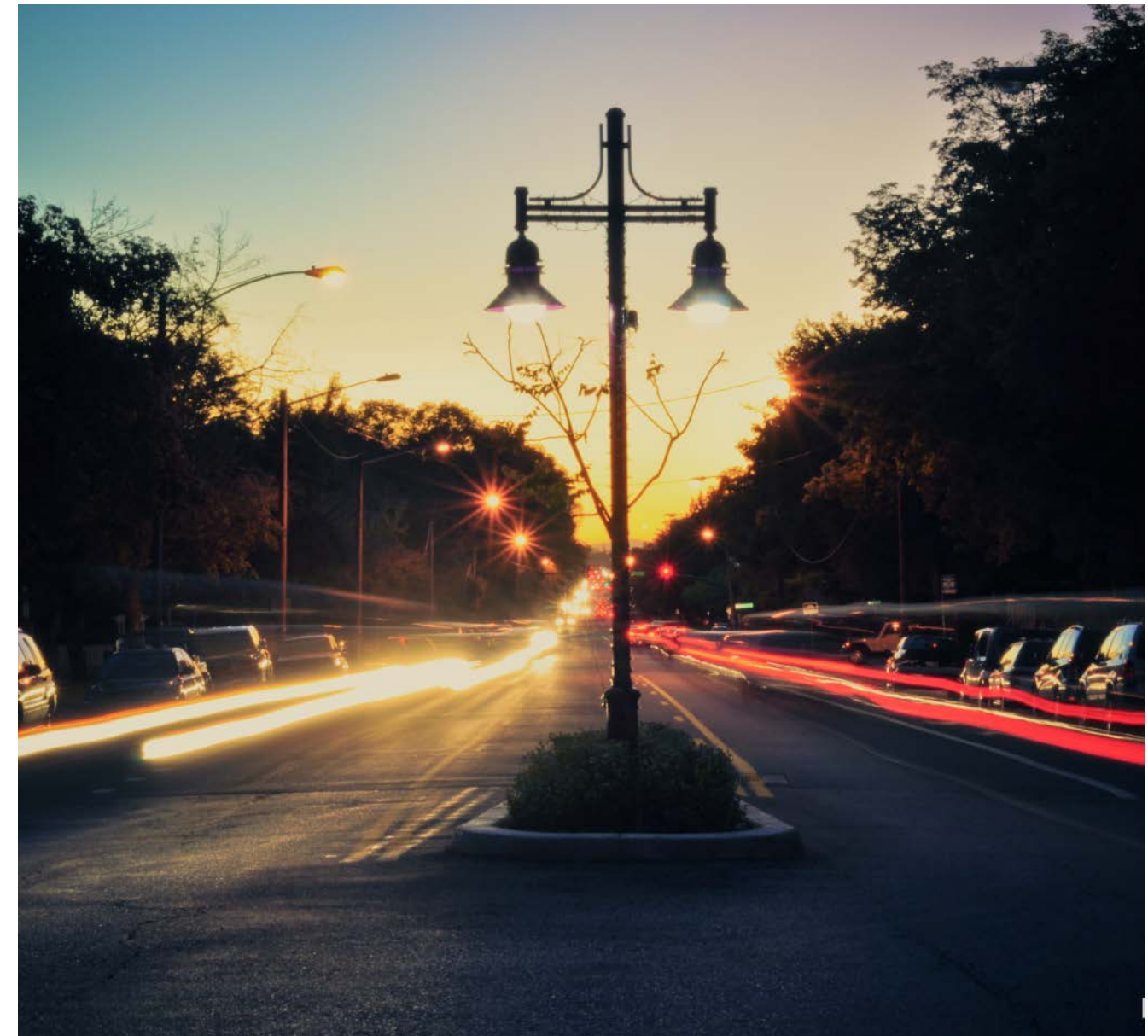
APPLYING TYPOLOGIES TO FUTURE STREETS

The typologies have been assigned to streets based on their existing or known, planned land uses and place types. In less-developed and select other areas in Salt Lake City, no typologies have been assigned where streets do not currently exist. As undeveloped areas of the City begin to build out, planners can refer to the [“Context and Function”](#) section of Chapter 1 of this document, which provides guidance on how land use types, transportation functions, and right-of-way priorities were combined to develop and assign individual typologies to streets.

As Salt Lake City’s Planning, Transportation, Engineering, and other divisions collaborate to create a vision for these areas, street typologies will need to be assigned that reflect the anticipated land use context. City staff should consider how proposed street networks should function – what right-of-way activities should be prioritized in these areas to best complement the planned land uses? How fast should drivers be traveling and how should the full range of transportation choices and people-focused activities be accommodated on newly-planned streets? Finding answers to these questions will help staff determine which typologies are appropriate to apply in these areas.

Everywhere, but especially where development creeps closer to the Great Salt Lake and its surrounding environment, street typology designs must be responsive to drainage needs. The water table will be higher in these critical areas near the lake, with higher risk of flooding (especially during spring runoff conditions or major storms). Incorporating green stormwater infrastructure elements, such as bioswales, will help streets absorb stormwater better, reduce the need for expensive storm drain infrastructure, and ensure that the streets and the ecosystem can serve

their critical functions. These streets should be cooperatively designed among the Transportation, Streets, Public Utilities, Sustainability, and Public Lands divisions and departments to create solutions that meet citywide goals and needs.





APPLYING TYPOLOGIES TO UDOT STREETS

UDOT offered specific guidelines for how the Typologies should be applied to UDOT streets within Salt Lake City, generally represented by the Two-Way Thoroughfare, One-Way Thoroughfare, and Destination Thoroughfare typologies shown in this document. Their guidance is provided below.

The Salt Lake City Street and Intersection Typologies Design Guide is an aspirational vision linking street design and land use. Several corridors within Salt Lake City are state routes under the jurisdiction of the Utah Department of Transportation (UDOT). The state code Title 72 Chapter 4 Part 1 Section 102.5 Paragraph 3 states that “state highways shall primarily move higher traffic volumes over longer distances than highways under local jurisdiction.” While the movement of higher volumes of people on these corridors is their primary purpose, the Typologies Design Guide elevates other functions on these streets, including person mobility, greening, curbside uses, and placemaking. These functions will not conflict with the primary purpose of state routes.

State Route Application:

- **LANE NUMBER:** *The existing number of lanes on state routes in Salt Lake City will be maintained and are included in the typology cross sections applied to state routes. Certain typologies show conversion of some lanes to transit; future studies would be needed to assess the appropriateness of this conversion. Additionally, UDOT does not*

have authority to implement transit operations on state routes in Salt Lake City and will coordinate with the Utah Transit Authority on capital projects.

- **MAXIMUM TARGET SPEED:** *Posted speed limits on state routes are currently set based on the 85th percentile prevailing speeds and range from 30 to 55 mph. However, both street design and surrounding land uses affect how fast a street should be driven (maximum target speed) and how fast it feels it should be driven (design speed). As such, when opportunities to redesign rights-of-way are planned to occur, UDOT may coordinate with Salt Lake City to ensure that maximum target and design speeds are appropriate and result in safe and comfortable environments, given land uses, any new policies, and other factors.*
- **FREQUENCY:** *It is anticipated that the application of the principles, design criteria, and street cross sections in the Typologies Guide may occur at various times and with various intensities, depending on the type of work being performed. For example, perhaps limited improvements may be possible because of some regular and capital maintenance activities (e.g., repaving and restriping, curb ramps, and other curb and gutter work), while more substantial changes and complete redesigns may only be possible because of reconstruction and other opportunities of significant investment.*
- **GEOMETRIC DESIGN:** *Will comply with the current processes and procedures as described within the UDOT Roadway Design Manual (RDM), or current State-applicable design guidance.*
- **COORDINATION:** *Salt Lake City and UDOT have and will continue to coordinate and evaluate where aspects of the typologies documented in the Guide align with UDOT’s strategic direction and transportation*



program. This Guide is a tool to document and illustrate the goals of Salt Lake City but should not replace coordination between Salt Lake City and UDOT.

- Prior to implementing transportation solutions, projects that are part of UDOT's transportation program are required to go through UDOT's project development process. Part of this process involves formally identifying what is needed of the street, how these needs can be addressed, and the impacts that would occur as a result of doing so. This process follows the procedures of The National Environmental Policy Act (NEPA) or UDOT's State Environmental Policy (State). It may consider the typology identified by Salt Lake City, but would select the solution identified through the NEPA or State process. This may or may not result in the cross-section identified in the Guide.*
- Implementation of active transportation facilities, as included and designed in the typologies applicable to state routes, is contingent on also being included in an approved, local active transportation plan, such as Salt Lake City's 2015 Pedestrian & Bicycle Master Plan.*

As noted in UDOT's language above, Salt Lake City and UDOT will need to coordinate implementation of these typologies on state routes, on a corridor-by-corridor basis. Salt Lake City's intent is to work collaboratively with UDOT to create public spaces, even on state routes that meet the needs of the community and surrounding land uses. The agencies will need to work together to achieve these goals.





FURTHER ENGAGING STAKEHOLDERS AND THE PUBLIC

Planning efforts should include close coordination between Salt Lake City's internal divisions and departments, as well as with external agencies, as applicable, such as UDOT, the Utah Transit Authority (UTA), and the Wasatch Front Regional Council (WFRC). Engaging internal stakeholders early in the budgeting, planning, and design processes will result in increased support throughout the City, higher project quality, and better integration between planning, construction, and life-cycle maintenance for each street's typology implementation.

Stakeholder and public feedback, along with the typology designs, should guide corridor redesigns and implementation. As typologies are implemented on individual corridors, City and other agency staff should engage community members at multiple points in the planning and design process. Outreach efforts could include people from a variety of groups:

- Community councils
- Residents
- Local business owners and property owners
- Business associations, such as the Downtown Alliance and the River District Chamber
- The City's Transportation Advisory Board, Bicycle Advisory Committee, Accessibility Advisory Committee, and Disabled Rights Action Committee
- Local schools, school districts, and higher education institutions
- City council staff and representatives
- Transportation advocates
- The general public
- Additional stakeholders as appropriate to individual corridors



Public feedback can be helpful at several key points in the planning process:

- Early on, when identifying needs and opportunities along a particular corridor;
- In the middle, when the City has ideas for addressing those needs and opportunities, to which the public can respond;
- Towards the end, when the City is ready to recommend a design for implementation; and,
- After construction is complete, to gauge the impacts of changes

Stakeholder and public feedback need not be limited to these stages in the planning process, but these could be considered suitable “touch points” between the City and the public as typologies are considered for individual corridors.





PRACTICES, PROCEDURES, AND POLICIES

Salt Lake City can immediately establish practices, procedures, and policies to support implementation of the typologies. Some practices, procedures, and policies may also require coordination with transportation partners like UDOT and UTA to ensure the desired outcomes.

- **PRACTICE:** an action that internal Salt Lake City divisions (such as Transportation, Engineering, Planning, etc.) take with minimal revision to the City's current operating paradigm.
- **PROCEDURE:** a formalized step within Salt Lake City's permitting, approval, or other processes that may need to be modified to support more livable streets.
- **POLICY:** a formal statement, document, or ordinance that would generally be adopted by the City Council or other legislative body.

RECOMMENDED PRACTICES INCREASE INTERNAL COLLABORATION

City staff, leaders, and elected and appointed officials need better internal coordination to create livable streets in Salt Lake City. Collaboration between City departments and divisions is especially important in the early phases of planning and funding the application of a typology to a particular street. Early internal collaboration could help resolve issues such as:

- Mismatched expectations between those designing a streetscape and those responsible for its maintenance and operation;
- Appropriate sizing of green spaces to ensure a healthy urban forest and to incorporate sustainable infrastructure into street design;
- Conflicts between streetscape and greenery designs and intensities, and the utilities above and below ground, such as sewer water, power, and lighting; and
- Appropriate licensing for areas of the public right-of-way to include private establishments' activities, such as outdoor dining and sidewalk furniture, typically organized through the City's real estate services teams



FIRE DEPARTMENT AND OTHER AGENCY COORDINATION

Compliance with the City's fire and building codes and emergency vehicle access regulations should be a focus when implementing these typologies. Early in the typologies implementation process, Salt Lake City staff and leaders tasked with planning and design of the public right-of-way should reach out to the Fire Department and Building Services Division to discuss corridor-specific goals, issues, and concerns. These discussions may help resolve conflicts early on between emergency vehicle access concerns and Citywide sustainability and transportation goals. Best practices for these discussions may include exploring best practices from other communities or staging mock emergency events with temporary streetscapes in order to ensure access will be appropriate. City attorneys may be involved in these discussions, as well, to help participants understand the legal risk and exposure when deciding on ways to reconcile emergency access and transportation needs.

In addition to higher levels of internal coordination, planning efforts should engage external transportation stakeholders early on, as well. UDOT controls the design, maintenance, and operation of streets and intersections within Salt Lake City that are under state jurisdiction, and often manages other street projects that are built with federal funding. They also have an interest in how Salt Lake City's streets intersect with state routes. Similarly, UTA's plans for bus and rail infrastructure will need to be incorporated into individual corridor typology designs, and early communication with UTA will help facilitate a more efficient planning, funding, and design process. WFRC offers technical and financial support to communities like Salt Lake City, with potential planning, design, and construction funding sources through the Transportation and Land Use Connection program as well as the Regional Transportation Plan. Communicating early with these agencies will make sure that the design and construction process are as smooth as they can be.

DEVELOP DATA AND TOOLS

To ensure that the new typologies work as intended and meet the goals of this Guide and the City's residents, the City should gather data that help understand how streets function and whether changes are making a positive or negative impact.



PERFORMANCE MEASUREMENTS

The typologies prioritize five critical functions of the public right-of-way. To ensure the successful implementation, operations, and maintenance of the typologies, Salt Lake City should collect and publish before, after, and ongoing data to measure whether the typology designs have the desired outcomes on individual corridors. The City could gather the following performance measurements, focused on each of those priorities.



PERSON MOBILITY:

- Transportation measures such as the percentage of people walking, driving, biking, or taking transit, and the percentage of children among those walking, biking and taking transit
- Design measures such as the percent of right-of-way dedicated to non-auto transportation users, or the pavement condition index for sidewalks, crosswalks, curb ramps, and bike lanes



GREENING:

- Environmental measures such as runoff water quality, localized air quality, and the percent of productive and efficient landscaping that is drought tolerant and supports wildlife
- Design measures such as the percent of shade cover along a street, ratio of pervious to impervious surface, or the percent of right-of-way dedicated to green space



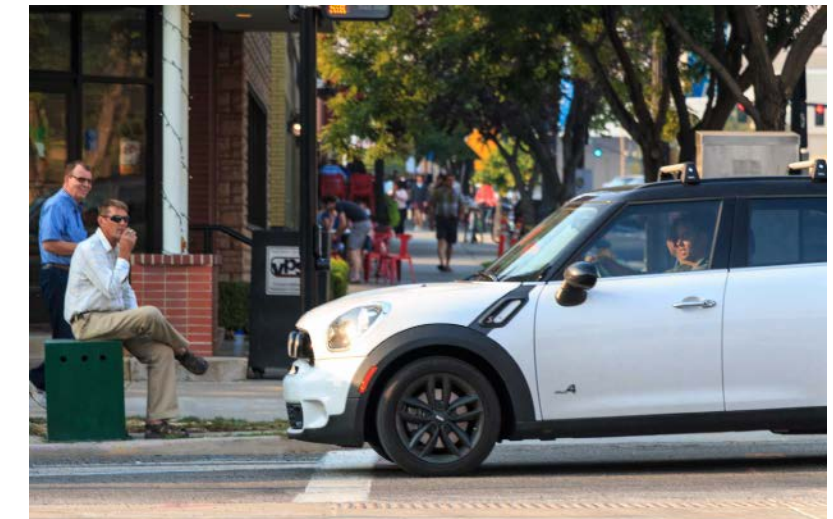
PLACEMAKING:

- Percent of right-of-way dedicated to non-transportation activities, or “space for staying”
- Economic measures such as retail sales or vacancies
- Urban design measures such as imageability (being distinct and memorable), having a human scale, street enclosure, street frontage transparency, amenity density, and complexity of the urban environment
- Measures of activity such as the number of children present, number of pets present, the average length of a person’s visit to the area, and the hours of daily operation



CURBSIDE USES:

- Measures of activity such as transit boardings and alightings, bike rack supply and demand, and rate of parking turnover and availability
- Human comfort measures such as transit stop quality and transit passenger comfort ratings
- Design measures such as the percent of a 660’-long block face dedicated to individual curbside uses such as transit stops, vehicle parking and charging, emergency access, passenger loading and unloading, ramps/driveways/corners, utilities, bike share stations, and curbside bike lanes



VEHICLE MOBILITY:

- Safety measures including crash and severity rates, as well as target, operating, and actual speeds
- Efficiency measures such as person throughput (in cars, transit, and active transportation modes)
- Infrastructure measures such as the pavement condition index



While this list of performance measures is not comprehensive, gathering and tracking these metrics consistently for individual projects still requires considerable effort. The City should begin by focusing on metrics that can be easily gathered and monitored on a regular basis (i.e., annually), beginning before project implementation and extending for several years after construction ends. Some simple metrics that represent an easy starting point could include:

- Percentage of right-of-way along each street dedicated to placemaking activity
- Percentage of right-of-way along each street dedicated to green space
- Percentage of right-of-way along each street dedicated to people walking, bicycling, and in mobility devices
- Transit boardings and alightings data, readily available from UTA for each of its bus and fixed rail routes
- Crash data



ROADWAY RECONFIGURATION TOOL

Salt Lake City has long recognized that the widths of its rights-of-way are a blessing, but the widths of its roadways are often a curse. However, overly-wide roadways (curb to curb width of asphalt or concrete) within ample rights-of-way represent an opportunity to create more space for non-automobile transportation choices and other uses of the public right-of-way.

The City may benefit from a simple spreadsheet-based tool that helps determine the feasibility of travel and turn lane reductions. While the City does not currently have such a tool, one could be developed. It could be used when implementing typologies, and as Salt Lake City evaluates opportunities for lane reductions during routine repaving and restriping maintenance activities. The tool could incorporate data showing daily and peak hour traffic volumes, turning volumes (including for two-way left turn lanes in the center of the street), on-street parking utilization, total pavement width, observed traffic speeds, observed and latent bicycle demand, or other factors. It may help decisionmakers base potential project improvements and typology implementation on data rather than perception, at project and citywide scales.



RECOMMENDED PROCEDURES

Salt Lake City has many internal procedures designed to provide a comprehensive and organized approach to project development, for both internal and external staff and leaders as well as for the public doing business with the City. These include various design review processes, checklists, and applications that should be modified in order to improve implementation of the goals and components of this Guide and its typologies, as well as a comprehensive Complete Streets approach.

- The City's Business Licensing and Real Estate Services teams, as well as the Planning Division, need to be involved in the process of making public spaces accessible and creating areas for play, respite, and dining with the public right-of-way. These teams are responsible for part of the interface between buildings and public streets, so design and approval procedures need to integrate their feedback.
- Typology design ideas could be included in encroachment permitting processes. The City's real estate services team is involved when this applies to City rights-of-way; for state routes, this includes submitting to UDOT for approval until an encroachment agreement is in place.
- The Planning Division has a Development Review Team (DRT) process for the development of property, with a checklist and design manual that is used by many divisions' staff members (and sometimes the public). Typology design ideas could be incorporated into this process, and the Building Services Division's Open Counter website could also include references to this Guide as well as other Complete Streets Ordinance requirements.
- The City should incorporate best-practice design standards for how to equitably, efficiently, and safely incorporate electric vehicle charging stations in the public right-of-way as part of the design review process, without compromising space for people not using motor vehicles.
- The City should include procedures for integrating typology design ideas into the Capital Improvement Project application, funding, and implementation processes; Community Development Block Grant application review; budgeting processes; small cell tower guidelines; and all City property projects.
- The City should create internal guidelines to determine which street typologies to prioritize for public art. Art may take many forms, such as environmental remediation, sculpture, functional furniture, concrete, and more.



RECOMMENDED POLICIES

Some aspects of implementing the Salt Lake City Street and Intersection Typologies require a more formal approach, such as written policies or revisions to existing codes and ordinances. During the process of developing the typologies, several potential policies were identified, including those described below.

REVISE ZONING ORDINANCES

The City should revise the zoning ordinances and development review codes to incorporate references to these typologies. Such revisions will ensure that this Guide and the zoning and development codes and processes speak to one another, ensure compliance with fire code requirements, and integrate the Fire Department's feedback earlier in the review process.

COMPLETE STREETS POLICY

Salt Lake City's current Complete Streets Ordinance, provided in Chapter 14.06 of the Salt Lake City Code, was adopted in 2010 and requires the City to consider people walking and bicycling as it designs and builds streets. As part of the typologies development process, Salt Lake City prepared a memorandum to recommend needed improvements to the Complete Streets Ordinance.

The memorandum identified the following high-priority revisions to the current ordinance:

- Expand modes to include transit, ride share, scooters, electric car share, and other forms of transportation and other elements of the right-of-way beyond bicycling and walking
- Create streets where persons of all ages, abilities and circumstances will be able to meet their daily transportation needs
- Establish a process for incorporating Complete Streets elements into new construction and retrofits
- Advance transportation equity by investing in underserved communities and involving people who have been typically underrepresented
- Create an explicit connection between the Typologies Design Guide and other transportation and modal master plans
- Provide guidance on how to coordinate with UDOT on Complete Streets issues
- Provide consistent design guides and standards
- Include green infrastructure in the public right-of-way
- Clarify and formalize the membership, responsibilities, and roles of the complete streets committee



TRAFFIC LEVEL OF SERVICE (LOS)

Most cities and transportation agencies have internal policies stating their tolerance for traffic congestion, expressed as “Level of Service”. The Level of Service (LOS) metric generally refers to the amount of delay, in seconds, that drivers must wait before passing through an intersection. Traffic engineers describe LOS on a scale from A (no delay) to F (an unacceptable level of delay, assuming 80 seconds or more of delay per vehicle at a signalized intersection). Many cities and agencies consider LOS D as the threshold beyond which traffic congestion needs to be mitigated.

However, while many people may value the ability to drive quickly and efficiently, decisionmakers, engineers, and planners must consider all of the undesirable consequences of prioritizing a high traffic level of service, both now and into the future. Improving traffic level of service often means expensive widening and adding more travel and/or turn lanes to a street, which make streets less friendly to people walking or bicycling, reduces property values, increases crashes, induces faster driving, and has an increasingly diminishing return on investment with each lane added. Population growth and transportation demand is exponential; roadway expansion is, at best, linear, and will never meet demand.

On the other hand, if cities choose to tolerate a lower level of service for motor vehicle traffic, they acknowledge that they accept some traffic congestion in exchange for safer and more comfortable conditions for everyone, more space to meet the needs of a growing city, and more sustainable budgets.

In place of traffic level of service metrics to assess the system’s performance, Salt Lake City could instead choose to consider level of traffic stress impacts to people bicycling, walking, taking transit, and using mobility devices. The City may also wish to consider the connections between traffic level of service and vehicle miles traveled, acknowledging that a higher traffic level of service leads to more vehicle





miles traveled, which in turn contributes more of the greenhouse gas emissions that exacerbate the impacts of climate change.

Salt Lake City may wish to adopt a policy that clearly states its position regarding level of service, answering the questions:

- Is the City willing to tolerate vehicle congestion and slower speeds during peak times in certain contexts? If so, how many minutes or hours during the day is the City willing to accept vehicle congestion, and at what levels?
- Is the City willing to actively pursue projects that will knowingly cause vehicle congestion, for the purpose of improving the quality of the environment for all other people?
- What metrics will replace level of service, as a measurement and as a way of thinking, decision making, budgeting, and engineering?

A policy could outline this position and also identify the contexts or time frames in which the City is willing to tolerate congestion.

CONFLICTS WITHIN THE RIGHT-OF-WAY

The public right-of-way is a busy place. Above ground, people walking, bicycling, and using mobility devices compete for space with moving cars, parked cars, transit vehicles, electric vehicle charging stations, landscaping, overhead utilities, and areas along adjacent land uses. Below the surface, an array of underground utilities must be accommodated and meet design criteria in order to continue safely meeting the needs of the community. Some features of the typologies' proposed right-of-way designs conflict with other features in the right-of-way. City and outside agencies and stakeholders suggested that policy actions could help resolve conflicts.





SIDEWALK FURNITURE

The City's Real Estate Services team works with residents and business owners, as well as public agencies, to address encroachment issues in the City's public rights-of-way and license use of the public space for private purposes, among its myriad other tasks. For state routes, this includes submitting to UDOT for approval until an encroachment agreement is in place.

As sidewalk dining has become more popular throughout the city, the Real Estate Services team has struggled to help the public understand regulations for outdoor furniture, and to ensure that the City is able to meet minimum acceptable accessibility requirements for people walking

and others using sidewalk space. While many of the Guide's typologies provide wider sidewalks for uses including walking and sidewalk dining, a sidewalk furniture ordinance would help regulate the use of the sidewalk and establish clear lines of responsibility for enforcement. At a minimum, stakeholders agreed that more City divisions (such as Real Estate Services, Engineering, Compliance, and others, such as UDOT, when applicable) need to participate in decision-making around this use of the right-of-way, and ultimately that someone needs to be in charge of making final decisions for the group.



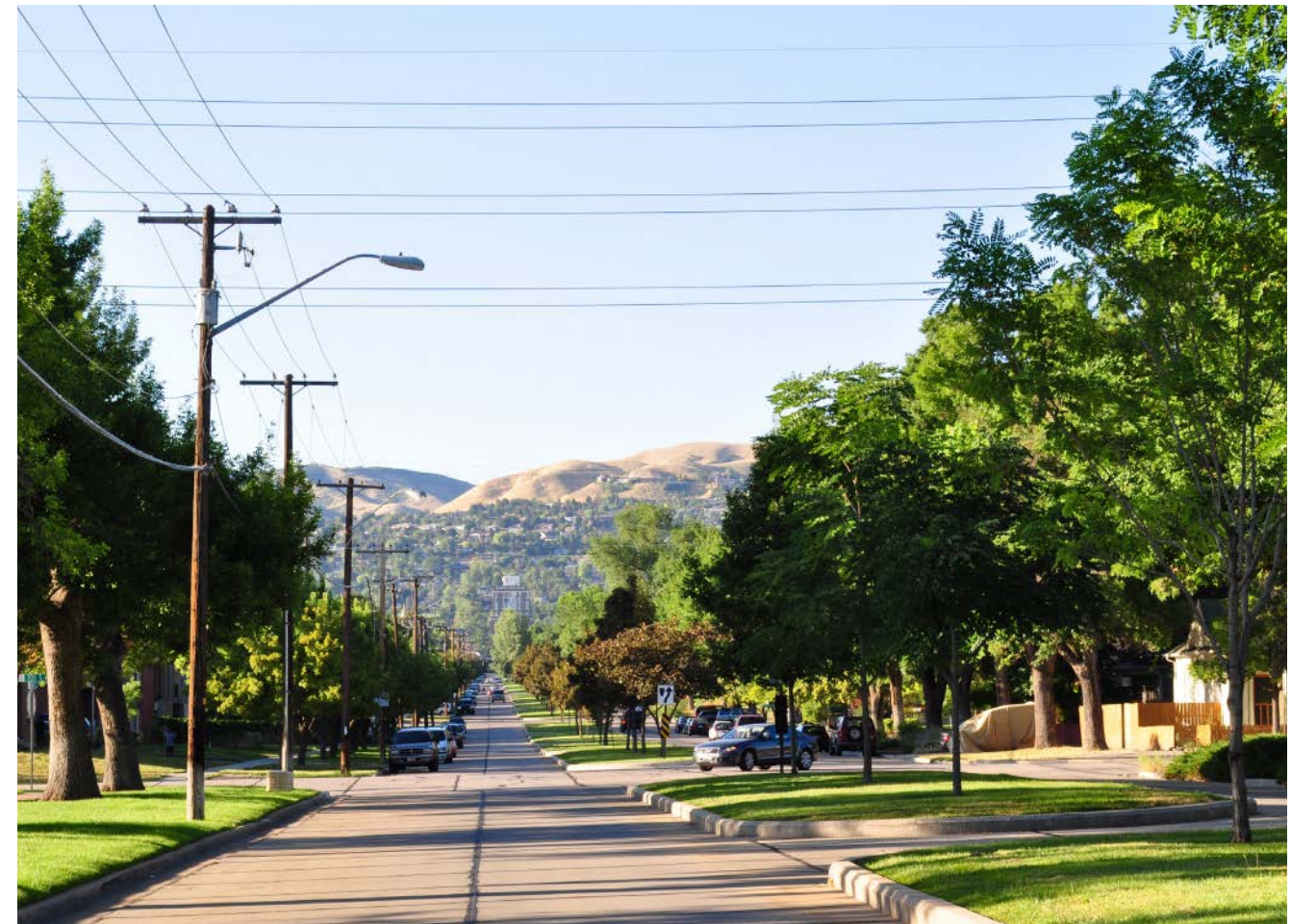


UTILITY CONFLICTS

For many Salt Lake City streets, especially those intended to provide greening and urban forestry benefits, there are potential conflicts between the need for a healthy tree canopy, reduced load and demand on pipes, and the underground and overhead utilities themselves. In addition, implementation of some typology designs may require and should budget for utility relocation or other mitigation measures.

Tree branches can interfere with overhead wires as they grow upward, and tree roots can impact underground pipelines as they extend downward. The implementation of typologies' designs must carefully consider the placement of streetscape improvements relative to public and private utilities, and vice versa. Salt Lake City may wish to consider a policy that specifies the process for addressing these conflicts when retrofitting an existing street to implement a typology's proposed design, including identifying impacts to underground and overhead utilities, recommendations for resolving utility and streetscape conflicts, and the cost and potential funding sources to resolve the conflicts. Many of these issues will also be addressed in Salt Lake City's [Urban Forest Action Plan](#), which is forthcoming.

In some instances, private development may play a role in implementing typologies on established rights-of-way. This may result in relocations of multiple utilities, the cost of which may already be partially borne by the developer. Salt Lake City could establish a policy to delineate the role of the private sector in implementing typologies, with input from various City divisions and departments. As noted earlier in this Guide, Salt Lake City acknowledges that UDOT will have some implementation authority on state routes and perhaps also on streets built with federal funding. As corridors are designated for improvements, Salt Lake City intends to work closely with UDOT to create public streets that serve travel needs as well as the larger community affected by each street.



CONSTRUCTION AND MAINTENANCE

The street designs envisioned in this Guide are often very different than the streets Salt Lake City residents are familiar with. They will require different construction and maintenance strategies and budgets than many are used to, including staff, elected leaders, residents, and business owners. Typology implementation on individual corridors should move forward with clear plans for ongoing maintenance and operations, but lack of immediate maintenance funding should not prevent necessary improvements to the public rights-of-way.

When Salt Lake City implements typology designs on individual corridors, the planning process should involve coordination with the various divisions and departments charged with the maintenance of assets within the public right-of-way (such as Streets, Facilities, Public Lands, Salt Lake County, the University of Utah, and UDOT) to ensure that construction details and ongoing maintenance needs are well understood and have a sustainable funding source. For example, increasing the miles of separated bike lanes throughout the City will require additional specialized maintenance vehicles, as well as additional staff to conduct those maintenance activities. The same is true of adding more green space, trees, and diversifying curbside uses. Most infrastructure, outside of the roadway, on UDOT streets is currently maintained (including snow removal) by Salt Lake City. Some maintenance activities could be conducted by external maintenance contractors, but this would also require additional funding to keep the new and improved designs functioning at the desired level.

As typology implementation expands, Salt Lake City may establish a dedicated funding stream to ensure that the redesigned streets meet

expectations and can be maintained appropriately once they are built. The City could also modify maintenance levels depending on changing conditions such as rain and snowfall – for example, in low-water years, the City could opt to selectively water only the high-investment landscaping such as trees, while allowing vegetation that could be more easily replaced to die if severe drought or low water supply conditions exist.

