

BUS STOP

MASTER PLAN

2019





Bus Stop Master Plan



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Executive Summary

Because of the expansive inventory of more than 6,300 bus stops, stops are most often public's first impression of UTA and its presence in the community. This is true whether or not people ride transit. Bus stops are ubiquitous from suburban neighborhoods to downtown cores. UTA's objective is to make bus stops a positive contribution to the community, both for riders and people who host them in their neighborhood. Bus stops should contribute to the streetscape and be a place where all riders can obtain transit related information. Stops should be a community asset as well and provide easy, intuitive access to transit service for people of all ages and abilities.

It is important that bus stops, to the maximum extent possible, are easily identifiable, clean, safe, accessible, and a comfortable place to wait for the bus. Although, there may be underdeveloped bus stops that do not currently achieve all of the standards outlined in the following pages, this master plan and associated guidelines provide a framework for retrofitting, maintaining and building new bus stops in order to make the entire system as accessible and user friendly as possible.

In addition to providing an inventory of existing conditions, this document is intended to provide a common set of goals, design principles, guidelines and policies to promote consistency in the design and provision of bus stops and their associated amenities. The aim is to ensure that stops are suited to their location, operationally functional and attractive to current and potential riders.

The Bus Stop Master Plan outlines and encourages partnerships with local governments and property owners. UTA is continually working with communities to improve access to bus stops, including sidewalks, street crossings, curb ramps and bicycle lanes. UTA continually affirms that the quality of the streetscape is critical to the success of the bus stop improvement program.

The primary objectives of this document are to identify and outline each of the elements of UTA bus stops, set design guidelines for the bus stops including placement and amenities and to describe the process for developing and managing a comprehensive bus stop inventory at UTA.

This document will also act as the basis for annual Capital Improvement budgets that will be used in combination with a prioritized program of bus stop projects that support the stated goals of the plan.

This document contains four major sections. They are (1) a brief introduction to the purpose and need as well as the goals for the master plan, (2) a description of the existing conditions, (3) the design criteria and guidelines (4) a prioritization methodology for managing the bus stop capital improvement program.

Introduction

The need for this plan is rooted in a bus stop management process that has focused on improvements upon request and has resulted in an inconsistent inventory of stops that ranges from exceptional to less than ideal. During 2016-2017 there was a proactive effort in the UTA Planning Department to inventory, document and catalogue every bus stop in the system. This inventory was the first ever comprehensive collection of organized and accurate data on the bus stops. To date, there has not been a cohesive strategy for organizing, tracking and prioritizing any proposed changes to bus stops.

Work on bus stops has traditionally been done on an *ad hoc* basis through an internal work order system, via email, or oral request. These improvements were most often based on customer or stakeholder comments or feedback, as a result of a specific grant project or based on staff priorities. While this approach has improved a large number of stops, it has often led to inefficient and ineffective use of capital. Specifically reviewing individual stops for improvement rather than looking at the network of stops as a system has led to inconsistencies and potential misallocation of improvement funds.

Perhaps more important than a process for addressing complaints and route changes is the fact that UTA lacks any current standard for bus stop design. Bus stops are the public's primary interface with the UTA system. In some cases stop conditions are more than adequate however there are also a large number of noncompliant or under improved stops. The need for a set of minimum standards, guidelines and policies for UTA's bus stop system will be addressed in this plan.

The purpose of this Bus Stop Master Plan is create a guiding document for UTA that can be used for strategically identifying, analyzing and prioritizing improvements to all bus stop amenities throughout the UTA system. The overarching intent of the Bus Stop Master Plan is *to enhance the customer experience by creating safe, comfortable, easy to use bus stops and amenities that are ADA accessible*.

The plan will provide a prioritized and phased schedule, design criteria and cost estimates for bus stop improvements. The schedule and prioritization will be based on different criteria including but not limited to total stop activity (TSA), compliance with the Americans with Disabilities Act and safety. The Bus Stop Master Plan will transform the network of stops into an asset that enhances the experience for existing customers, operators and the public and draws potential new riders to the UTA system.

Bus Stop Master Plan Goals

UTA has established a basic set of universal requirements that are addressed as every bus stop is considered. Each stop should, at a minimum:

- Meet minimum federal ADA and safety requirements which consists of a reasonably sloped, paved surface with access to a safe pedestrian pathway to and from the stop, where applicable
- Be designed to meet Crime Prevention through Environmental Design (CPTED) recommendations
- Have visible, consistent and easily identifiable signage
- Be unobscured and clearly visible by approaching bus where possible
- Be safely and conveniently accessed by a typical UTA fixed-route or Flex route vehicle
- Allow for the most effective and efficient system operation
- Provide accurate, up-to-date information for riders about services at the stop
- Provide placement and improvements which are sensitive to the community setting



- Meet local code, where applicable

Existing Conditions

UTA serves more than 2 million people along the Wasatch Front, with about 44% of that population living within ¼ mile of a bus stop. For many communities, the bus stop is the first and primary interaction they have with UTA. As of January 2018 the UTA System has 6,346 total active bus stop locations.

ADA Compliance

Existing bus stops that are currently not fully ADA compliant make it difficult for those with disabilities, or using mobility devices to enter and exit the bus safely (See Figure 1). Even passengers not faced with those challenges must still give attention to potential obstacles (i.e. snow, mud etc.) and terrain faced when boarding and alighting the bus.



FIGURE 1 - NON-COMPLIANT UTA BUS STOP

In addition, bus operators are also faced with challenges when servicing a bus stop that is not ADA compliant. They are left to use their best judgment to find a suitable location to unload or pick up passengers in mobility devices or those with other disabilities. The Federal Transit Administration (FTA) provides guidance for ADA compliance for both new and existing stops. The rule states that, to the maximum extent practicable:

- *New, altered, or relocated bus stops must have a firm, stable surface and must provide a clear length of 96 inches, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 60 inches, measured parallel to the vehicle roadway.*
- *Bus stops must also connect via an accessible route to streets, sidewalks, or pedestrian paths.*
- *The slope of the bus boarding and alighting area in the direction parallel to the roadway must be the same as that of the roadway to the maximum extent practicable. Perpendicular to the roadway, the slope must not exceed 1:48, that is, not more than 1 inch of rise over a horizontal distance of 48 inches¹.*

For existing stops, there is no explicit language in the guidance that exempts transit agencies from providing accessible bus stops, but rather the guidance states:

- *An individual with a disability who could otherwise ride an accessible bus but cannot reach the bus stop due to the lack of an accessible route would be eligible for complementary paratransit, at least on a conditional basis.*
- *FTA encourages transit agencies to inventory the location of their bus stops in relation to accessible pedestrian routes, and coordinate with owners of public rights-of-way (e.g., local municipalities) to help ensure connections to stops are as accessible as possible².*

For UTA specifications for minimum standard bus stop requirements, see Appendix B - *Landing Zone and Accessible Route Requirement*

Obstructions

Stop locations located in proximity to obstacles or obstructions such as power/telephone poles, hydrants, and utility boxes also pose additional barriers and not just to those persons with disabilities. These obstructions represent potential of interruption in service and damage to

¹ Americans with Disabilities Act of 1990 (ADA), Section 810.2

² Americans with Disabilities Act of 1990 (ADA), Section 209.2.3

property if vehicle contact is made with any of these obstacles. For example, when a bus makes contact with the curbside mirror of the bus with an obstruction, replacement costs may exceed \$1,500. In addition to the financial cost of the incident, the operator must stop to file a report causing an interruption of service. If the damage is severe enough that the bus is inoperable, the bus must remain at the location until a replacement bus is called out. This requires the time of a mechanic, leading to more time lost and costs continue to cascade. Repeated time and financial impacts can be mitigated if the bus stop is properly assessed and can be redesigned or relocated to a more ideal location.

Existing Bus Stop Amenities

While ADA Compliance and safety are the primary criteria to be used when evaluating stops, many stops are “underserved” in terms of the level of additional amenities. Amenities refer to those attributes of a bus stop beyond UTA and ADA minimum compliance standards (i.e. benches, trashcans, shelters, informational signage, etc.). In addition to a firm stable landing surface for ADA compliance, a sign pole and a route sign there are a range of amenities present at some but not all bus stops throughout the system. These amenities include:

- Shelters
- Benches
- Trash Cans
- Lighting
- Bike Racks
- Simme-Seats
- Electronic Signs
- Quartz Heaters

Prior to this plan, the determination of which stops in the system received additional amenities were determined on an *ad hoc* basis using a simple metric of bus stop activity as the primary indicator of performance. Decisions on which stops to improve have also often been based on things such as complaints, rider requests, elected official comments, special grants received to improve routes or corridors or on staff recommendations. In recent years UTA has addressed many individual bus stop related problems and the agency intends to continue this forward progress. This plan will provide a more structured and measureable approach to stop improvements.

The Bus Stop Master Plan provides a clear, consistent, quantitative methodology for assessing the current conditions of a bus stop, determining the appropriate level of amenities and prioritizing the budgeting, construction and placement of stops and amenities.

Existing Bus Stop Inventory

In 2016 UTA conducted a comprehensive inventory of the status of all of the bus stops within the UTA system. This inventory included all of the amenities present at each stop as well as other information related to the general condition of the stop including accessibility. As part of that inventory process, many variables associated with each stop were identified as being present or not present at any given stop location. The inventory process is an ongoing function of the Bus Stop Administrator and other Planning and UTA staff. The continual cataloging of every bus stop is ongoing and is critical in meeting the goal to implement system wide consistency and improvement. Table 1 shows the amenity categories that are currently documented and maintained.

Inventory Category		
• ADA Access	• Obstruction - Guy Wire	• Sidewalk
• Bench - Advertisement	• Park Strip	• Park and Ride
• Shelter	• Pole	• Trash Cans
• Lighting	• Bike Lane - Buffered	• Quartz Heaters
• Schedule Holder	• Bike Rack	
• Route Information	• Bathroom	

TABLE 1 - EXISTING AMENITY CATEGORIES

These levels have been determined by assessing the average daily total stop activity (boardings and alightings) at each stop. Table 2 provides descriptions of the levels including required average daily total stop activity (TSA), associated amenities.

Stop Level	Headway	Avg. Daily Boardings	Amenities
Level I - A	15 Min or Less	0 to 9	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad
Level I - B	Greater than 15 Min	0 to 4	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad
Level II - A	15 Min or Less	10 to 39	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Bench • Trash Can
Level II - B	Greater than 15 Min	5 to 9	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Bench
Level III - A	15 Min or Less	40 to 59	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Bench • Trash Can • 4'x8' Shelter**
Level III - B	Greater than 15 Min	10 to 19	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Bench • Trash Can • 4' x 8' Shelter**
Level IV - A	15 Min or Less	60 to 79	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Bench • Trash Can • 6' x 12' Shelter**
Level IV - B	Greater than 15 Min	20 - 29	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Bench • Trash Can • 6' x 12' Shelter**
Level V - A	15 Min or Less	80 to 99	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Trash Can • Two (2) Benches • 6' x 12' Shelter**
Level VI - A	15 Min or Less	100 to 149	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Trash Can • 6' x 16' Shelter** • Two (2) Benches • Light Fixture
Level VII - A	15 Min or Less	150 +	<ul style="list-style-type: none"> • Pole • Sign • ADA Pad • Trash Can • Two (2) Benches • Custom Shelter • Light Fixture • Digital Sign

TABLE 2 – BUS STOP LEVELS BY TSA

**Cantilever Option Available

NOTE: The amenity levels shown are based upon UTA being the sole provider of the amenity performing the upgrades at the bus stop location. Actual amenity levels may vary based upon local partnerships or third party financial participation including signage located in building in relative proximity to high performing stop locations. On-site conditions and availability of property may limit listed upgrades.

These bus stop levels are also stratified by the frequency of the route(s) that serve any given stop. The two frequency thresholds used are (a) 15-minute or less and (b) Greater than 15-minute.

Bus Stop Spacing and Placement

Bus stop spacing has a major impact on transit performance. Stop spacing affects both access time and line-haul time, and therefore affects the demand for transit service. In general, there is a tradeoff between: (a) closely spaced, frequent stops and shorter walking distance, but more time on the vehicle and (b) stops spaced further apart and longer walking distance, but less time on the vehicle.

Industry practices on spacing vary, as different agencies opt for different bus stop spacing standards. Often, bus stops are added on an as requested basis along existing bus routes. The addition of bus stops should be evaluated carefully prior to implementation to ensure that

operational efficiencies in bus services are not degraded and they do not negatively impact service reliability. Additionally, a periodic reexamination of stop spacing is recommended. Table 3 provides one example of typical industry practices. NOTE: These numbers represent typical fixed-route bus service and should not be applied to BRT service.

Environment ³	Stop Spacing (in feet)
Central Business District (CBD)	400–800
Urban Areas	500–1,000
Suburban	600–1,200
Rural	800 (as needed based on surrounding development and activities)

TABLE 3 - TYPICAL STOP SPACING

In general, stops located on the far-side of intersections are preferable; however, other types of stops may be unavoidable or justified in certain situations. There are advantages and disadvantages to each location. There are also opportunities to work with local municipalities and UDOT to take advantage of queue jump technology and Traffic Signal Prioritization (TSP) in order to optimize bus stop locations and minimize impacts to local automobile traffic. Extensive discussion and guidance for determining proper bus stop locations, including traffic signals and operations, are provided in the Transit Street Design Guide published by NACTO⁴. Assuming that all stop location variables are equal, Figure 2 shows the recommended stop locations for basic, fixed route and ADA accessible service.

Design drawings and more specific planning and design guidance for recommended siting, location and designs are included in Appendix A - *Guidelines for the Location and Design of Bus Stops*.

Bus Stop Elimination and Consolidation

While there are far more opportunities for improvements to existing bus stops or even adding new stops to the system, there is also a need to monitor, analyze and assess whether a stop is necessary any longer. There may be an opportunity to eliminate or consolidate one or more stops. This decision is not a trivial one and should be based a series of steps before any stops are eliminated or moved. These steps include using the same evaluation methodology as outlined in this document but elimination and consolidations requires much more community and rider engagement than would be needed for new stop installations or improvements. For more guidance on stop elimination and consolidation see “*Best Practices in Bus Stop Consolidation and Optimization*”⁵

Bus Stop Amenities

The basis for providing amenities and particular bus stops takes into account multiple factors. As mentioned above, one key factor is the average daily total stop activity (TSA). Other factors include wayfinding, safety, comfort and curb appeal in order to make UTA stops attractive as assets to a community. In addition to the physical location of a bus stop, the design and amenities should be considered in terms of having minimal visual and physical impact to the surrounding environment, especially in residential areas. Each of the available amenities for certain stops are described below, including the UTA design standards for each amenity.

³ Central Business Districts are loosely defined as a one (1) mile radius around the geographic city center or city hall

Urban Areas are areas defined by the US Census that contain 50,000 or more people.

Suburban Areas can be generally defined as the area outside of a central business district but still within the limits of the official census urban area

Rural areas can generally be defined as those areas outside of the official census urban areas

⁴ Transit Street Design Guide, National Association of City Transportation Officials, 2016 <https://nacto.org/publication/transit-street-design-guide/>

⁵ “Best Practices in Bus Stop Consolidation and Optimization” <https://issuu.com/uclapubaffairs/docs/2/>

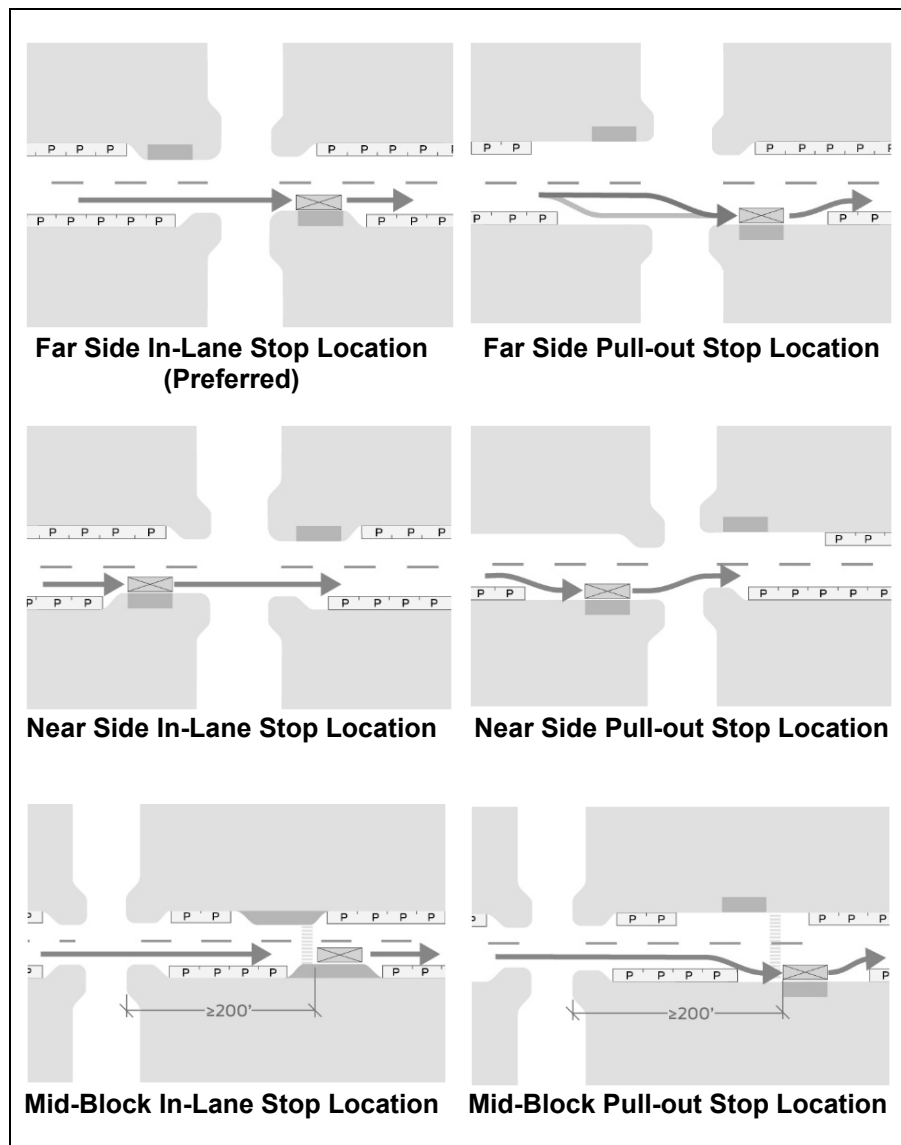


FIGURE 2 - STOP LOCATION RECOMMENDATIONS

Benches

Benches are a simple, easy and cost effective way to provide comfort and security for waiting passengers and help in wayfinding. UTA currently uses two styles of benches: Park Benches and Team Benches. Limiting the number of styles of benches in the system helps to keep maintenance costs low and allows for purchasing contracts that include multi-year options. This design criteria also provides uniformity in appearance at the bus stops across the system. This in turn helps passengers and operators quickly identify bus stops especially those unfamiliar with a route. For UTA specifications for standard bus benches, see Appendix B - *Trash Can and Bus Bench Specifications*

Shelters

While shelters require increased capital costs associated with the construction and maintenance of a bus stop, they provide greater security, protection and wayfinding for passengers and operators alike. Typically bus stops with higher boardings will receive shelters and depending on the TSA, the sizes of those shelters will vary to accommodate the volume of waiting passengers.

A recent study⁶ shows that providing shelters at bus stops will not only increase ridership but more importantly help retain ridership, especially during inclement weather. This is especially true when transfers are required as most riders can control the initial point of origin when taking public transit (i.e. leaving home, workplace, etc.). A 2015 UTA rider survey found that a single rider transfers an average of 1.39 times. When offering shelters at high boarding stops and focusing on transfer points it influences choices people make in relation to using transit on days when weather is a factor (i.e. heat, cold, rain, snow). For UTA specifications for standard bus shelters, see Appendix B - *Shelter Design Specifications (Typical)*

Signage

The Bus Stop Master Plan will always refer to the signage standards as presented in the current UTA Customer Information Standards and UTA Wayfinding Strategy documents.

The standards and wayfinding strategy have been structured to support the needs of each affected group within the UTA system. In addition, the sign standards are organized into families of sign types, bus stops signs are represented independently in the standards (See Section 13 – Customer Information Standards). Within the bus stop sign family, there are design specifications for specific sign types, each with physical characteristics tailored to fit specific information and site-specific needs. For instance in remote locations on rural routes there is no need for sophisticated multi-route information signs. In this situation a simple post and bus stop sign serves perfectly to mark a bus stop. However, as population and route density increase approaching population centers, more and more sophisticated signs are required to handle the greater information density. The standards include details regarding the information display requirements, a set of detailed construction drawings, specifications, and typical installation.

Finally, the mechanism for planning, procurement, management and maintenance of the sign program is essential to the success of the sign and information design. An internal administration process, including procurement, installation and removal is included in Appendix D - *Processes*.

Stop Assessment Methodology

This section outlines the methodology that is being used by UTA to evaluate the existing conditions of the stops in the system. While the level of stop amenities is determined by the TSA at the stop, these recommended amenities come with a significant capital and operating cost. This methodology is used to determine *which* stops will receive improvements and thus appropriate the limited amenity resources equitably.

Before determining what design level will be assigned to a stop, there are several key factors, or minimum standards, that must be met. These factors are driven by federal ADA standards, UTA safety standards and bus stop operations serviceability standards. These standards provide the first level of screening for each of the stops within the system.

Over the lifetime of a bus stop, the largest cost is operation and maintenance (i.e. cost to maintain trash receptacle, shelter, and lighting etc.) of the amenities located at any particular bus stop. Because of this ongoing cost, the initial installation and purchase of the amenities to be installed is evaluated and carefully considered before approving amenities to be installed at a stop. This is done to ensure that stops with the most daily activity receive priority of UTA's limited resources. In order to determine what bus stops are improved on a prioritized basis, UTA has developed a Bus Stop Scoring Matrix where each stop is assigned "points" (see Table 4).

⁶ *Impacts of Bus Stop Improvements*, University of Utah Department of City and Metropolitan Planning, 2018, K. Bartholomew et. al.

The matrix below has been approved by the FTA to comply with Civil Rights, ADA and Title VI regulations. By evaluating each stop location and scoring the various categories at each stop, the highest scoring stops are prioritized and addressed first. While the Bus Stop Master Plan is designed to address all the bus stops system-wide, this process helps UTA prioritize a limited annual budget for bus stop improvements. The underlying assumption associated with the Bus Stop Scoring Matrix is that it is used to address only those stops in the UTA system that are currently non-ADA compliant. The reasoning is that if UTA has funds to improve stops in the system, the first stops to be improved should be those that do not meet federal ADA compliance standards.

Category	1 Point	2 Points	3 Points	4 Points	5 Points
Non-ADA Compliant*	-	-	-	-	Yes
Total Stop Activity (TSA) – Average Daily Weekday**	1 to 19	20 to 39	40 to 59	60 to 79	80 +
Total Annual Bus Ramp Deployments	1 to 49	50 to 99	100 – 149	150 – 199	200+
Transfer Point***					
Equal to or Greater than 30 min. freq.	1 Route	2 Routes	3 Routes	4 Routes	5+ Routes
Less than 29 the min. freq.	1 Route	2 Routes	3 Routes	4 Routes	5+ Routes
Serves Title VI Community	Title VI Route/Area				
Safety					
Intersection	1 of 5 Elements	2 of 5 Elements	3 of 5 Elements	4 of 5 Elements	5 of 5 Elements
Parking Allowed					
Obstacle(s) Present					
No lighting Present					
Sidewalk Not Level					
Social					
Education Adjacent	Yes				
Library Adjacent	Yes				

Table 4 - Bus Stop Scoring Matrix

* Non-ADA compliant bus stop locations automatically receive five (5) points

** TSA Data is average weekday ridership taken from the last eight change day periods

***One (1) additional point is assessed each route at a transfer point with 30 minute or less frequency

The results of this methodology are compiled annually into the Bus Stop Planning Reports. These reports represent the top tier of bus stops that UTA has prioritized as needing to be addressed for one or more of the screening criteria listed above. These reports can be found in Appendix F – *Annual Bus Stop Planning Reports*.

Funding

One purpose of this Master Plan is to develop a 2-5 year strategy for bus stop improvements. UTA's Bus Stop Administrator will manage the development and administration of this strategy and working with the Service Planning Department prepare an annual budget associated with a

prioritized schedule of bus stop improvements or new construction. This budget should include capital costs as well as operating and maintenance costs for the life of the stop.

It should also be noted there are opportunities for cities and counties to participate in contributing additional funding for local stops in their communities. These stops may not necessarily appear in the *Annual Bus Stop Planning Report* as a prioritized location, but UTA recognizes that outside funding contributions may not always completely align with the schedule or prioritization that UTA has prepared for stop improvements. In these cases, the Bus Stop Administrator will work directly with city or county staff in preparing a work scope, budget and schedule for these situations. The responsibility for the maintenance and upkeep of the stops, shelters and amenities paid for by others become will be explicitly outlined in a Memorandum of Understanding or Memorandum of Agreement between UTA and the sponsoring agency. This agreement may also call for UTA to maintain the facility as part of its routine maintenance and be reimbursed by the sponsoring agency. For more guidance on this process, see Appendix E - *Bus Stop Amenities Installation Standard Operating Procedure*

New Bus Routes and Route Modifications

In the case of new routes or new service being introduced, the Service Planner(s), regardless of the levels or type of stops that may be required, will collaborate with the Bus Stop Administrator and together evaluate and select the optimal locations of bus stops and plan the stop locations according to the guidance established in this document. Stop amenities at the new stops will be based on estimated ridership using UTA's travel demand modeling tool (TBEST). At a minimum, every new stop will require all of the Level I stop amenities in order to be ADA compliant. Sufficient time for both planning, ordering and installing new stops needs to be provided. In no case should a new route start operation without proper, accessible, safe bus stops in the designated locations.

Routes are often modified to improve operational efficiency of provide access to a new customer base. All new bus stops on modified routing must be made ADA compliant to the maximum extent practicable. This is true where the change originated with UTA. Where the change was forced by an outside factor, stop locations may receive temporary placards until the location can be improved.

Bus Stop Administration

The UTA Bus Stop Administrator is responsible for coordinating with other UTA departments all of the work that is done with regard to the planning, feasibility, design, installation and maintenance of any UTA bus stop. This does not necessarily mean that the Bus Stop Administrator is responsible for the actual tasks associated with the design, installation and maintenance, just their proper execution according the Bus Stop Master Plan. UTA has established processes and procedures that are used for everything from planning and installation of bus stops to the procurement of shelters and amenities to the removal or replacement of existing amenities. UTA also has an adopted Standard Operating Procedures that outline the entire bus stop administration process, including explicit steps and persons responsible for each step. These SOPs can be found in Appendix E - *Policies & Standard Operating Procedures*.

Annual Bus Stop Planning Reports

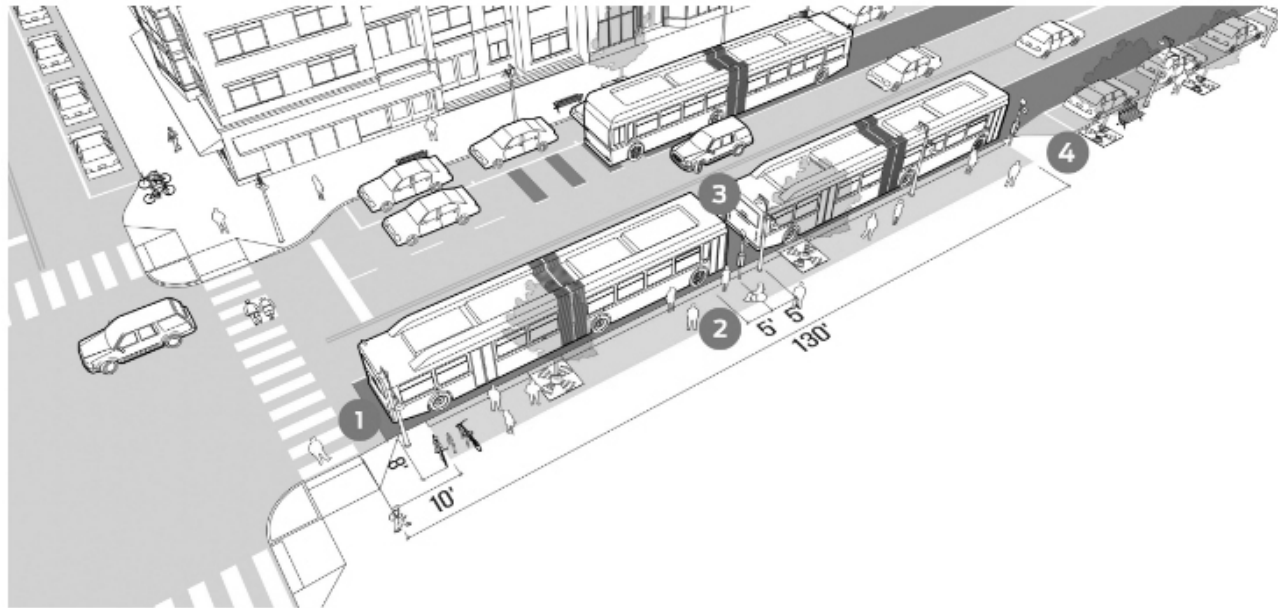
Bus Stop Planning reports are generated and reviewed annually in order to track progress on the improvements⁷ made to bus stops throughout the system. These reports are generated prior to the UTA budget period so that capital budget requests can be made by the Bus Stop Administrator for the following year. These requests represent the total cost of the cumulative work identified in the prioritization matrix. These reports are subject to review, and change, by executive leadership in order to make sure the program of bus stop improvements is in line with the annual goals as established by the Board of Trustees. Since local revenue is generated at the county level, these reports are generated on a county-by-county basis and represent the total capital that is anticipated to be spent bus stops and amenities in any particular county. This allows for UTA to also report to local municipal and county leaders how their tax dollars are being spent in their respective jurisdictions. These annual reports can be found in Appendix F - *Annual Bus Stop Planning Reports*.

⁷ It should be noted that these reports also contain recommendations for stops that should be consolidated or completely eliminated.

Appendix A – Guidelines for the Location and Design of Bus Stops

A no parking zone is required at all bus stops. The length of the no parking zone is dependent on the length of the bus operating on the stop's route. The next section describes the required length of the no parking zones in front of bus stops depending on whether the bus stop is an 'in lane' stop or a 'pull out' stop.

Stop/Platform Lengths



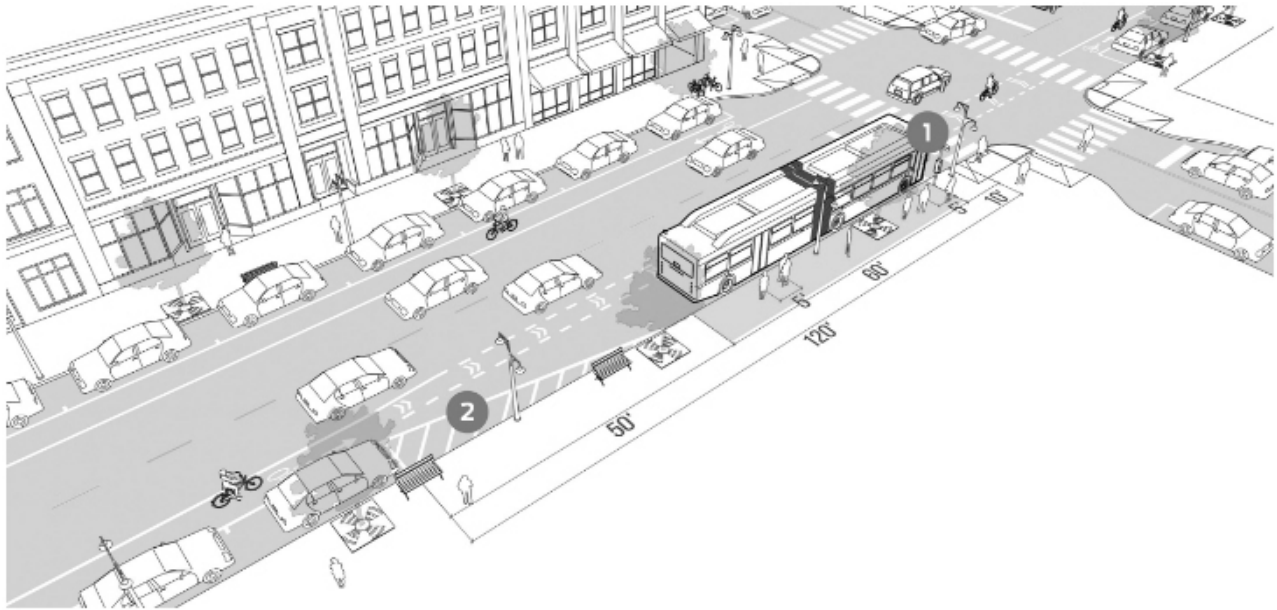
In-Lane Stops

Desired Minimum Stop/Platform Length by Vehicle Type (feet)*				
Stop Location	40' Bus	60' Bus	2 x 40' Bus	2x 60' Bus
Near-side	35	55	80	115
Far-side	45	65	90	130
Mid-block	35	55	80	115

*Bus stop/platform lengths also represent the distances where 'No Parking' restrictions should be enforced in the street.

NOTES:

- 1 Locate platform with at least 10 feet of clear distance from crosswalk or curb return. Measure to transit stop pole at near-side, or rear of transit vehicle at far-side.
- 2 While 5 feet is the minimum curb length for a receiving facility at each boarding door (ADA Std. §810.2.2), design platforms to be continuous through all doors, and consider additional elements to improve passenger comfort
- 3 Provide 5–10 feet of distance between each additional transit vehicle expected to be dwelling at the platform consistently throughout the day.
- 4 Design boarding bulbs and islands to accommodate proper drainage and sweeping; tight radii may require maintenance agreements to ensure bulbs are properly cleaned and maintained.



Pull-out Stops

Desired Minimum Stop/Platform Length by Vehicle Type (feet)*				
Stop Location	40' Bus	60' Bus	2 x 40' Bus	2x 60' Bus
Near-side	100	120	145	185
Far-side	80	100	125	165
Far-side (right turn)	140	160	140	230
Mid-block	120	145	185	210

*Bus stop/platform lengths also represent the distances where 'No Parking' restrictions should be enforced in the street.

NOTES:

- 1 Locate stop zone with at least 10 feet of clear distance from crosswalk or curb return. Measure to transit stop pole at near-side, or rear of transit vehicle at far-side.
- 2 White diagonal hatch line markings may be striped to delineate the entry and exit tapers and discourage blocking. Provide 5–10 feet of distance between each additional transit vehicle expected to be dwelling at the platform consistently throughout the day.

Desired Minimum Stop/Platform Length by Vehicle Type (feet)*

Desired Minimum Stop/Platform Length by Vehicle Type (feet)*				
Stop Location	40' Bus	60' Bus	2 x 40' Bus	2x 60' Bus
Near-side	35	55	80	115
Far-side	45	65	90	130
Mid-block	35	55	80	115

NOTES:

- 1 For pedestrian travel paths, a clear width of 8–12 feet is preferred where transit is present, and may be wider based on pedestrian and transit rider capacity. Pinch-points less than 6 feet wide create capacity and comfort issues and should be avoided. A 4-foot clear width is acceptable around some design elements like shelters and seating, and may be used especially where access is helpful but not essential, such as between a curb and the back of a building-facing shelter. Shelters and seating should be positioned so that all riders can comfortably wait, board, and alight without obstruction.
- 2 Turns in travel paths must have a landing at least 4 feet deep (ADAAG §403), and a minimum 4-foot by 5-foot turning space is preferred (PROWAG §304.2.1). Crosswalks must be accessible, with special attention to both people using wheelchairs and wheeled mobility devices and people with no or low vision. Curb ramps must be provided at all street crossings that involve a change in grade. Do not obstruct the top of the curb ramp. Curb ramps and other travel paths should be designed to prevent the accumulation of water and snow. Ramps may not have a slope exceeding 1:12. Ramps must have a landing for each 30 inches of rise (ADAAG §405).
- 3 An accessible boarding area must be provided, typically measuring 5 feet long (parallel to the curb) by 8 feet wide (perpendicular to the curb). This includes 5 feet of width for a wheelchair waiting area, plus additional width to deploy a wheelchair ramp to serve the waiting area (typically 3 feet). Longer ramps may require additional length (see ADAAG §810.2.2). To provide accessible boarding, the vertical step between a platform and a vehicle (or ramp) must not exceed 5/8 inch, with a maximum horizontal gap of 3 inches (49 CFR §38.23). For near-level boarding, bridge plates used to enable accessible boarding should not rise more than 3 inches or exceed 1:8 slope, with shallower slopes preferred. The slope for a bridge plate depends on the height of the vehicle floor and ranges from 1:4 to 1:12 [49 CFR §38.83(c)(5)].

Appendix B – Bus Stop Construction Standards & Design Specifications

As of 2018 UTA will consider the 2015 circular from the FTA the primary authority yet the 2015 circular does not void the guidelines in place in the 2010 DOJ and the 2006 FTA ADA guidelines. These guidelines will be supplemental and referenced within this document.

<https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/fta-circulars>

ADA requirements state the landing zone must be 5' x 8' (See Figure 1) and less than 2% sloping toward the road. UTA standards have increased the size of the required landing zone to 6' x 8' to accommodate a stop flag. The stop flag will be installed on the far side of the landing zone 1.5 feet away from the curb. See SHEET #1 (Plan View). Slope of all concrete flatwork shall not exceed 2%. Concrete flatwork should drain toward the roadway where possible.

Landing Zone and Accessible Route Requirement

UTA standards require an accessible route complying with Chapter 4 of the 2010 ADA guidelines connecting the bus shelter, the landing zone and the sidewalk (See Figure 1). If sidewalk is not present sidewalk should be constructed. If sidewalk construction will exceed 20% of the cost of the bus stop, alternative construction options will be considered. A possible alternative could include a curb ramp into the roadway but the location's specific needs must be analyzed by UTA's Capital Development and Civil Rights Departments.

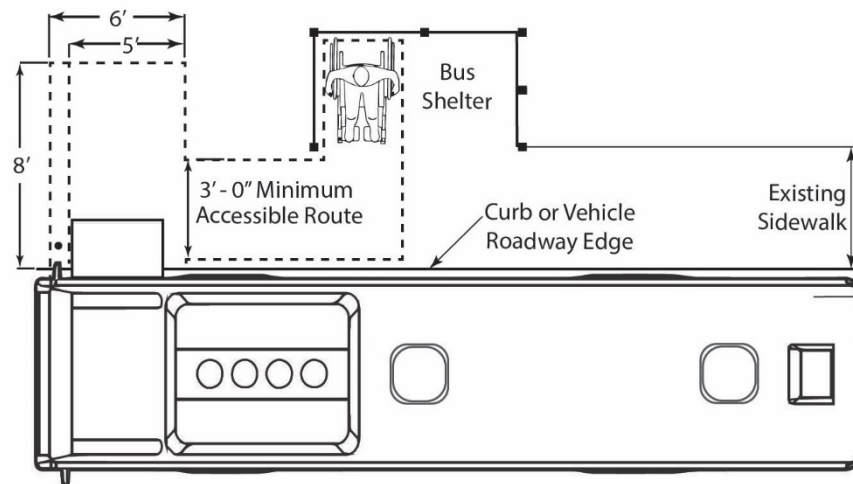


FIGURE 3 - ACCESSIBLE ROUTE DIAGRAM

1. Bus stops require a Landing Zone complying with 810 of the 2010 ADA guidelines. This landing zone must be 6' x 8' as indicated in Figure 2 and less than 2% sloping toward the road.
2. This Landing Zone must be connected to the sidewalk and shelter with an accessible route complying with 402 of the 2010 ADA guidelines.
 - a. The accessible route must be at least 3 feet wide and have a slope less than 2% in any direction
 - i. If 2% cannot be achieved, an ADA ramp may be employed to connect the landing zone and the sidewalk. The ramp must comply with Fig. 2 below. The ramp may have a maximum slope of 5% unless handrails are included increasing the maximum slope to 8.3% (or 1:12).

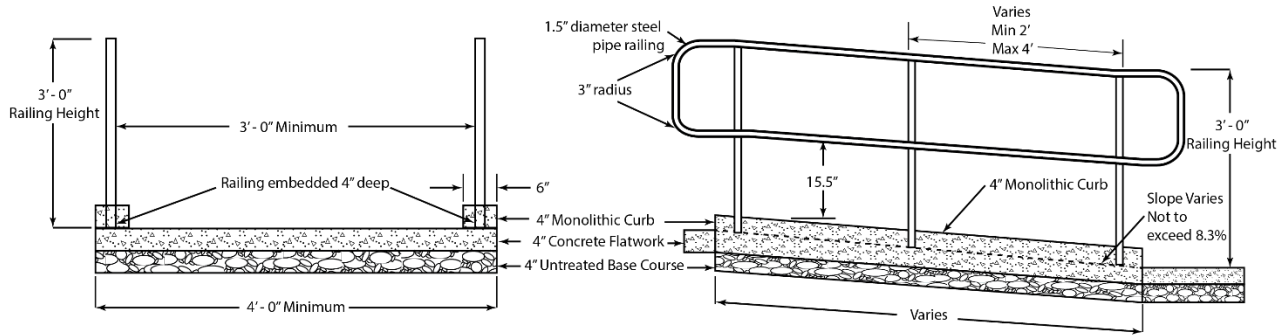


FIGURE 4 - ADA RAMP DESIGN

- ii. With UTJ engineer approval, a raised curb may be employed in accordance with Fig. 3 to reduce the length of the ramp.
 - 1. The horizontal spacing between the “L” #2 rebar installments must be 18” maximum on center. (See Fig. 3)
 - 2. Clear distance between the rebar and concrete edges must be at least 7/8” inches.
 - 3. Use only epoxy coated rebar.
 - iii. If the length of the ramp exceeds 10 feet, stairs must be installed concurrent with the ramp in accordance with the detail in Figure 6.
 - iv. If the length of the ramp reaches 30 feet a 5 foot landing must be installed where the slope is reduced to below 2% in the direction of the ramp. (Reconsideration of the ramp route or stop location may be appropriate.)
3. Amenities shall be installed with 0.5 inch clearance between appurtenances.

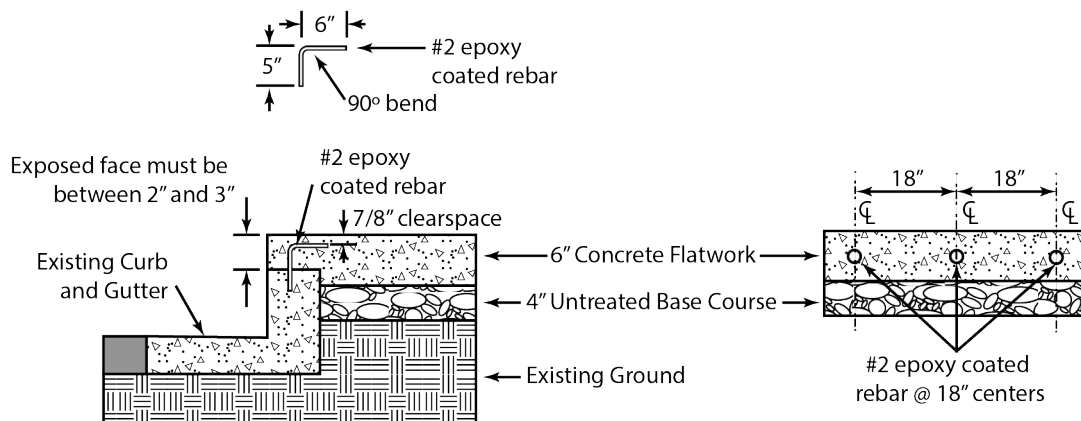


FIGURE 5 - RAISED CURB FACE DESIGN

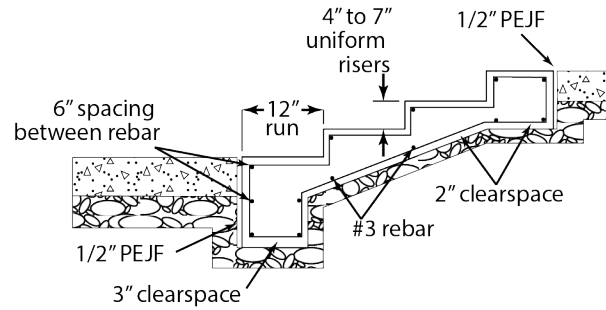


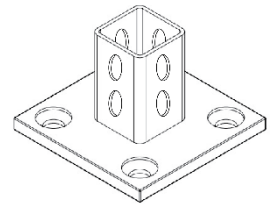
FIGURE 6 - STAIR DETAIL

Hardware

1. Rebar Specifications
 - a. Use #2 epoxy coated rebar used for the raised curb face.
 - b. Bend and cut the #2 rebar into a 90 degree "L" bend (See Fig. 3)
 - c. Install the "L" bends 18 inches on center. (See Fig. 3)
2. Bus Stop Flag Installations
 - a. Mount the Bus Stop Flag 1.5 feet from the Top Back of Curb. edge of the mount should be 6 inches from the far edge of the concrete in the "mount alley". (See Fig. 7)
 - i. Use a Strong-Tie Titen HD bolt or UTA approved equivalent. (See Fig. 5)
 1. Bolt shall be 0.5 inches thick
 2. Bolt shall be 3 inches long
 3. Bolt shall be fastened with a 0.5 inch washer
 - b. Use Stainless Steel Base Flange for Square tubing or UTA approved equivalent (See Fig.6)
 - c. The mount must remain in the "mount alley". (See Fig. 7)
 - d. The mount alley consists of the 1 foot corridor perpendicular to the roadway on the farside of the landing zone. (See Fig. 7)



FIGURE 5



**FIGURE 6 - BASE
FLANGE FLAG
MOUNT (TYPICAL)**

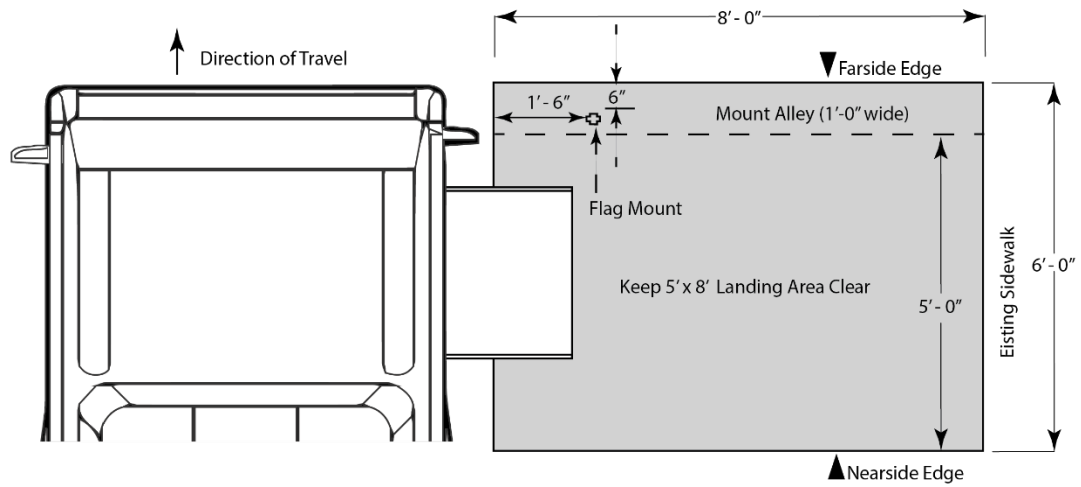


FIGURE 7 - ADA LANDING PAD DESIGN

Shelter Design Specifications (Typical)

Materials

- Dark bronze anodized aluminum structure
- 1/4" tempered safety glass
- Dark bronze standing seam hip roof with fascia and gutter system
- Partial length aluminum bench with backrest

Custom Shelters

- Must provide roof, back, and side weather coverage similar in dimension to standard shelters that UTA would normally provide
- Must meet all UTA structural and building code requirements

Lighting

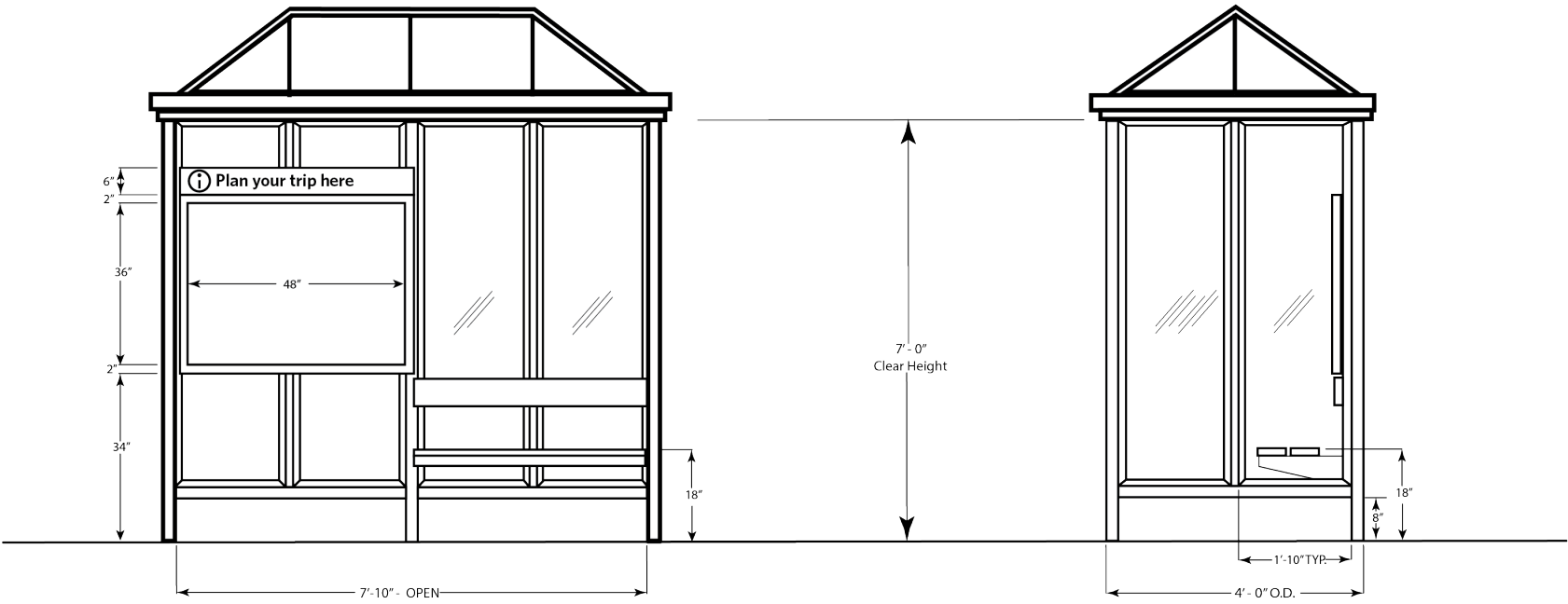
- External lighting can include streetlights, pedestrian lights, or floodlights
- Where possible bus stops should be located adjacent to existing lighting sources. Shelters and other furniture should be located within the flood of existing lights
- UTA prefers to install internally lit shelters at all new or refurbished Level V, Level VI and Level VII bus stops
- Standard lighting fixtures should be used at bus stops because they are easier and less costly to maintain than uniquely designed fixtures

Artwork

- Municipalities may request artwork to be installed at bus stops
- Funding for the artist's time and material will be paid by the requesting municipality
- UTA will develop agreements with the artists including but not limited to contractual obligations that address future modifications or other impacts to the art pieces

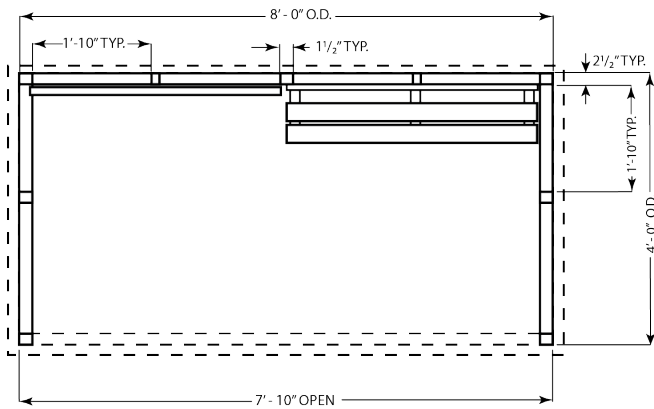
Benches

- Benches should be provided in all shelters
- A single bench is provided at all Level II bus stops
- Additional benches are placed outside Level III through Level VII shelters
- Benches may be installed at stops where a shelter is warranted but will not fit

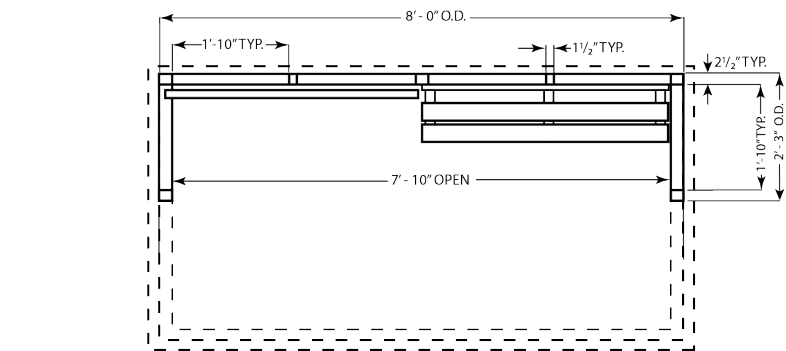
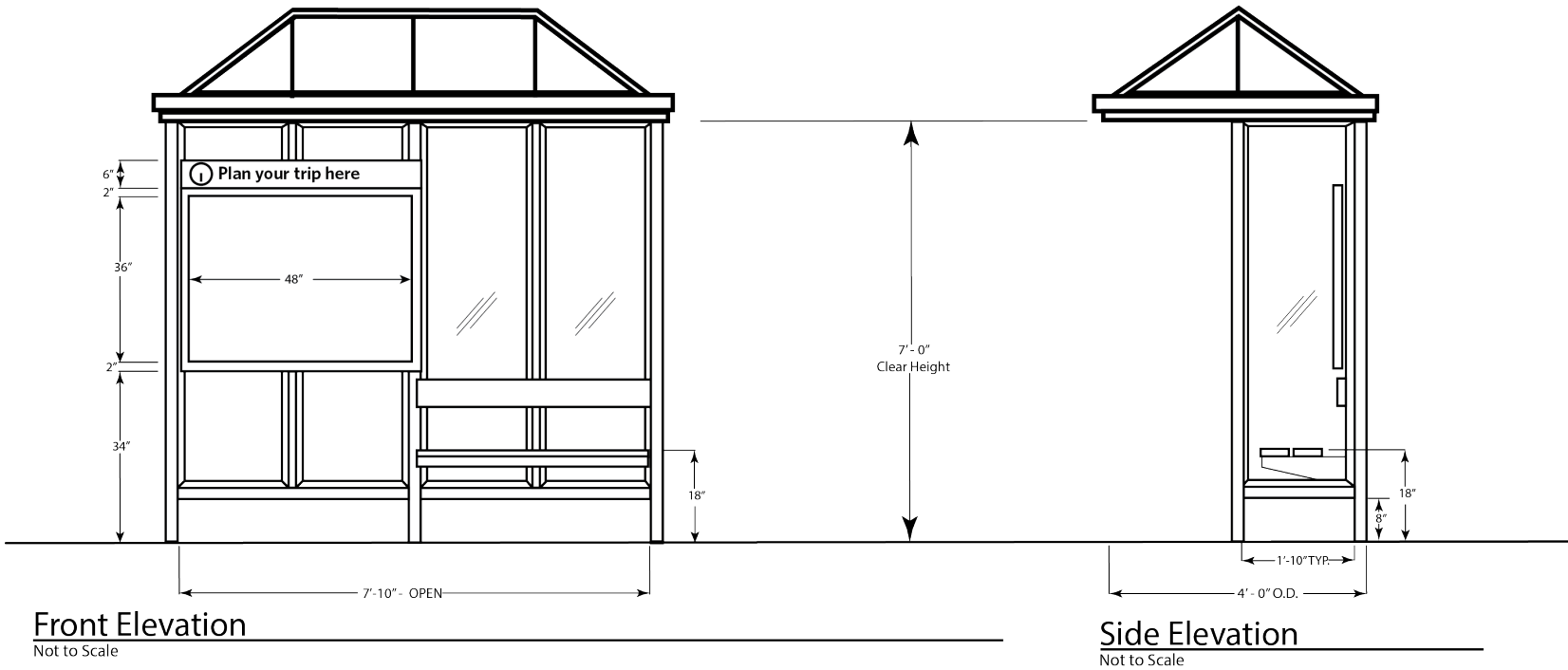


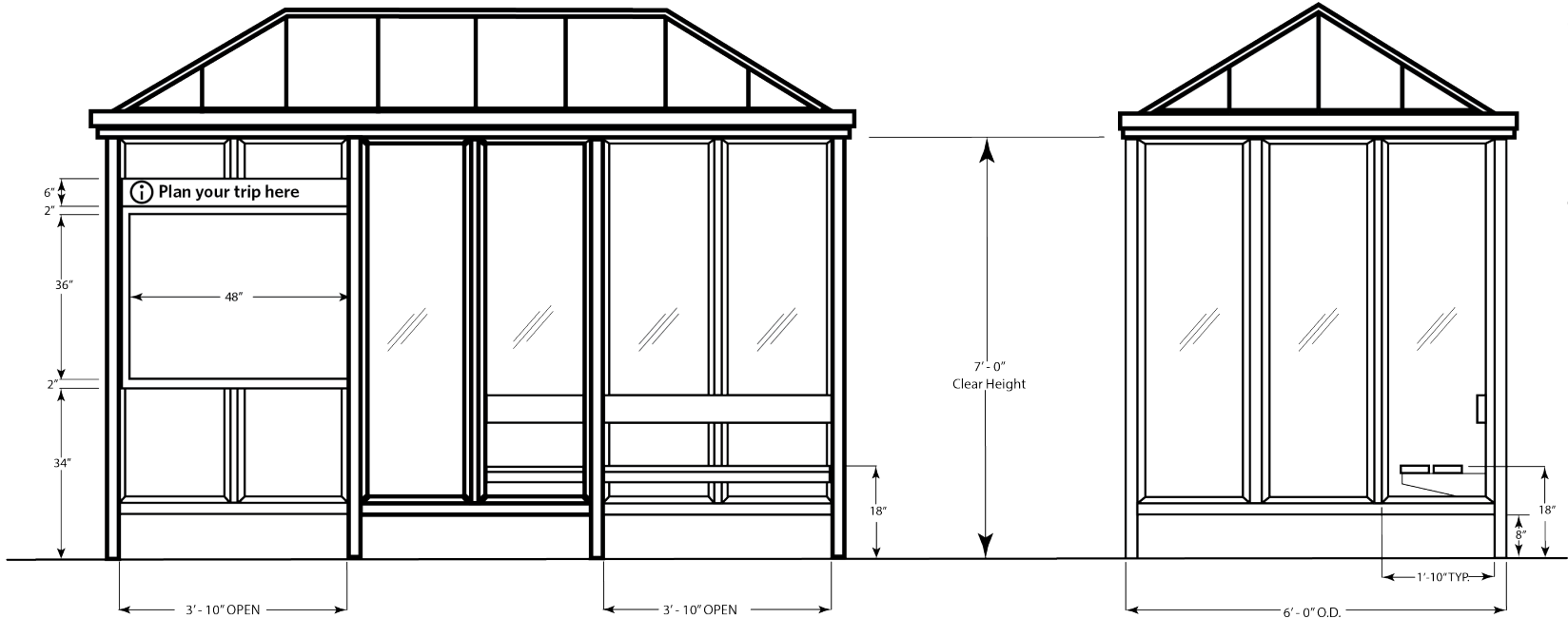
Front Elevation
Not to Scale

Side Elevation
Not to Scale



Plan View
Not to Scale



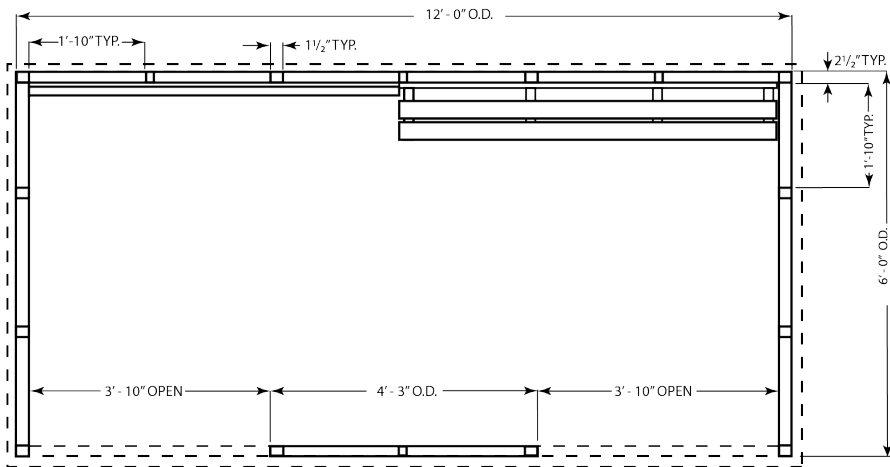


Front Elevation

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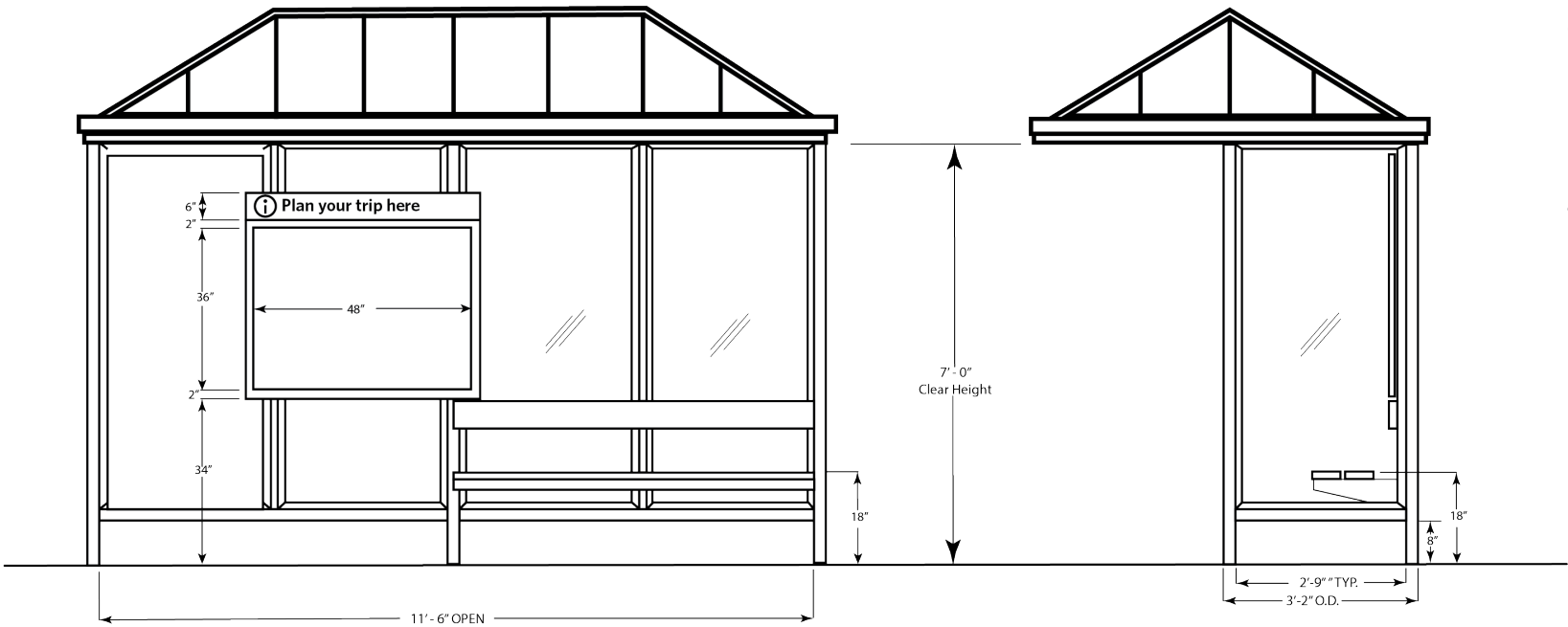
Side Elevation

Not to Scale



Plan View

Not to Scale

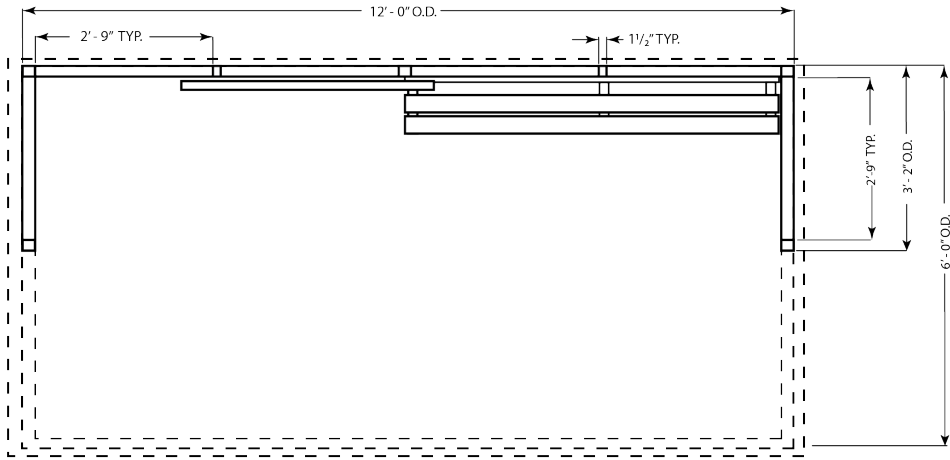


Front Elevation

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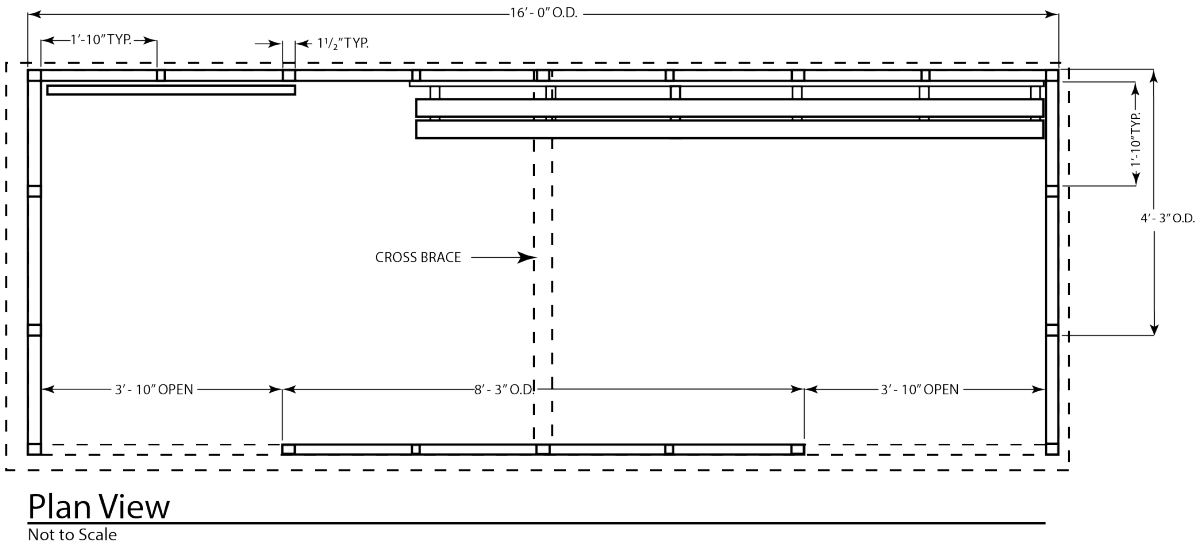
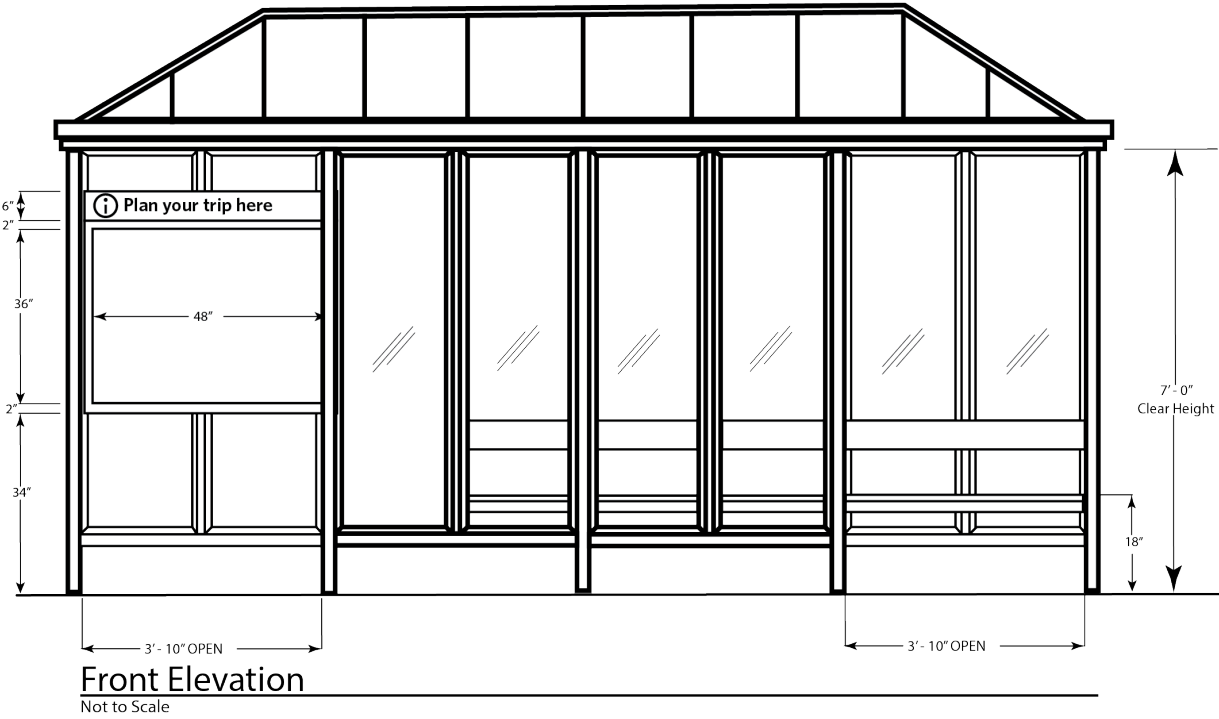
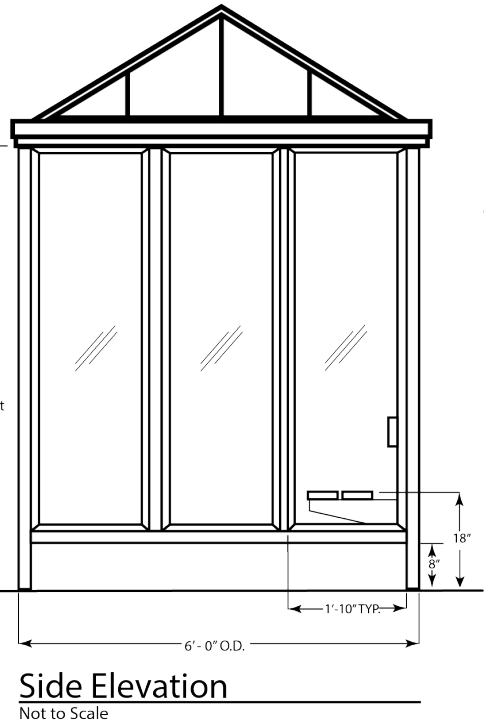
Side Elevation

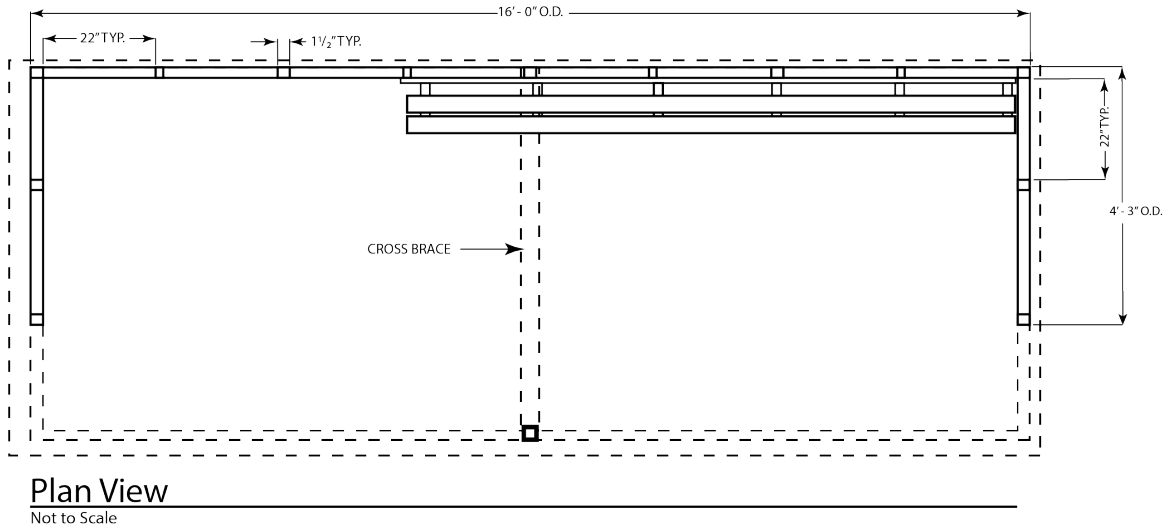
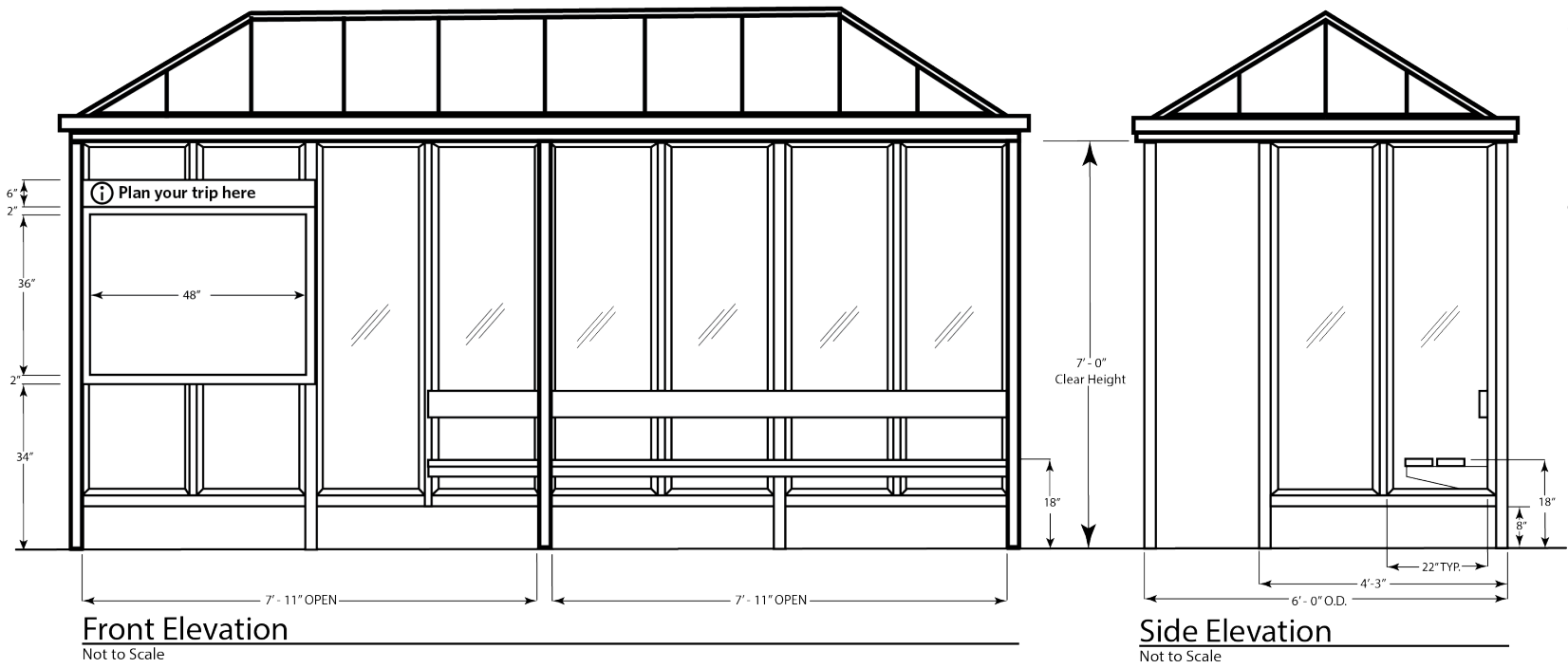
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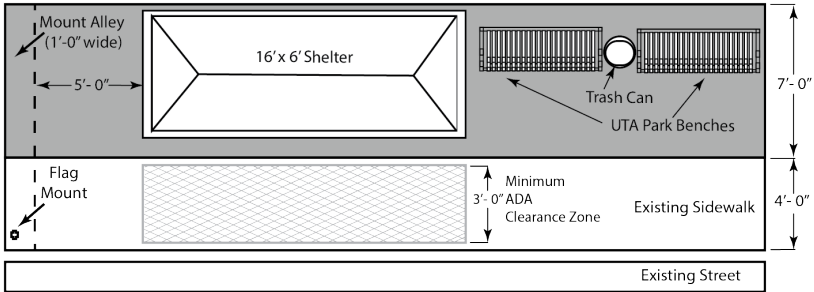


Plan View

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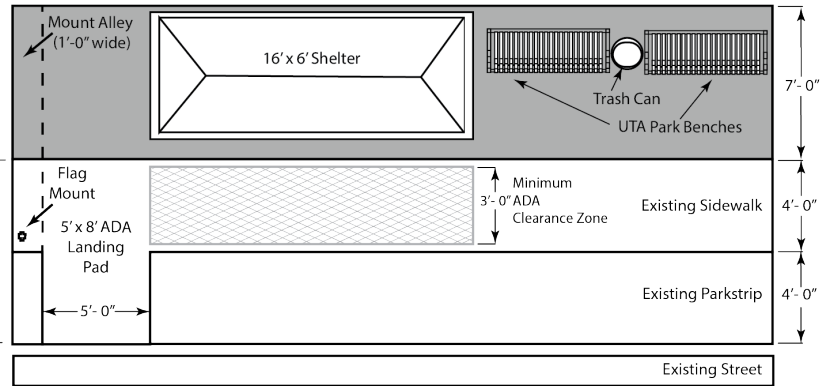






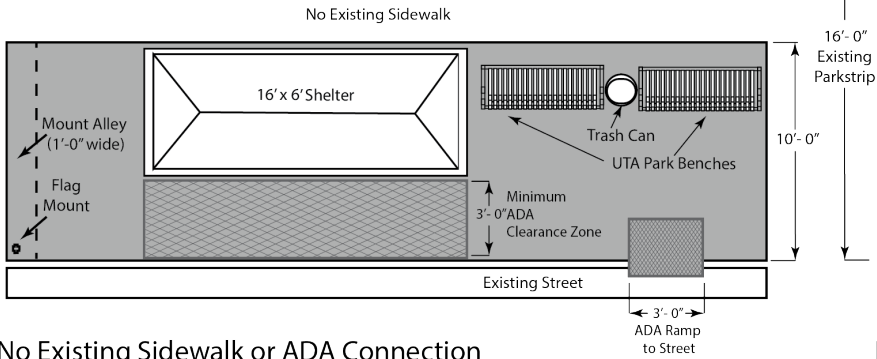
Existing Sidewalk Adjacent to Curb and Street

Not to Scale



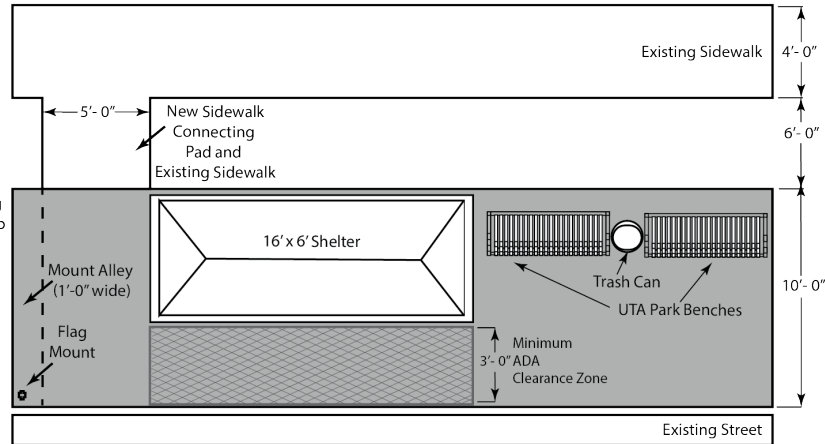
Existing 4'-0" Parkstrip Adjacent to Curb and Street

Not to Scale



No Existing Sidewalk or ADA Connection

Not to Scale



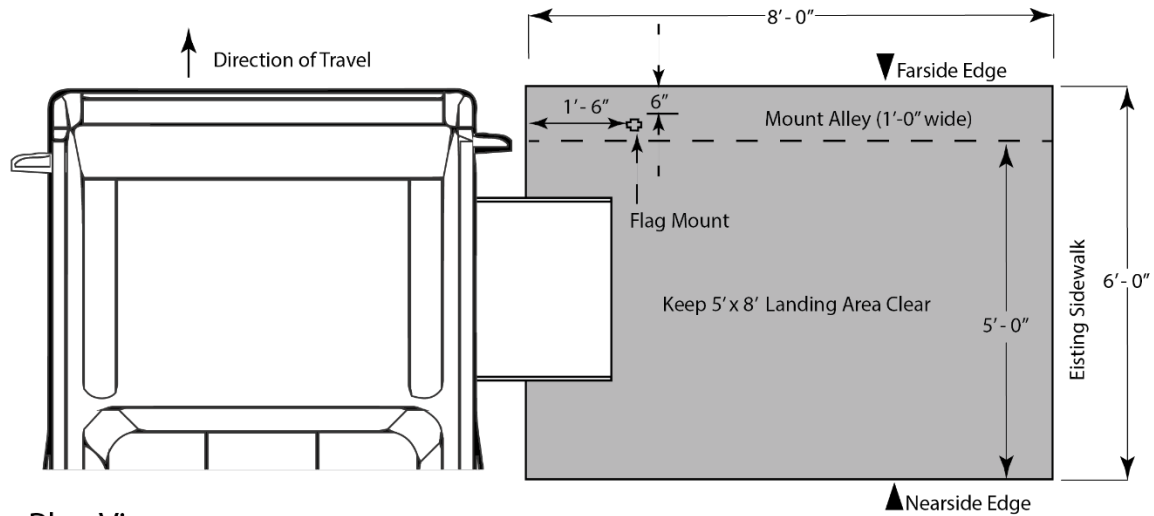
Existing 16'-0" Parkstrip Adjacent to Curb and Street

Not to Scale

Bus Stop Designs by Level

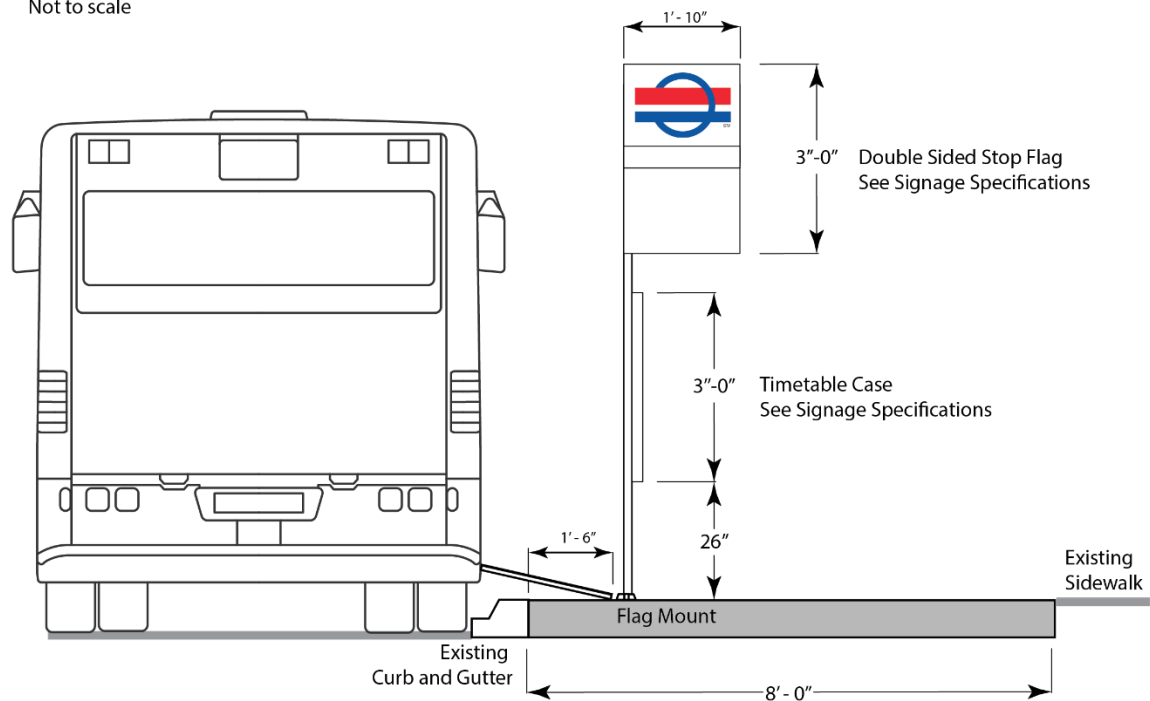
Level I Bus Stop Design (Typical)

Updated January 2019



Plan View

Not to scale

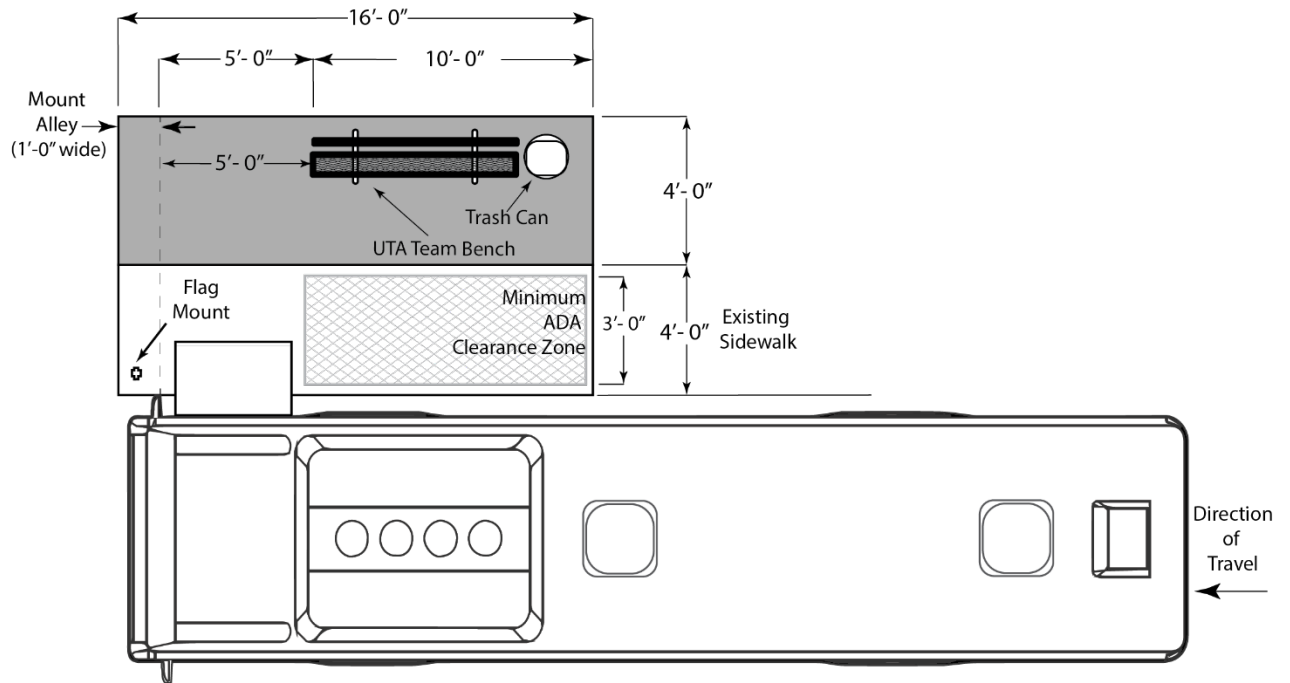


Side Elevation View

Not to scale

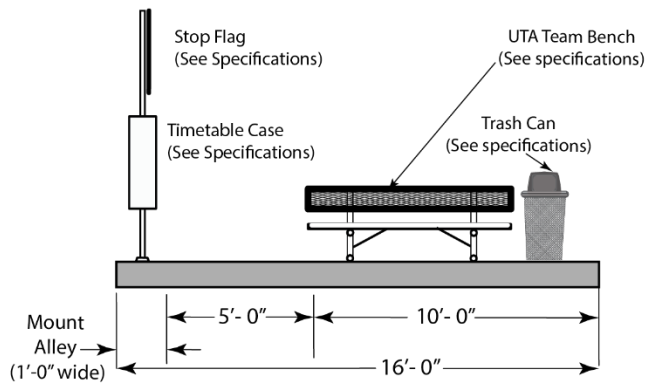
Level II Bus Stop Design (Typical)

Updated January 2019



Plan View

Not to scale

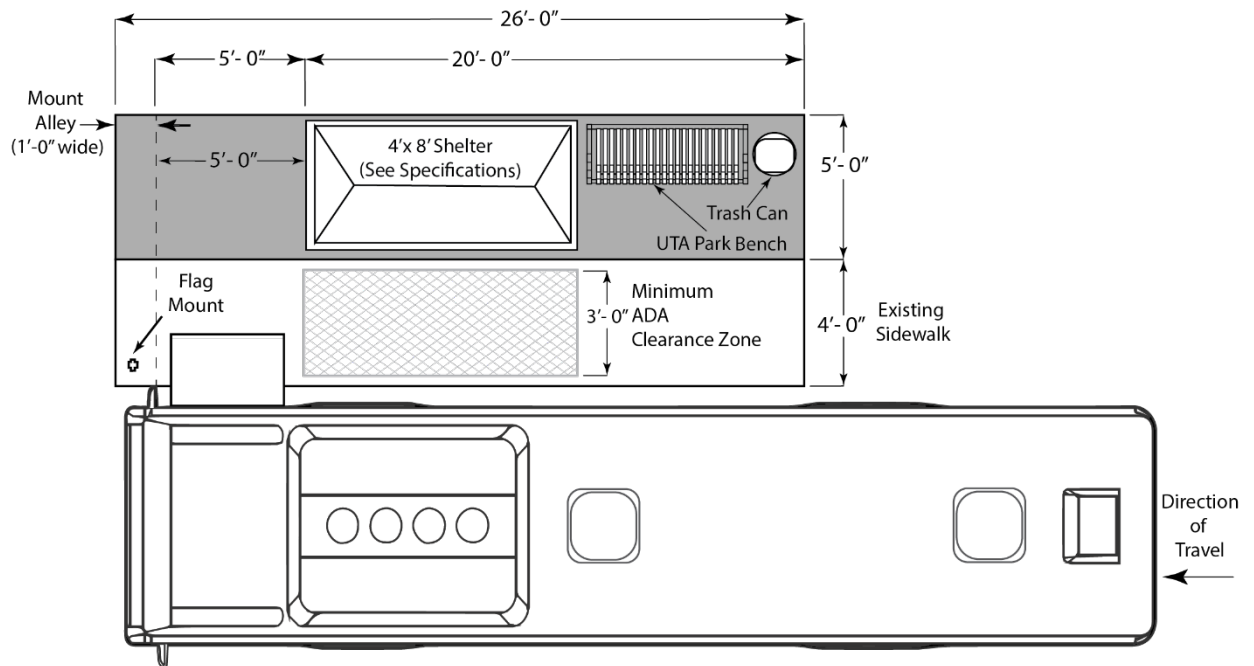


Front Elevation View

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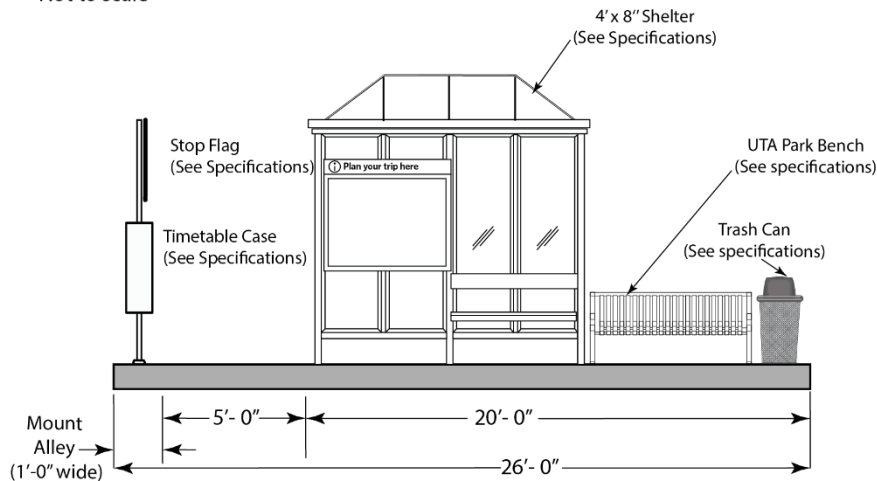
Level III Bus Stop Design (Typical)

Updated January 2019



Plan View

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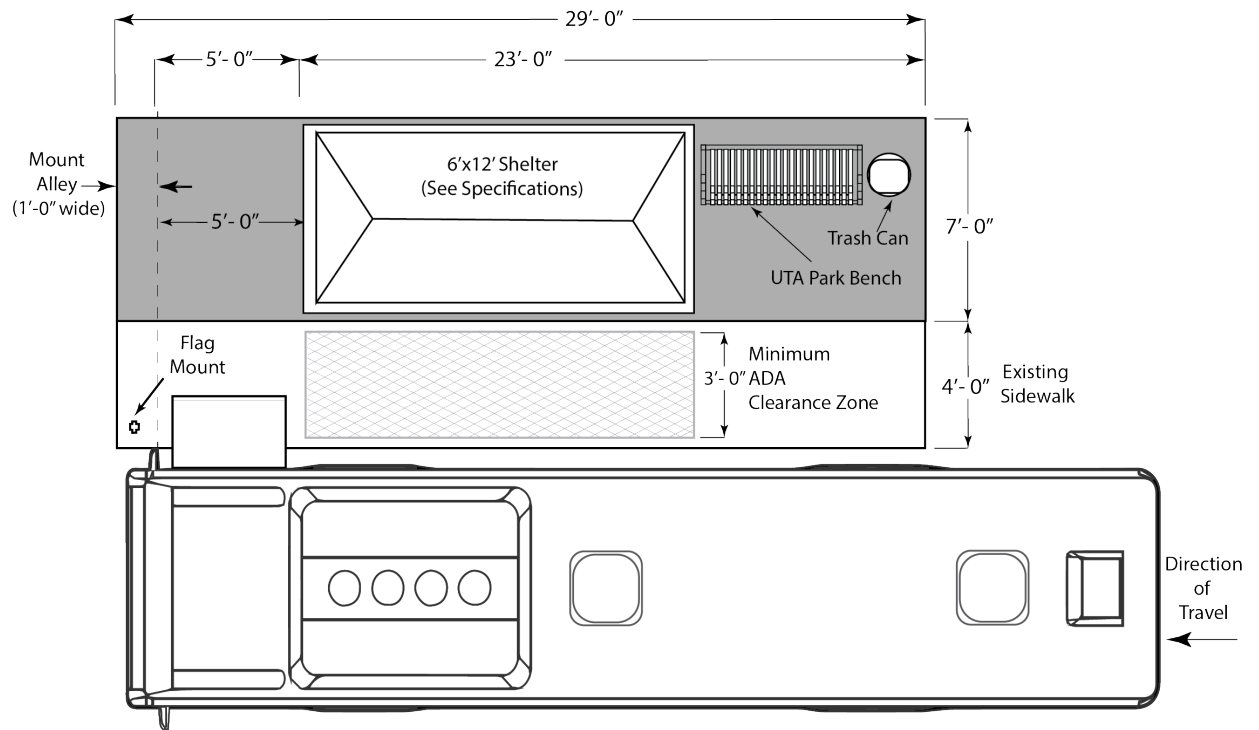


Front Elevation View

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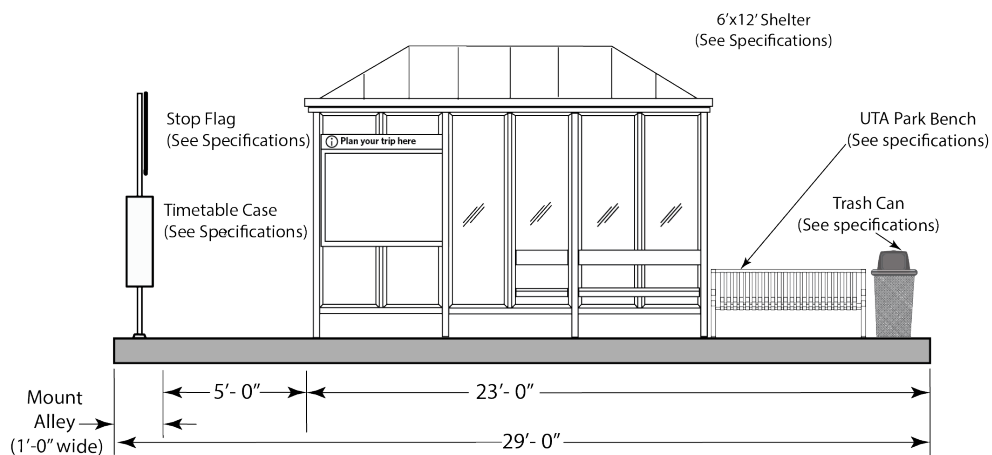
Level IV Bus Stop Design (Typical)

Updated January 2019



Plan View

Not to scale

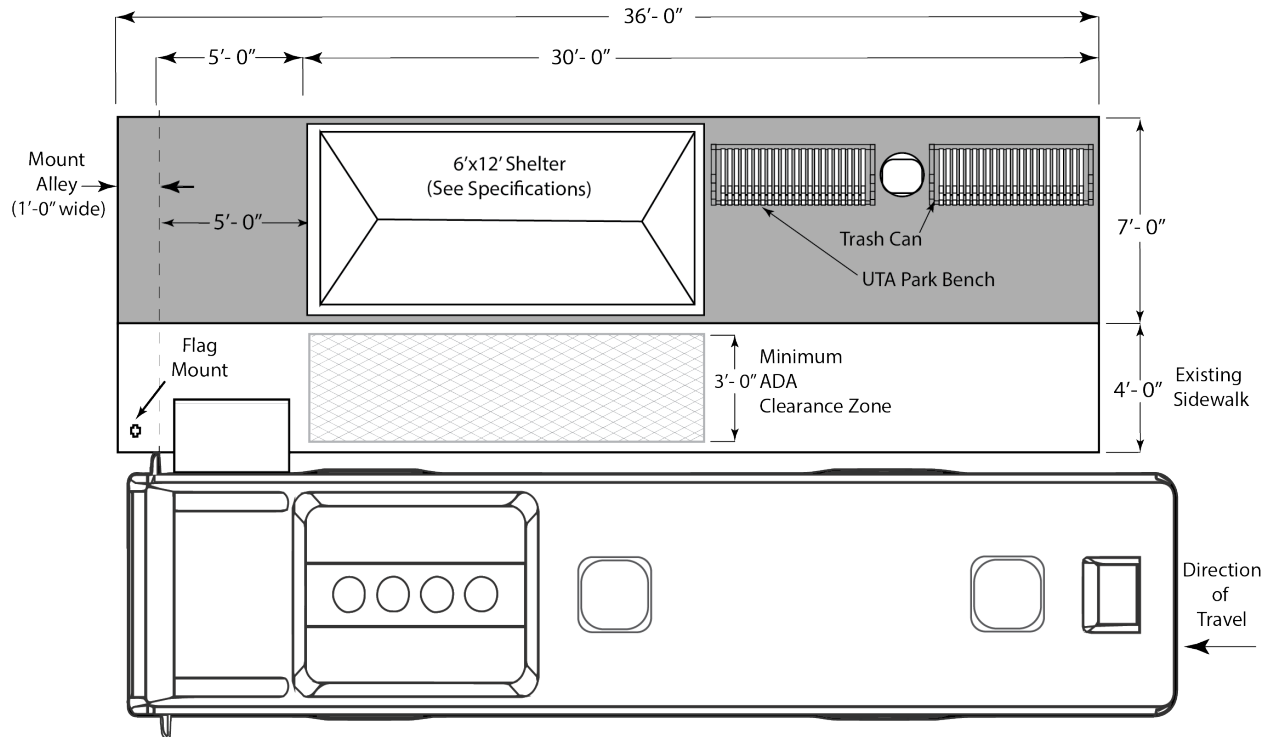


Front Elevation View

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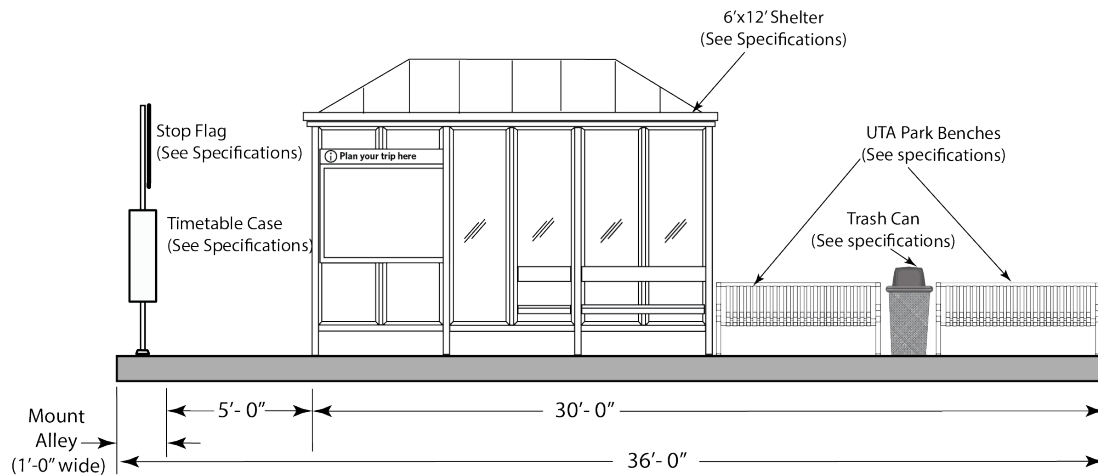
Level V Bus Stop Design (Typical)

Updated January 2019



Plan View

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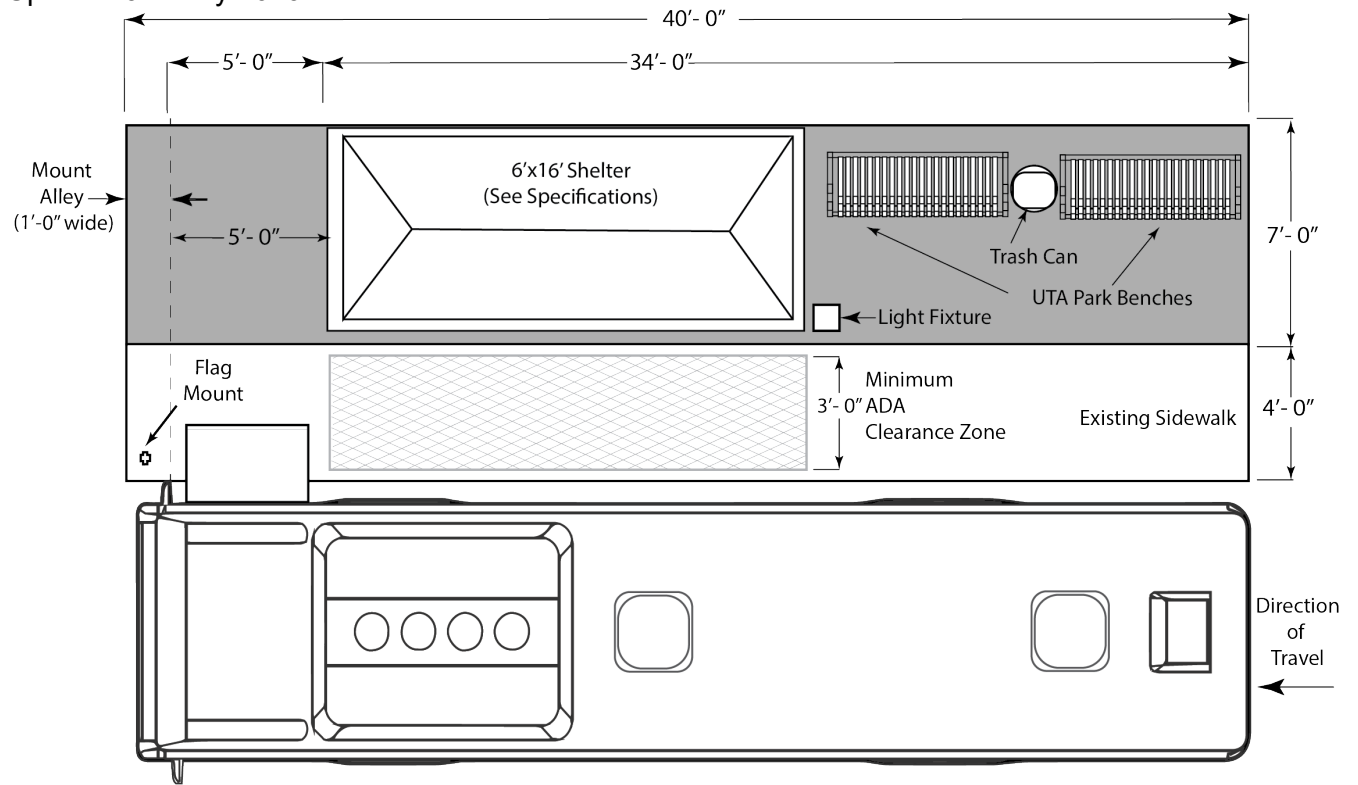


Front Elevation View

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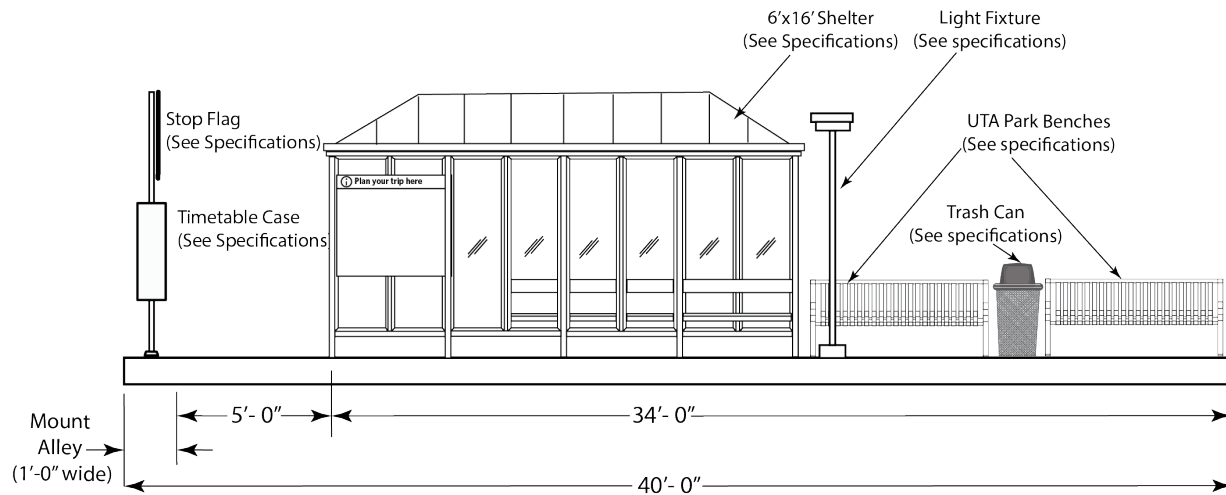
Level VI Bus Stop Design (Typical)

Updated January 2019



Plan View

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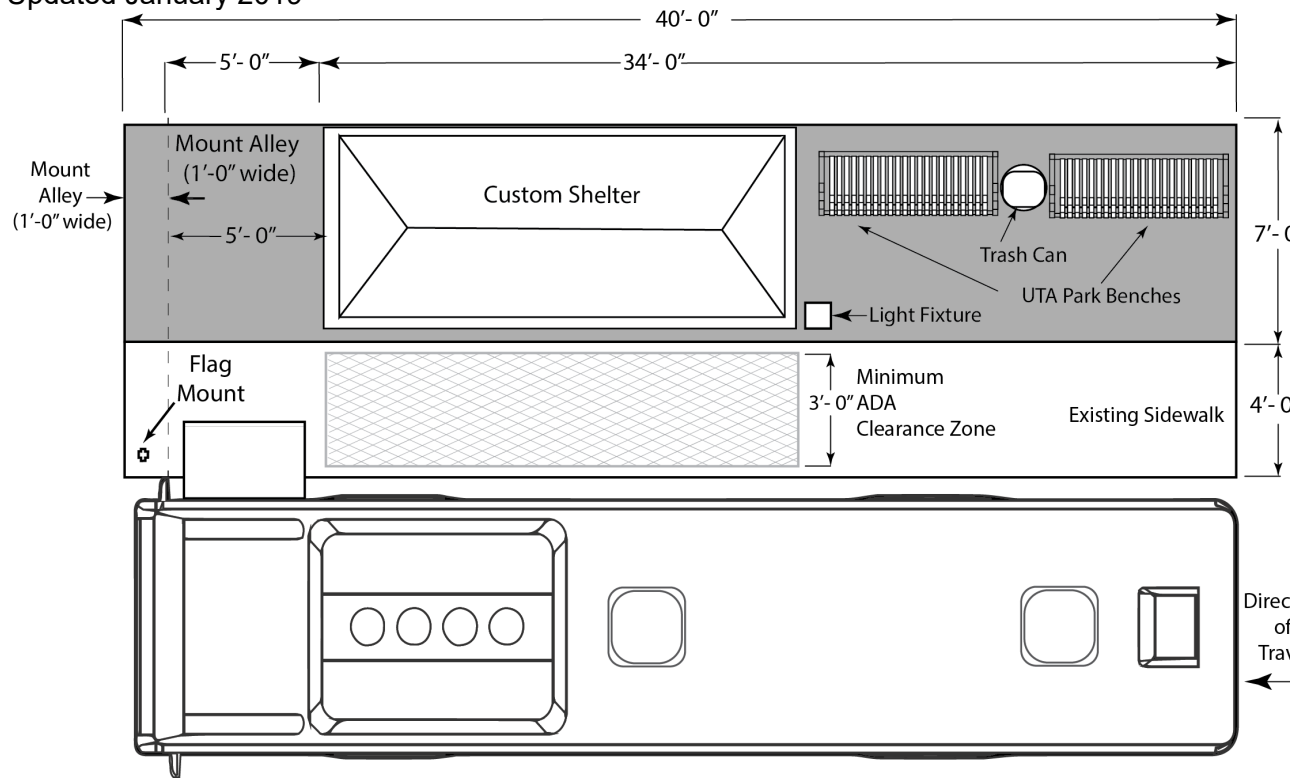


Front Elevation View

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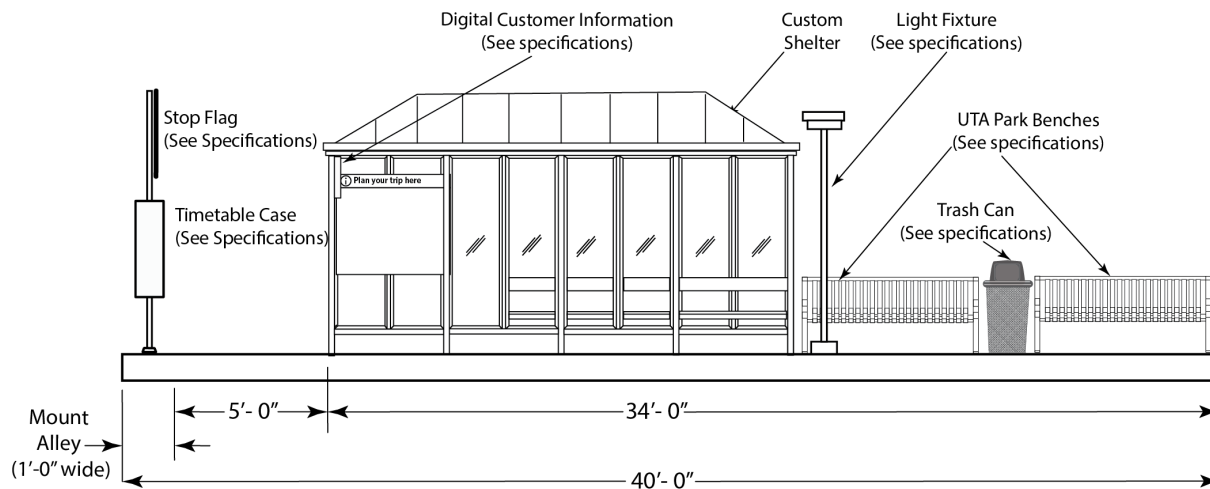
Level VII Bus Stop Design (Custom)

Updated January 2019



Plan View

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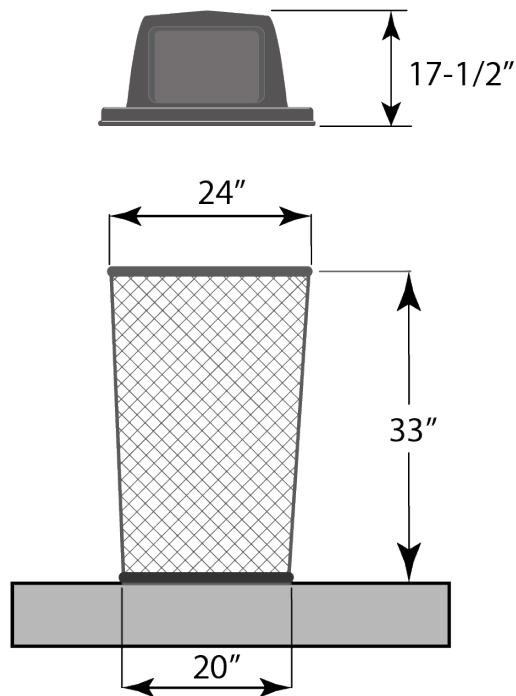


Front Elevation View

Not to scale

- UTA has chosen the Brasco 'Eclipse' series for custom shelter applications
- They are available in 5' depth by lengths of 8', 10', 12', 14', 16'
- The shelter may be customized with features such as interior lighting, branded glass panels and digital real-time signage
- Various wall glazing options are available, including tempered glass, laminate glass or perforated aluminum, all of which can be tailored with custom branding elements

Trash Can and Bus Bench Specifications



Trash Container Dome Top

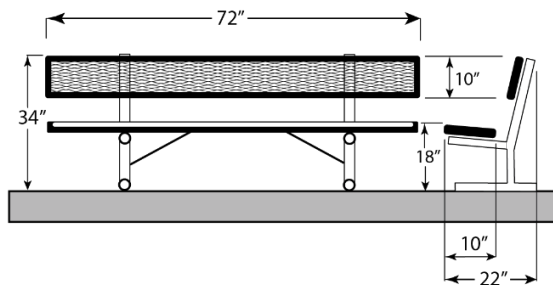
- Black colored
- 26" x 17-1/2"
- Wide rim and tight-fitting door
- Rain deflector
- Fits the Huskee container model #4442, 4443 & 4444

Trash Container

- Dimensions: 33" high x 24" Top Dia. and 19" Bottom diameter
- Weight: 33 lbs.
- Finish: Hot dipped galvanized
- Capacity 45 gal.
- UPS: Can ship UPS. Ships at UPS 70 LB. rate
- Sides are Constructed of 16 gauge steel, base is constructed of 18 gauge steel
- Color: Galvanized Steel

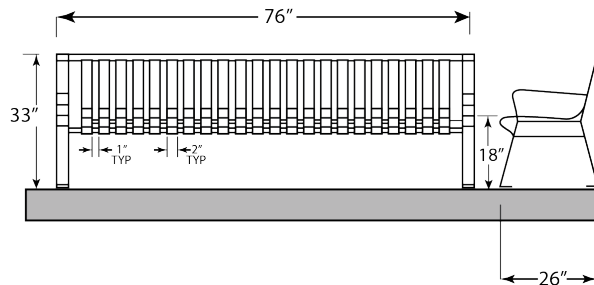
Updated June 2018

Team Bench

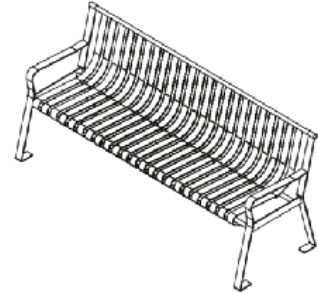


- Overall Length: 72"
- Overall Height: 34"
- Overall Depth: 26"
- Seat Height: 18"
- Seat and Back: 10" x 72" (11 gage die formed angle frame 1" x 1 7/8" with 3" radius corners, 3/4" #9 steel expanded metal. 10 gauge x 1-1/2" flat bar center support and mounting bracket understructure. Electrically MIG welded.
- Hardware: Benches should be in knock-down condition in the largest modular sections possible. Benches will be assembled after delivery by UTA personnel. All hardware and fasteners to be stainless steel.
- Mounting: Benches will be surface mounted. The legs will have a perpendicular cross bar (approximately 24") to increase stability and allow the bench to be self-standing. A 12" long angle iron will be welded to both cross bars and have 2 pre-drilled 1/2" holes for mounting the bench to concrete with concrete anchors (to be provided by UTA) This angle iron should be at least 2" wide and 1/4" thick. See image.
- Frame Coating: Electrostatic powder coated black application and oven cured
- Seat Finish: Seat to be thermoplastic coated in blue.
- Benches should be fully warrantied from defects for 1 year from date of delivery.

Park Bench

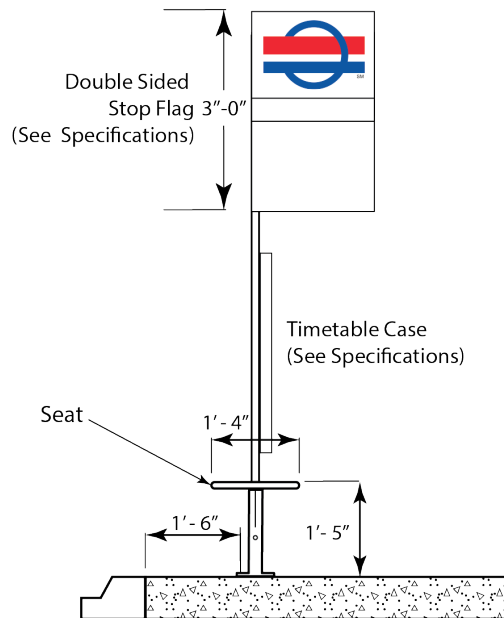


- Overall Length: 76"
- Overall Height: 33"
- Overall Depth: 25"
- Seat Height: 18"
- Seat Slats: 2" wide (3/16" gauge) mild steel slats with 1" space
- Legs and brace: 1/4" gauge mild steel legs and cross braces
- Center Brace: 1/2" steel rod
- Tube Rails: 1" (14 gauge)
- Finish: Electrostatically applied polyester power coated over shot blasted and zinc primer coated substrate
- Hardware: Benches should be knock-down condition in the largest modular sections possible. Benches will be assembled upon delivery by UTA personnel
- Mounting: Surface mount is required with mounting hardware
- Warranty: Benches should be fully warrantied from defects for 1 year from date of delivery



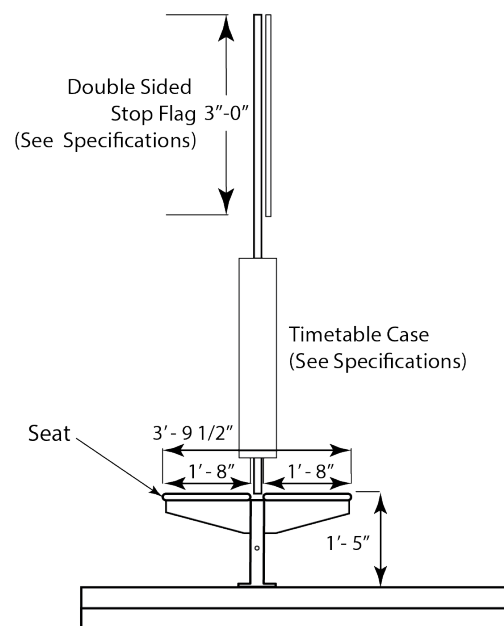
Updated June 2018

'Simme' Seat Specifications (Typical)



Side Elevation

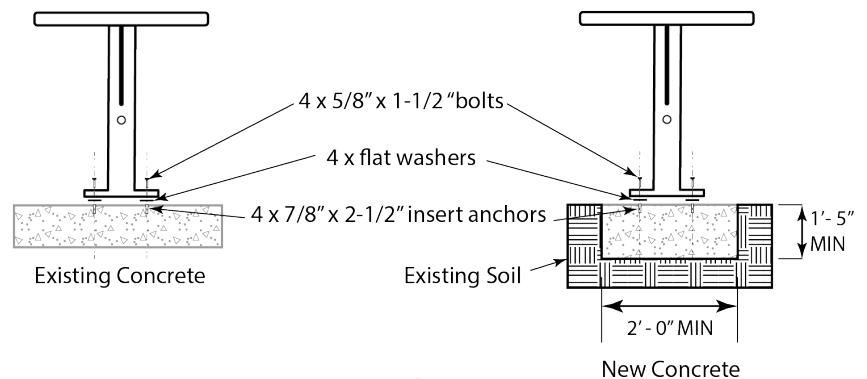
Not to Scale



Front Elevation (from street)

Not to Scale

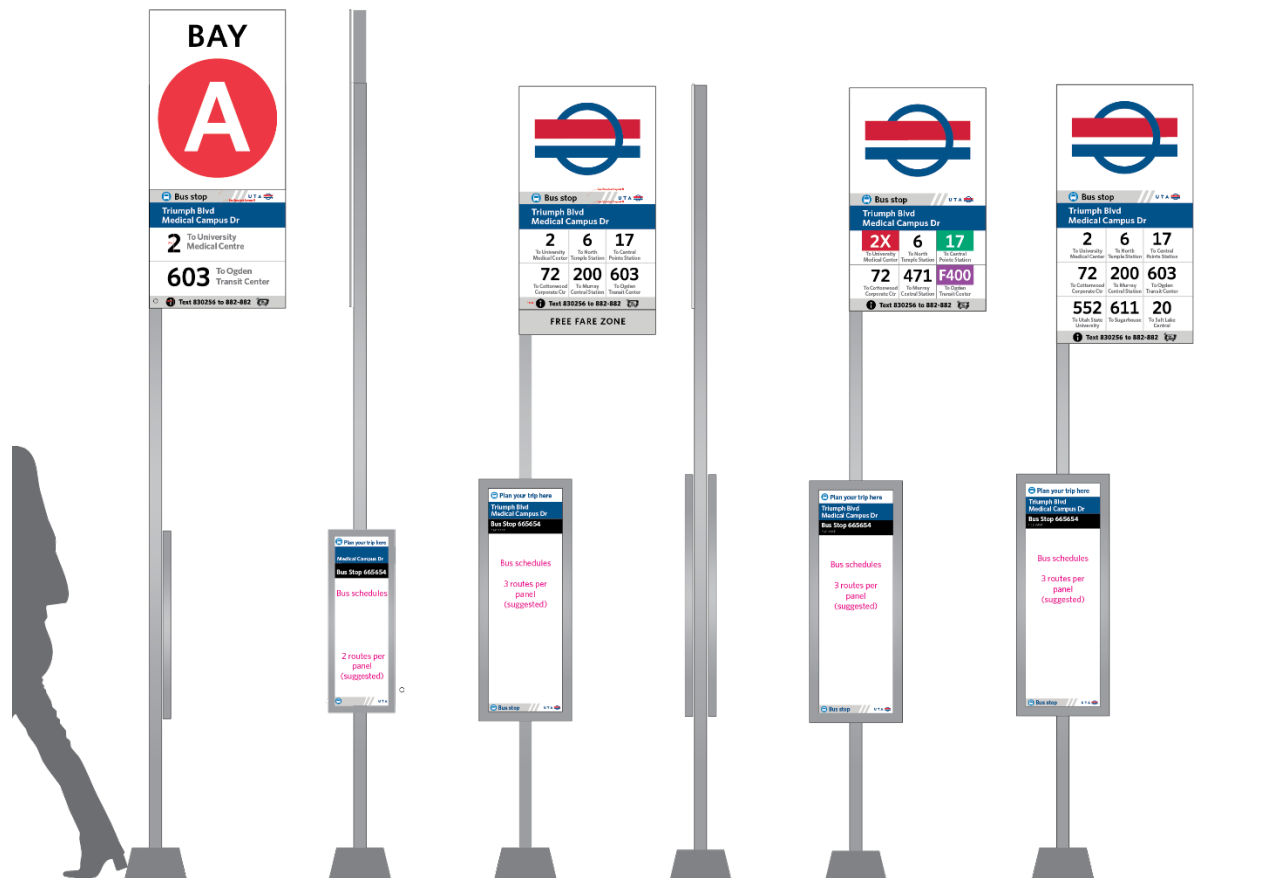
- Simme bus stop seat shall include a tube dimensioned to encompass a 2" x 2" sign post.
- The Simme-Seat mounts to a 2"x2" square steel bus stop sign pole or a seat divider.
- The seat may consist of a single or pair of rigid seats connected to the tube on opposite sides of the tube.
- Seats are 17" inches in height above grade and provide seating for one or two people.
- Seat shall be powdered coated steel and designed for external use.
- Seat shall be rated to hold 500 pounds on per seat
- Seat divider is 1" bent tubing fabricated in a 14" half round and mounted on square tubing that can be secured in the receiver in the Simme Seat
- Seat shall meet American with Disability Act (ADA) requirements.
- Seat shall include an anchoring metal plate attached to the lower end of the center tube.
- All required drop-in anchors and bolts for mounting the seat to a sidewalk or other concrete surface shall be included.



Concrete Anchoring Specifications

Not to Scale

Bus Stop Signage (Typical)



- One or two routes
- Bus Bays

- Three to six Routes

- Color coded

- Seven to nine routes

[THIS SECTION IS UNDER DEVELOPMENT]

1. Electrical power source
 - a. Wired (Preferred)
 - b. Solar
2. Data connectivity source
 - a. Backend – who manages it, hosted (Vendor) or onsite (UTA)
3. Total Cost of Ownership
 - a. Cost of Sign
 - i. Maintenance
 1. Monitoring for device health and content integrity
 2. Servicing, cleaning, and visible maintenance
 - ii. Warranty – length of warranty
 - b. Cost of and Options for Content Management
 - i. Hosted – only vendor furnished
 - ii. Hosted – Hybrid, meaning UTA and Vendor can upload
 - iii. Onsite – UTA is responsible for content uploads
 - c. Cost of Data Connectivity
 - i. Hard Wired – Copper or Fiber cable to UTA network
 - ii. Cellular –
 1. Hosted (Vendor)
 2. Onsite (UTA)
4. Cost of Installation
 - a. UTA installed
 - b. Vendor installed

Appendix C – Cost Estimates

Capital, Design and Engineering Cost Estimates

Capital Cost Category	Description	Sq. Ft.	Estimated Cost (\$) *
Contractor Mobilization	Standard Requirement		\$800
ADA Landing Zone	ADA Landing Zone Pad (6' x 8')	48	\$624
Concrete Amenities Pad**	16' x 4' Concrete Pad	64	\$832
Concrete Amenities Pad**	26' x 5' Concrete Pad	130	\$1,690
Concrete Amenities Pad**	29' x 7' Concrete Pad	203	\$2,639
Concrete Amenities Pad**	36' x 7' Concrete Pad	252	\$3,276
Concrete Amenities Pad**	40' x 7' Concrete Pad	280	\$3,640
Concrete Amenities Pad**	Carlisle - Sidewalk		\$1,800
Concrete Amenities Pad**	Carlisle - Sidewalk & Amenity Pad		\$3,300
Pole & Hardware	8' pole (Pedestal Mount)		\$85
Bus Stop Sign	Aluminum		\$17
Bus Stop Flag	Aluminum		\$6
Parkstrip Pour	Parkstrip Pour (4' x 20')		\$900
Simme Seat	Two-seat model (includes hardware)		\$600
Simme Seat	Single seat model (includes hardware)		\$500
Simme Seat	Square poles		\$110
Trash Receptacle	Trash Receptacle		\$170
Trash Receptacle	Trash Receptacle Lid		\$80
Bench	Team Blue Bench (with back)		\$150
Bench	Park Bench		\$700
Bench	Park Bench (Anti-sleeper add \$150)		\$850
Shelter	4'x8' Shelter	32	\$3,275
Shelter	4'x8' Shelter (Cantilever)	32	\$2,745
Shelter	6'x12' Shelter	72	\$4,775
Shelter	6'x12' Shelter (Cantilever)	72	NA
Shelter	6'x16' Shelter	96	\$6,000
Shelter	6'x16' Shelter (Cantilever)	96	\$6,000
Shelter	Custom Shelter (i.e. Ski Shelter)	96	\$11,000
Shelter	9 x 12 Steel Post and Glass Shelter	108	\$8,725
Fixture	Light Fixture		\$1,000
Customer Information	Digital Signage		\$2,500
Bike Rack	Bike Rack		\$555

Engineering Work*	Description	Estimated Cost (\$) *
UTA Design Needed	Engineering & Flatwork Design	\$2,000
Miscellaneous Repairs	Unforeseen obstacles on site	\$400

* 2018 Costs from Purchasing and Capital Development

** Concrete Costs Per Sq Ft = \$13.00

Capital, O&M and Total Lifecycle Costs by Stop Level Type

Description	Level I	Level II	Level III	Level IV	Level V	Level VI	Level VII
Contractor Mobilization	\$800	\$800	\$800	\$800	\$800	\$800	\$800
Pole and Mount	\$200	\$200	\$200	\$200	\$200	\$200	\$200
ADA Landing Zone Pad (6' x 8')	\$720						
16' x 4' Concrete Pad		\$960					
26' x 5' Concrete Pad			\$1,950				
29' x 7' Concrete Pad				\$3,045			
36' x 7' Concrete Pad					\$3,780		
40' x 7' Concrete Pad						\$4,200	\$4,200
Team Blue Bench		\$170					
Park Bench			\$700	\$700			
Two (2) Park Benches					\$1,400	\$1,400	\$1,400
Trash Can		\$170	\$170	\$170	\$170	\$170	\$170
4'x8' Shelter			\$3,225				
6'x12' Shelter				\$4,575	\$4,575		
6'x16' Shelter						\$5,995	
Custom (i.e. Ski Shelter etc)							\$11,000
Lighting Fixture						\$1,000	\$1,000
Digital Customer Information							\$2,500
Total Capital Cost	\$1,720	\$2,300	\$7,045	\$9,490	\$10,925	\$13,765	\$21,270
Contingency Work	-	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500
Total Estimated Capital Cost	\$1,720	\$11,800	\$16,545	\$18,990	\$20,425	\$23,265	\$30,770

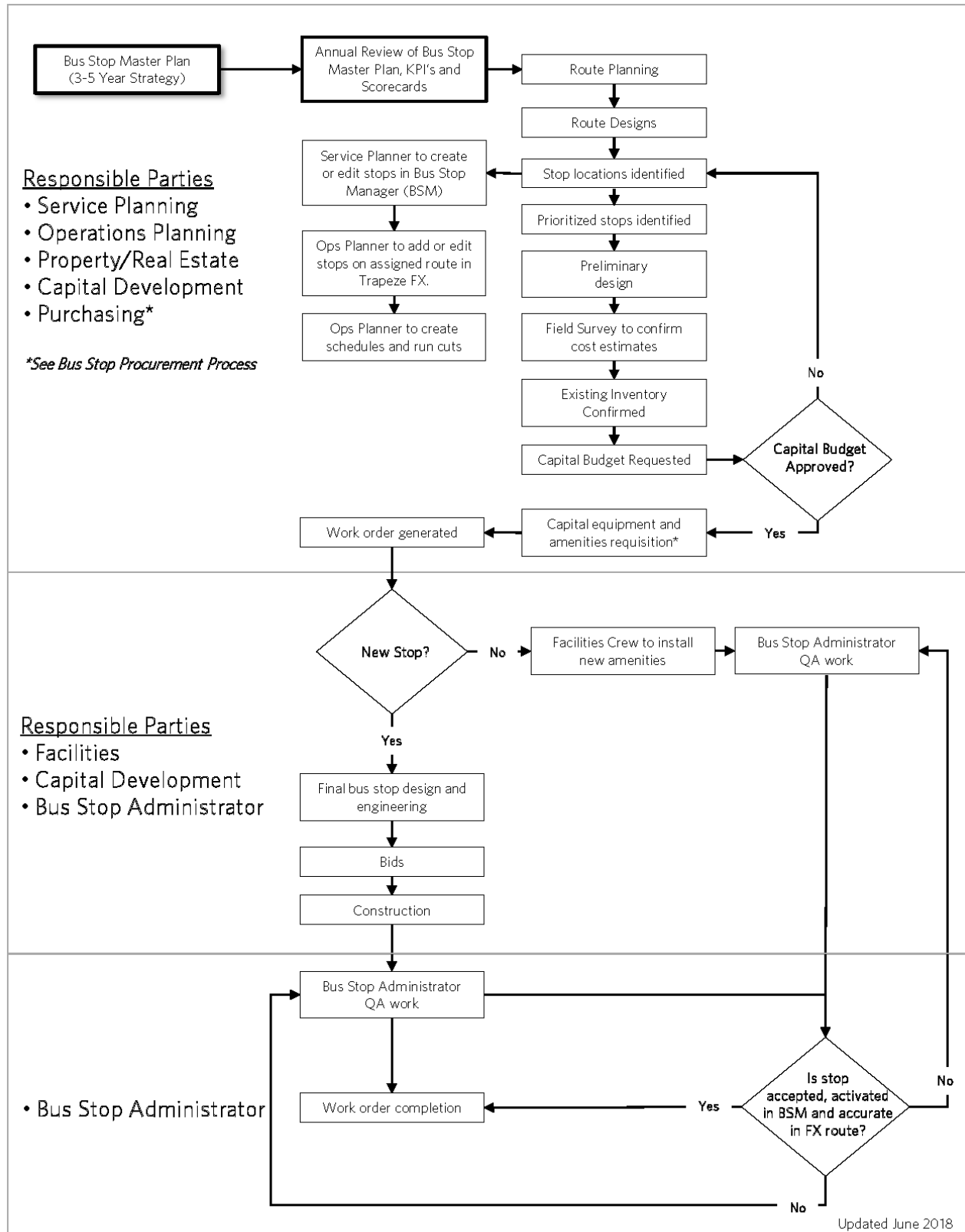
Operating Cost Description	Level I	Level II	Level III	Level IV	Level V	Level VI	Level VII
Power Washing	\$77	\$102	\$208	\$325	\$403	\$448	\$448
Window Cleaning	-	-	\$51	\$115	\$115	\$154	\$154
Trash Pick-up	-	\$480	\$480	\$480	\$480	\$480	\$480
General Maintenance & Repairs	\$430	\$575	\$1,761	\$2,373	\$2,731	\$3,441	\$5,318
Removal & Demolition	\$430	\$575	\$1,761	\$2,373	\$2,731	\$3,441	\$5,318
Total Estimated Annual O&M*	\$937	\$1,732	\$4,262	\$5,665	\$6,461	\$7,964	\$11,717
Total Estimated Lifecycle O&M	\$18,736	\$34,648	\$85,234	\$113,300	\$129,218	\$159,282	\$234,332

Assumptions

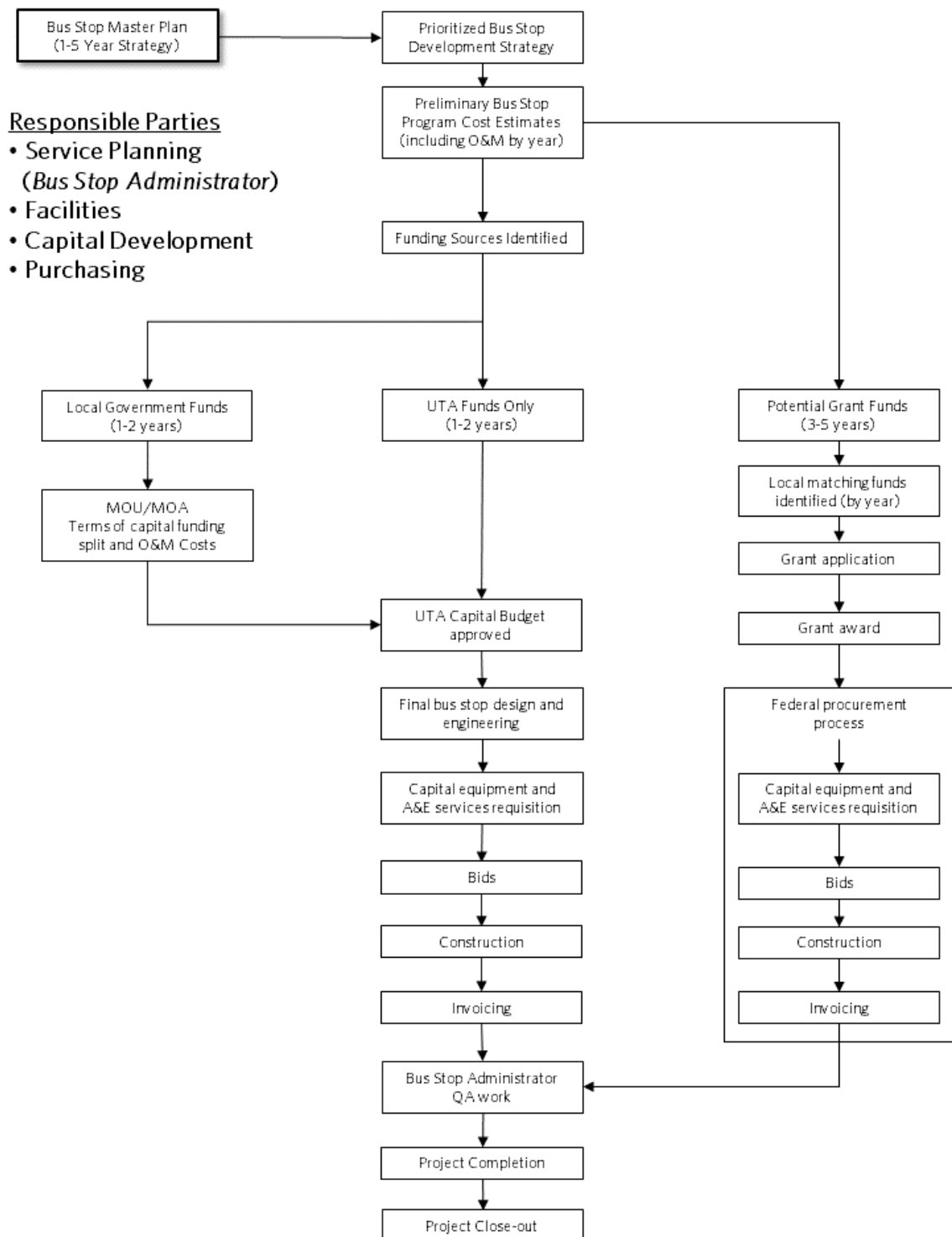
Fully Loaded Hourly Rate \$40.00 = \$25.00/ hr * 16 (Benefits)
 Power Washing 30 min. per 100 sf @ 4 x year
 Window Cleaning 30 min. per 100 sf @ 4 x year
 Trash Pick-up 30 min. per can @ 24 x year
 General Maintenance & Repairs 25% of capital cost
 Removal & Demolition 25% of capital cost
 Amenities Lifecycle 20 years

Appendix D – Processes

Bus Stop Administration Process




Bus Stop Amenity Procurement Process



Updated June 2018

Appendix E – Policies & Standard Operating Procedures

Bus Stop Administration Standard Operating Procedure

Standard Operating Procedure		
No.	Effective Date:	Supersedes: BU7.0
Applies to: Service Planning, Bus Control, Capital Development, Salt Lake Business Unit, Facilities, Mt. Ogden Business Unit, Timpanogos Business Unit, Planning Department.		
Title: UTA Bus Stop Administration		

Purpose: To assist the Business Units and other UTA Departments in providing bus stops that are designed to make transit more convenient, accessible and aesthetically appealing to transit users. The proper design of transit bus stops will increase transit access and convenience by eliminating barriers, especially for those individuals with mobility limitations. The appeal of public transportation will be increased further by the installation of amenities that: (a) enhance the attractiveness of public transportation, (b) increase passengers' comfort levels and feelings of security, (c) provide bus stop locations that are designed with paved waiting pads and where appropriate, shelters, benches, windbreaks etc. (d) provide customers with timely, accurate information about the arrival and departures of routes serving these stops (e) with consideration given to the private or public property owner needs and requirements where the amenities will be located.

Application: Business Unit General Managers, Service Planners, Operations Planners, Bus Stop Administrator, Training, Schedulers, Facilities Road Crew, Operations Supervisors, Capital Development and State of Good Repair

Procedure: Concrete pads, posts, flags, shelters, benches or other amenities will only be installed at an official bus stop location upon approval from the Bus Stop Administrator with input from the Service Planning Division and Operations Planning group. The Service Planning Division will approve the relocation of an existing bus stop in order to provide for the safe operation of the bus, more efficiency in serving adjacent stops or in relation to vehicle and pedestrian movements, including ADA considerations. These actions will only be taken with the approval of the private property owner (adjacent to the public right of way), local municipality, county or state government (UDOT).

Schedule: The Bus Stop Administrator will prepare the Annual Bus Stop Planning Reports according to the same schedule as outlined in the Five Year Service Plan so that there is coordination between service plan improvements and the installation, consolidation or elimination of bus stops.

Supporting Documentation: Bus Stop Master Plan, Five Year Service Plan

Practice:

1. Bus Stop Planning and Prioritization

Using the Bus Stop Master Plan and Five Year Service Plan, bus stop locations are identified and prioritized annually for installation, improvement (receive new bus stop amenities), consolidation or removal. Specific recommendations for improvements, consolidation or removal will be developed with consideration to the location, ADA compliance, service to Title VI communities, total stop activity, service levels and safety. This prioritization process will use a scoring matrix that ensures that equitable comparisons are made among all of the bus stops in the system. The current scoring matrix can be found in Exhibit A.

The prioritized stops will then have capital improvement and operating costs calculated for each stop on the list. The lists will finally be segmented by County. These lists are collectively referred to as the Annual Bus Stop Planning Reports.

Exceptions to the Annual Bus Stop Planning Report prioritized list may be granted in cases where there are:

- a. Immediate risks to the safety of customers or UTA vehicles
- b. Requests from cities or other municipalities (as determined by the Regional General Managers) who may want to contribute to the cost of the improvements
- c. Bus stop improvement requests are received via the customer comment program (TransTrack)
- d. Other unanticipated circumstances related to the administration of the Bus Stop Master Plan

2. **Bus Stop Design Criteria**

UTA bus stop design criteria shall follow the guidance as established in the Bus Stop Master Plan in the appendix titled ‘Bus Stop Construction and Design Specifications’.

3. **Title VI, Americans with Disabilities Act (ADA) and Architectural Barriers Act Compliance**

The Service Planners, Bus Stop Administrator and Capital Development engineers will ensure that the design and installation of any bus stop and associated amenities, (by UTA, local or state government agency or private agency), at an official UTA bus stop, meets the Americans with **Disabilities** Act (ADA), Section 504 of the Rehabilitation Act of 1973 and the Architectural Barriers Act (ABA) and UTA Corporate Policy No. 1.1.28 - Title VI Compliance as they pertain to bus stops and public transit. A bus stop installation that does not meet these standards will not be accepted by the Bus Stop Administrator as “Completed”.

4. **Bus Stop Program Budget**

Using the prioritized list of stops on the Annual Bus Stop Planning Reports, the Bus Stop Administrator, along with the Service Planning Division, Capital Development and Facilities departments will prepare an annual schedule and preliminary budget request no later than October 31st of each year. This budget will be submitted for approval as part of the annual UTA capital budgeting process. (See also ‘Funding’ section below) The program budget shall include estimated labor and capital costs for design, procurement, construction and installation as well as all labor required for operating and maintaining the requested bus stops and amenities.(See also ‘State of Good Repair’ below)

5. **Design, Procurement, Construction and Installation**

Pending budget approval for the annual Bus Stop Planning Reports, the Service and Operations Planners, Bus Stop Administrator, Capital Development staff, contractors, surveyor, engineers etc., will conduct an on-site visit of each approved location. Service and Operations Planners as well as the Bus Stop Administrator will review engineering drawings and confirm compliance to ADA/ABA federal regulations and as well as operational safety standards before construction begins. (See also ‘Bus Stop Amenity Procurement Process’ diagram)

The Project Manager (Capital Development or designated contractor) will prepare Cooperative Agreement documents with local agencies and property owners and will obtain approval and signatures from all involved parties as required. This shall include sending a registered letter to the property owner(s) who will be directly affected by the installation of the bus stop. The Project Manager must obtain approval in writing prior to the installation of any facilities or amenities. The Project Manager will complete the

necessary requisitions, bid packages, contracting, permits, and follow through with development. Maintenance and upkeep of the facility will be conducted by UTA Facilities.

the Bus Stop Administrator will coordinate with the Capital Development and Facilities departments to schedule procurement, construction and installation (or removal) of the stops and amenities identified on the annual Bus Stop Planning Report (See also ‘Bus Stop Amenities Inventory’ below).

6. **Bus Stop Amenities Inventory**

In order to expedite the execution of the constructions and installation of the approved bus stop improvements, there will be an inventory of standard equipment maintained by the Facilities Department. The quantities of equipment maintained in this inventory will be calculated based on the average number of pieces of equipment that are used each year as part of the implementation of the bus stop program. This inventory is ‘universal’ meaning that the equipment held in inventory does not belong to a specific business unit and shall be accounted for through a centralized asset management process.

7. **Bus Stop Data Management**

All bus stops identified to be installed, improved, consolidated or removed per the Annual Bus Stop Planning Reports will be coordinated with each Business Unit Operations Planner(s) in order to update the bus stop information in Bus Stop Manager (BSM). It is the responsibility of the Bus Stop Administrator to maintain the integrity of the data associated with each bus stop in the BSM.

Each year the Bus Stop Administrator will review the updates and changes in BSM in order to confirm that any and all changes that have been affected with regard to the execution of the Bus Stop Planning Report are accurate and timely. After the BSM has been updated the Bus Stop Administrator will again begin preparation of a prioritized list of bus stop improvements for the coming year.

8. **Funding**

The Service Planners, Bus Stop Administrator and Capital Development engineers will ensure that the appropriate funding for the design, installation and maintenance of any bus stop and associated amenities, whether by UTA, local or state government agency or private agency has been identified prior to the execution of any work. Sources of funding for the bus stop program may include but are not limited to:

- 5339 (a) Bus and Bus Facilities Formula Grant Funds
- 5339 (b) Bus and Bus Facilities Discretionary Funds
- 5339 (c) Bus and Bus Facilities Lo-no Grant Funds
- Local UTA Capital Funding
- Community Development Block Grant (CDBG) Funds
- Local municipal/DOT funding partnerships (full or partial match funding)
- UTA Operations and Maintenance Funding (Facilities)

The Bus Stop Administrator will ensure that operation and maintenance funding is budgeted annually for the Facilities Department to hire one (1) facilities service employee for approximately every twenty (20) additional bus stops that UTA is required to maintain. No new stops or amenities will be approved without first identifying funding for ongoing operation and maintenance of the new facilities.

Unobligated transit enhancement funds will roll over from one year to the next within a three year cycle and shall be managed by the Capital Development Department as part of the Bus Stop Program according to the schedule of improvements identified in the annual Bus Stop Planning Reports.

Local matching funds may be used for the construction and installation and maintenance of bus stops and amenities. Guidance for the use of local matching funds consists of the following:

- The Project Manager (Capital Development or designated contractor) will prepare Cooperative Agreement documents with partner funding agencies and will obtain approval, signatures and exceptions (i.e. waiving of permitting fees) from all involved parties as required.
- The partnering agency will provide for the operation and maintenance for the projected life of the amenity. Maintenance may be performed by the partner agency or UTA Facilities Department by agreement.
- The partnering agency is expected to provide at least 20% funding for the project if federal transit enhancement funds are used.
- The partnering agency is expected to provide at least 50% of funding if local funds are used.

9. Bus Stop Work Order System

All work pertaining to new bus stops, bus stop amenity upgrades, bus stop removal or consolidation which are planned to be handled by the UTA Facilities Division will be initiated via a work order generated through the Bus Stop Manager program. Work orders may be generated by Service Planners, Business Unit Operations Planners or the Bus Stop Administrator. The Bus Stop Administrator must review, approve, inspect and accept or reject all work orders and finished work.

10. State of Good Repair

As part of the UTA Bus stop program and annual review of bus stops and amenities, the Bus Stop Administrator will create and manage a replacement schedule for facilities and amenities based on the average life cycle of each of the elements of bus stop. This schedule shall include the cost (in future dollars) of the replacement of facilities and equipment related to each bus stop in the UTA system. This data should be used as part of the annual budget requests.

11. Exceptions

None

Exhibit A

Bus Stop Scoring Matrix


Category	1 Point	2 Points	3 Points	4 Points	5 Points
Non-ADA Compliant*	-	-	-	-	Yes
Total Stop Activity (TSA) – Average Daily Weekday**	1 to 19	20 to 39	40 to 59	60 to 79	80 +
Transfer Point***					
<i>Equal to or Greater than 30 min. freq.</i>	1 Route	2 Routes	3 Routes	4 Routes	5+ Routes
<i>Less than 29 the min. freq.</i>	1 Route	2 Routes	3 Routes	4 Routes	5+ Routes
Serves Title VI Community	Title VI Route	Minority OR Low Income	Minority AND Low Income	2 x Minority + Low Income	2 x Minority + 2x Low Income
Safety					
<i>Intersection</i>	1 of 5 Elements	2 of 5 Elements	3 of 5 Elements	4 of 5 Elements	5 of 5 Elements
<i>Parking Allowed</i>					
<i>Obstacle(s) Present</i>					
<i>No lighting Present</i>					
<i>Sidewalk Not Level</i>					

* Non-ADA compliant bus stop locations automatically receive five (5) points

** TSA Data is average weekday ridership taken from the last eight change day periods

***One (1) additional point is assessed each route at the transfer point with 30 minute or less frequency

Bus Stop Relocation System Standard Operating Procedure

Standard Operating Procedure		U T A 
No.	Effective Date:	Supersedes: BO 1.17
Applies to: Service Planning, Capital Development, Salt Lake Business Unit, Facilities, Mt. Ogden Business Unit, Timpanogos Business Unit, Special Services, Planning Department.		
Title: Bus Stop Relocation System		

Purpose: To assist the Business Units in becoming more efficient and effective in providing our customers with accurate bus stop information.

Application: Service Planners, Operations Planners, Bus Stop Administrator, Training, Schedulers, Facilities Road Crew, Operations Supervisors

Procedure: Business Unit Planners evaluate all service requests and determine when a service request is necessary. If a service request is necessary Service Planners evaluate the service request for regulatory and safety compliance and obtain any necessary permits or agreements necessary for implementation. Service Planners generate a work order to implement all service requests and forward the work order to the Passenger Facilities Road Crew Supervisor. All work orders must meet the requirements contained in section 4.

Supporting Documentation: Definitions which is Exhibit A, the Bus Stop Relocation Matrix which is Exhibit B, and the Bus Stop Relocation Software Manual.

Practice:

1. Service Requests

The Bus Stop Administrator working with the Service Planning Division and the Operations Planners within each Business Unit generates requests to remove, add, relocate, or obtain the accurate GPS location of a bus stop. Once a service request is created automatic notification will be sent to all of the appropriate individuals. These same individuals will also be notified once the service request has been completed and closed.

- a. Request to add bus stops
 - i. Requests are generated by the Bus Stop Administrator after the white line has been drawn on the ground. A request will be created for each bus stop with the exception of short term bus stop changes (See Exhibit A - 'Definitions').
- b. Request to remove bus stops.
 - i. Requests for bus stop removals are generated by the Bus Stop Administrator for permanent and temporary removals. (See Exhibit B – 'Bus Stop Relocation Matrix')
- c. Request to relocate bus stops
 - i. Requests to relocate a bus stop are generated by the Bus Stop Administrator for each bus stop that requires relocation. (See Exhibit B – 'Bus Stop Relocation Matrix')
- d. Request to obtain a new GPS reading.
 - i. The Bus Stop Administrator generates the request by checking the "GPS Only" check box. (See also 'Bus Stop Relocation Software Manual')

2. Maintenance Requests

- a. Maintenance requests are entered into the Bus Stop Manager (BSM) program by the Bus Stop Administrator to notify the Passenger Facilities Road Crew Supervisor of stop locations that need attention.
- b. Safety concerns should be entered into the system by the Service Planners or Bus Operations Planners.
 - i. Maintenance requests relating to safety issues may be generated after the action has been taken.
 - ii. Once a request is created in the bus Stop Relocation Program, a follow-up phone call to the Passenger Facilities Road Crew Supervisor to make him/her aware of the pending work order may help to expedite the process.
- c. A maintenance request may be entered into the BSM by the Passenger Facilities Road Crew Supervisor if:
 - i. It is out of the scope responsibility of Service Planner or Operations Planner
 - ii. If the Bus Stop Administrator is made aware of the request
- d. Once a maintenance request is created in BSM an automatic notification will be sent to all of the appropriate individuals needing to be notified. These same individuals will also be notified once the service request has been completed and the work order closed. A work order may not be closed until the Bus Stop Administrator has approved and accepted the stop as complete. (See Exhibit A - 'Definitions')

3. Miscellaneous Requests

With the approval of the Bus Stop Administrator, miscellaneous requests for work orders related to bus stops may be generated by the Service Planners or Operations Planners for items such as facilities cost estimates, changes to a facility, new facility requests, and detour signage (See Exhibit A - 'Definitions'). All work must be documented and tracked in BSM according to this document.

4. Facilities Work Orders and Service Requests

Service requests are generated by the Bus Stop Administrator to remove, add, relocate, or GPS a bus stop. These requests require that all of the information and work order details are entered into BSM. (See also 'Bus Stop Relocation Software Manual').

- a. Request to add bus stops.
 - i. It is the responsibility of Service Planners or Operations Planners to provide the information such as the exact physical address, side of street, direction of travel, and basic characteristics at a proposed stop location, whether the proposed location will be in the park strip, behind the sidewalk, or on the side of the road. This information is required prior to submitting any locations to Blue Stakes for a dig ticket and underground utility locating.
- b. Work Orders.

The Facilities Road Crew Supervisor will only respond to a service request if all necessary details and requisite information have been included by the Service Planners or Operations Planners. Any service request that does not contain complete details and instructions will be returned to the originator for completion and resubmission. After a period of five business days incomplete service requests that have not been revised will be processed and closed as identified with the note "Complete - no action taken". Only authorized business unit requests will be accepted to ensure the integrity of the system. The only exception will be for safety issues that require immediate action.
- c. The Facilities Road Crew Supervisor will determine whether to complete any site preparation with UTA Facilities Crew resources or utilize an outside contractor.
- d. Miscellaneous requests as approved by the Bus Stop Administrator may be generated by the by the Service Planners or Operations Planners for items such as facility cost estimates, changes to a facility, and new facility requests. The Service Planner or Operations Planner is responsible for providing any necessary site drawings and assisting Capital Development in

securing any permits from the affected city or municipality need for site preparation and/or installation of all passenger amenities.

- e. Once a Work Order is complete the Facilities Road Crew Supervisor will notify the Bus Stop Administrator. The Bus Stop Administrator will inspect the work for compliance with all federal, local and UTA standards. If the work is unsatisfactory and additional work is necessary, the Bus Stop Administrator will reject the close out of the work order resubmit the work to be completed properly. If the Bus Stop Administrator is satisfied and accepts the final work, Facilities Road Crew Supervisor will close out the work order and an automatic notification will be sent to the appropriate individuals.

5. Global Positioning System (GPS) and Attribute Collection Work

- a. Once the Facilities Road Crew has closed the work order and the post has been properly mounted to the regulation bus stop concrete pad the Bus Stop Administrator is notified so he/she can obtain the GPS position of the post.
- b. At the same time that the GPS coordinates are obtained, a final inventory of the actual physical attributes for that bus stop location is taken. It should be noted that all signs prior to being mounted on the post require the six digit location identifier.
- c. The Bus Stop Administrator, or Operations Planners if so designated, is responsible to update the data in BSM and ensure that the new data is imported to Trapeze. An automatic notification will then be sent to the appropriate individuals notifying them that the GPS and attribute data has been updated. (See also 'Bus Stop Relocation Software Manual')

6. Trapeze Work

- a. Once the Bus Stop Administrator and Operations Planners have been notified they are responsible to perform the required steps in the Trapeze program.
- b. Any bus stop changes that require the post to remain out of the ground for more than 30 days will be marked in Trapeze as "not in Use" in order to ensure customer data accuracy.
- c. Once the steps in Trapeze are completed the Operations Planner fills out the Quality Control sheet in the system.
- d. Once this action is complete an automatic notification is sent to the appropriate individuals for confirmation and final approval.

7. Transit Master Work

- a. The Bus Stop Administrator performs the Transit Master surveys and the service request is closed and automatic notification is sent to the appropriate individuals.

8. Temporary Signs

- a. Operations Supervisors input all temporary sign requests into the system
- b. The request will state why a particular temporary sign is required and when it is scheduled to be removed.
- c. Temporary sign requests may be entered into the system after the placement of the sign.
- d. The Facilities Road Crew Supervisors will be notified by an automatic report when the signs are scheduled for removal.

Exceptions: None

Exhibit A Definitions

The following terms will be used when referring to the planning, design, installation, consolidation or removal of bus stops:

- A. **Action List:** listing created by the business units of bus stops that will be upgraded in the current year.
- B. **ADA:** Americans with Disabilities Act of 1990
- C. **Amenities:** Bus shelter, bench, trash can, cement flat work, ADA ramp, schedule holder, additional signage, lighting, anything other than the bus stop pole and signs etc.
- D. **Bus Stop Planning Report(s):** annual prioritized lists developed by the Service Planning Division which identifies new bus stops or bus stops that are eligible for improvements, consolidation or removal using the matrix criteria in Exhibit A. These reports include capital, operating and maintenance costs and are organized by County
- E. **Complete(d) Bus Stop:** Status of an installation, improvement, consolidation or removal once the Bus Stop Administrator is satisfied following a Quality Assurance review of the work
- F. **Obligated Funds:** Monies that have been explicitly budgeted for a particular bus stop for improvements, consolidation or removal but have not yet spent.
- G. **Property Owner:** The land owner whose property may be directly affected by a recommended stop location or improvement. This may also be defined as the owner of the private property that is 'adjacent' to the recommended stop location or improvement.
- H. **Detour Signage** – signs that are placed for a period of 30 days or more but do not require the installation or removal of a pole or an update in Trapeze. These signs are usually tacked to street light or other fixture and are due to a route detour.
- I. **Long Term Removal** – stops that are removed for a period of 30 days or more. These will often require that the pole is removed but may require the removal of the sign only. Trapeze work is required for long term removals.
- J. **New Location** – the placement of a stop that requires Passenger Facilities Road Crew preparation, GPS data gathering, the installation of a pole in the ground and a new 6-digit location number.
- K. **Permanent Removal** – the total removal of a stop and its hardware with no expectation that they will be reinstalled.
- L. **Relocation** – May not always require a new 6 digit number. If the address changes then it requires a new six digit number. If the stop retains its geographic address but the pole is taken out of the ground and moved to a different location the GPS location will be different), but the six digit number will be the same. Example you move a pole from the north end of a home to the south end. Because the address is the same, the six digit number is the same but, GPS is different.
- M. **Service Request** – Means any request by anyone to add, relocate, remove, maintain, and repair a bus stop due to temporary detour or permanent change. It also may include change route flags, evaluating a potential safety hazard at a bus stop obtaining a GPS reading.
- N. **Short Term Stops** – bus stops that are placed or removed for a period of two weeks or more but less than 30 days (between 14 and 29 days). Trapeze work is not required.
- O. **Temporary Stops** – any stop that will be discontinued for a period of less than two weeks and the pole is not removed. They are typically informational signs posted on the existing sign informing the customer that there are some changes to service at that particular stop for a stated duration of time. Examples include locations where there is unplanned or limited construction or maintenance at the location. Typically operations supervisors will always install and remove temporary signs.
- P. **Temporary Signage** – is an information sign that is posted on an existing Bus Stop pole informing the customer that there are some changes to service at that particular stop for duration of less than 2 weeks. Three types of colors are used for signage: Orange is a discontinued sign, Yellow is an information sign and Blue is a temporary sign. All signs list appropriate details for the customer.

Exhibit B
Bus Stop Relocation Matrix

Task/Activity*	Description	Change Day Process Required	Maintenance Request Only	Miscellaneous Request
New Bus Stop	Stop is created as part of a new route or added to an existing route	✓		
Pole Remains/Stop Location is Discontinued (i.e. sign and flags are removed)	Pole to remain < 30 days	✓		
	Pole to remain > 30 days		✓	
Pole is removed	Temporary removal < 30 days (i.e. for roadway construction)		✓	
	Permanent removal > 30 days (i.e. stop is being taken out of service)	✓		
A temporary stop becomes a permanent stop	Temporary location was not a UTA stop	✓		
	Temporary location is already a UTA stop	✓		
Move a permanent stop (immediately)	Near the same address	✓		
	To a new address (<i>Planner must check the 'New Address' box in Trapeze</i>)	✓		
Change out route flags			✓	
Damage or other need of attention	Regardless of person(s) responsible for the damage		✓	
Detour stop identification	A short term temporary stop becomes a long term temporary stop (i.e. a long term detour)			✓

* All new stop information must be entered in Trapeze before proceeding with any work orders

Cross References:

Corporate Standard Operating Procedure BO1.17 - Bus Stop Relocation System
 Corporate Policy No. 1.1.28 – Title VI Compliance
 Architectural Barriers Act of 1968
 Americans with ***Disabilities*** Act of 1990

Section 504 of the Rehabilitation Act of 1973

Bus Stop Amenities Procedure was reviewed by the Business Unit Forum on _____ and approved by the Regional General Managers on this _____ day of _____, 2019 and takes effect on the latter date.

 Steve Meyer, Chief Operating Officer

 Eddy Cumins, Mt. Ogden Regional General Manager

 Mary DeLaMare-Schaefer, Timpanogos Regional General Manager

 Lorin Simpson, Salt Lake Regional General Manager

 Cheryl Beveridge, Special Services General Manager

Revision History			
Title	No.	Date	Version
Bus Stop Amenities Installation	OPO 1.2	11/9/2008	1
Revised, Renumbered and Renamed Transit Improvements BU 7.0	BU 7.0	8/15/2016	2
BU 7.0 Updated	BU 7.0	11/15/2016	3
Revised, Renumbered and Renamed Bus Stop Administration BU ##			4

Appendix F – Annual Bus Stop Planning Reports

Top 50 Systemwide

City	County	Stop Abbr	Stop Name	Time Between	Total Stop Activity	Total Ramp	Score	Recommended Amenity
MURRAY	SALT LAKE	153170	COTTONWOOD ST @ 5149 S	5	1020	1442	20	Level VII - A
MILLCREEK	SALT LAKE	136071	3900 S @ 61 W	18	532	998	21	Level VII - A
LAYTON	DAVIS	101007	RING RD @ 425 W (LAYTON	5	441	269	22	Level VII - A
SALT LAKE C	SALT LAKE	117005	NORTH TEMPLE ST @ 275 W	3	384	629	19	Level VII - A
WEST VALLE	SALT LAKE	101208	6200 S @ 5699 W	5	240	651	24	Level VII - A
SALT LAKE C	SALT LAKE	117020	1300 N @ 1710 W	9	237	353	21	Level VII - A
WEST VALLE	SALT LAKE	101386	REDWOOD RD @ 3538 S	18	215	765	19	Level VII - A
TAYLORSVIL	SALT LAKE	153076	REDWOOD RD @ 5595 S	18	202	1753	19	Level VII - A
SALT LAKE C	SALT LAKE	126468	STATE ST @ 1730 S	16	182	459	19	Level VII - A
SALT LAKE C	SALT LAKE	126558	Stadium Station	17	164	289	19	Level VII - A
SALT LAKE C	SALT LAKE	198356	GARSDIE ST @ 129 N	9	163	559	22	Level VII - A
SOUTH OGD	Weber	629235	CHAMBERS AVE @ 928 E (S.	8	154	448	20	Level VII - A
LAYTON	DAVIS	301442	MAIN ST @ 723 N	16	145	363	19	Level VII - A
SALT LAKE C	SALT LAKE	101974	SOUTH CAMPUS DR @ 1665	8	118	17	19	Level VII - A
MILLCREEK	SALT LAKE	137360	4500 S @ 930 E	17	115	644	19	Level VII - A
OGDEN	Weber	629149	HARRISON BLVD @ 4255 S	8	109	708	19	Level VII - A
MILLCREEK	SALT LAKE	101915	4500 S @ 877 E	18	107	479	19	Level VII - A
MILLCREEK	SALT LAKE	137013	900 E @ 3265 S	17	104	813	19	Level VII - A
MURRAY	SALT LAKE	137352	4500 S @ 155 E	9	103	316	20	Level VII - A
TAYLORSVIL	SALT LAKE	153069	REDWOOD RD @ 5375 S	18	100	563	19	Level VI - A
SPANISH FOR	UTAH	825021	800 E @ 713 N	28	99	157	21	Level V - A
FARMINGTO	DAVIS	107003	200 E @ 190 S	17	98	157	19	Level V - A
MILLCREEK	SALT LAKE	137029	900 E @ 3334 S	18	96	547	19	Level V - A
SALT LAKE C	SALT LAKE	126339	2100 S @ 1671 E	16	95	219	19	Level V - A
PROVO	UTAH	820080	UNIVERSITY AVE @ 885 S	8	93	748	22	Level V - A
SALT LAKE C	SALT LAKE	127139	2100 E @ 2001 S	15	92	213	19	Level V - A
SALT LAKE C	SALT LAKE	127153	2100 E @ 1954 S	15	90	246	21	Level V - A
SALT LAKE C	Salt Lake	198460	200 N @ 413 W	6	90	43	19	Level V - A
PROVO	UTAH	830044	UNIVERSITY AVE @ 872 S	8	87	280	22	Level V - A
SALT LAKE C	SALT LAKE	117015	REDWOOD RD @ 720 N	18	85	688	20	Level V - A
OGDEN	Weber	601168	26TH ST @ 150 E	12	82	255	21	Level V - A
SALT LAKE C	SALT LAKE	125170	REDWOOD RD @ 1945 S	13	82	560	20	Level V - A
MURRAY	SALT LAKE	137452	STATE ST @ 4540 S	9	82	282	19	Level V - A
SOUTH SALT	SALT LAKE	137085	500 E @ 3275 S	17	81	400	20	Level V - A
SALT LAKE C	SALT LAKE	126451	2100 S @ 201 E	16	81	1591	19	Level V - A
SALT LAKE C	SALT LAKE	125014	400 S @ 65 W	16	77	248	21	Level VI - A
MAGNA	SALT LAKE	133029	3500 S @ 8345 W	17	76	234	21	Level VI - A
CLEARFIELD	DAVIS	301367	MAIN ST @ 1338 S	9	73	136	19	Level VI - A
MURRAY	SALT LAKE	154097	900 E @ 5545 S	17	68	203	20	Level VI - A
NORTH SALT	DAVIS	111077	US HWY 89 @ 16 S (N. SALT	16	63	142	19	Level VI - A
OGDEN	Weber	629162	HARRISON BLVD @ 4286 S	8	63	328	21	Level VI - A
MURRAY	SALT LAKE	154071	900 E @ 5640 S	18	62	401	20	Level VI - A
OGDEN	Weber	601052	ADAMS AVENUE @ 2241 S (28	42	216	19	Level III - A
TAYLORSVIL	SALT LAKE	136030	4700 S @ 1685 W	17	55	227	19	Level VI - A
SALT LAKE C	SALT LAKE	126482	STATE ST @ 1495 S	16	47	205	19	Level III - A
SALT LAKE C	SALT LAKE	117226	300 W @ 505 N	15	43	73	19	Level III - A
SALT LAKE C	SALT LAKE	117070	NORTHSTAR DR @ 1675 W	9	48	286	22	Level III - A
PROVO	UTAH	820081	UNIVERSITY AVE @ 455 S	8	44	578	19	Level III - A
PROVO	UTAH	820090	UNIVERSITY AVE @ 320 S	8	41	227	19	Level III - A
SALT LAKE C	SALT LAKE	117221	300 W @ 610 N	16	37	155	20	Level III - B

Weber County

City	County	StopName	StopAbbr	Time Between Buses	Total Stop Activity	Total Ramp	Score	Recommended Amenity
OGDEN	Weber	2900 S @ 1870 W	601233	395	10	195	17	Level III - B
OGDEN	Weber	9TH ST @ 955 E	616167	143	122	95	16	Level V - A
SOUTH OGD	Weber	36TH ST @ 425 E	623340	32	38	185	16	Level II - A
OGDEN	Weber	ADAMS AVENUE @ 2240 S (OGDEN)	601051	29	54	272	18	Level III - A
RIVERDALE	Weber	RIVERDALE RD @ 895 W	601108	29	61	343	18	Level IV - A
OGDEN	Weber	ADAMS AVENUE @ 2241 S (OGDEN)	601052	28	42	216	19	Level III - A
ROY	Weber	3500 W @ 4830 S	627040	27	18	261	16	Level III - B
NORTH OGD	Weber	400 E @ 2485 N	611046	20	35	164	16	Level II - A
OGDEN	Weber	WASHINGTON BLVD @ 2511 S	623025	20	36	281	18	Level II - A
OGDEN	Weber	25TH ST @ 999 E	623150	17	40	152	18	Level III - A
OGDEN	Weber	2ND ST @ 415 E (OGDEN)	616117	17	20	30	16	Level IV - B
RIVERDALE	Weber	RIVERDALE RD @ 4066 S (RIVERDALE)	601144	16	53	151	17	Level III - A
SOUTH OGD	Weber	WALL AVE @ 3648 S	636163	16	135	572	15	Level V - A
ROY	Weber	5305 S @ 1900 W	636111	16	52	211	18	Level III - A
OGDEN	Weber	INDUSTRIAL DR @ 2640 S (OGDEN)	622021	14	84	284	16	Level V - A
OGDEN	Weber	WASHINGTON BLVD @ 223 S	616069	14	82	241	15	Level V - A
OGDEN	Weber	WASHINGTON BLVD @ 390 S	616007	14	31	240	17	Level II - A
OGDEN	Weber	WASHINGTON BLVD @ 1146 S	623013	14	151	629	15	Level VII - A
OGDEN	Weber	HARRISON BLVD @ 2903 S (OGDEN)	623209	13	26	181	16	Level IV - B
OGDEN	Weber	WASHINGTON BLVD @ 2711 S (OGDEN)	623154	12	94	585	15	Level V - A
OGDEN	Weber	26TH ST @ 150 E	601168	12	82	255	21	Level V - A
OGDEN	Weber	17TH ST @ 135 W (OGDEN GARAGE)	623423	12	101	1	17	Level V - A
ROY	Weber	3500 W @ 5515 S (ROY)	627007	12	68	149	18	Level IV - A
OGDEN	Weber	WASHINGTON BLVD @ 1215 S	636207	11	147	566	17	Level V - A
OGDEN	Weber	WASHINGTON BLVD @ 2335 S	623024	11	152	847	15	Level VII - A
OGDEN	Weber	WASHINGTON BLVD @ 120 S	616031	11	100	274	16	Level V - A
OGDEN	Weber	WALL AVE @ 1987 S	601206	10	53	544	18	Level III - A
OGDEN	Weber	WALL AVE @ 1725 S	623202	10	118	345	17	Level V - A
OGDEN	Weber	WASHINGTON BLVD @ 2280 S	623003	10	54	225	15	Level III - A
OGDEN	Weber	WASHINGTON BLVD @ 2392 S	623305	10	129	740	17	Level V - A
NORTH OGD	Weber	400 E @ 2626 N (N. OGDEN)	611004	9	43	107	16	Level III - A
SOUTH OGD	Weber	CHAMBERS AVE @ 928 E (S. OGDEN)	629235	8	154	448	20	Level VII - A
OGDEN	Weber	HARRISON BLVD @ 3415 S	623214	8	36	56	15	Level II - A
OGDEN	Weber	HARRISON BLVD @ 3225 S	623212	8	46	126	18	Level III - A
OGDEN	Weber	HARRISON BLVD @ 3065 S	623418	8	81	334	16	Level V - A
OGDEN	Weber	HARRISON BLVD @ 4106 S	601105	8	44	78	15	Level III - A
OGDEN	Weber	HARRISON BLVD @ 3210 S	623242	8	47	96	17	Level III - A
OGDEN	Weber	HARRISON BLVD @ 4255 S	629149	8	109	708	19	Level V - A
OGDEN	Weber	26TH ST @ 321 E (OGDEN)	601160	8	576	3827	17	Level VII - A
OGDEN	Weber	26TH ST @ 310 E (OGDEN)	623292	8	547	3086	17	Level VII - A
OGDEN	Weber	HARRISON BLVD @ 4286 S	629162	8	63	328	21	Level IV - A
OGDEN	Weber	DIXON DRIVE @ 3900 S	601104	7	45	107	17	Level III - A
OGDEN	Weber	36TH ST @ 1220 E (OGDEN)	623238	7	103	363	18	Level V - A
OGDEN	Weber	36TH ST @ 1255 E (OGDEN)	623231	6	111	343	17	Level V - A
OGDEN	Weber	4400 S @ 1150 E	629086	6	32	196	16	Level II - A
OGDEN	Weber	HARRISON BLVD @ 4401 S (OGDEN)	629249	6	150	1626	15	Level VII - A
OGDEN	Weber	EDVALSON ST @ 1349 E	623223	6	433	383	15	Level VII - A
OGDEN	Weber	EDVALSON ST @ 1550 E	636121	6	306	125	15	Level VII - A
OGDEN	Weber	EDVALSON ST @ 1348 E	623296	6	412	369	16	Level VII - A
OGDEN	Weber	AVC LN @ 502 E	616034	5	266	595	15	Level VII - A

Davis County

City	County	Stop Abbr	Stop Name	Time Between Buses	Total Stop Activity	Total Ramp	Score	Recommended Amenity
LAYTON	DAVIS	101007	RING RD @ 425 W (LAYTON MALL)	5	441	269	22	Level VII - A
LAYTON	DAVIS	301442	MAIN ST @ 723 N	16	145	363	19	Level VI - A
LAYTON	DAVIS	101097	MAIN ST @ 688 N (LAYTON)	16	99	278	14	Level V - A
FARMINGTON	DAVIS	107003	200 E @ 190 S	17	98	157	19	Level V - A
FARMINGTON	DAVIS	107062	200 E @ 111 S	18	87	360	14	Level V - A
FARMINGTON	DAVIS	301012	STATE ST @ 45 E	11	74	130	13	Level IV - A
CLEARFIELD	DAVIS	301367	MAIN ST @ 1338 S	9	73	136	19	Level IV - A
NORTH SALT LAKE	DAVIS	111077	US HWY 89 @ 16 S (N. SALT LAKE)	16	63	142	19	Level IV - A
LAYTON	DAVIS	633125	MAIN ST @ 2065 N (LAYTON)	12	61	206	18	Level IV - A
LAYTON	DAVIS	633087	MAIN ST @ 2030 N (LAYTON)	17	58	178	17	Level III - A
NORTH SALT LAKE	DAVIS	117078	US HWY 89 @ 15 S (N. SALT LAKE)	25	50	128	15	Level III - A
KAYSVILLE	DAVIS	104054	MAIN ST @ 547 S	17	49	100	14	Level III - A
LAYTON	DAVIS	101089	GENTILE ST @ 223 E	16	49	178	16	Level III - A
BOUNTIFUL	DAVIS	109169	MAIN ST @ 505 S (BOUNTIFUL)	29	46	138	13	Level III - A
CLEARFIELD	DAVIS	633152	MAIN ST @ 364 N	29	44	135	14	Level III - A
CLEARFIELD	DAVIS	633150	ANTELOPE DR @ 421 E (CLEARFIELD)	17	41	23	13	Level III - A
LAYTON	DAVIS	101086	FORT LN @ 203 S	16	37	45	13	Level II - A
LAYTON	DAVIS	101104	MAIN ST @ 1986 N (LAYTON)	29	35	64	13	Level II - A
NORTH SALT LAKE	DAVIS	111033	US HWY 89 @ 2604 S	27	34	71	13	Level II - A
SUNSET	DAVIS	628160	MAIN ST @ 2331 N	16	34	61	14	Level II - A
NORTH SALT LAKE	DAVIS	111013	US HWY 89 @ 1085 N	26	32	107	14	Level II - A
BOUNTIFUL	DAVIS	109119	MAIN ST @ 1550 N (BOUNTIFUL)	28	32	127	15	Level II - A
CLEARFIELD	DAVIS	633108	MAIN ST @ 649 N	28	32	59	14	Level II - A
CLEARFIELD	DAVIS	633090	STATE ST @ 1299 S	11	28	58	15	Level II - A
BOUNTIFUL	DAVIS	112097	500 W @ 2554 S	29	28	40	13	Level II - A
CLEARFIELD	DAVIS	633114	13TH ST @ 1600 S	32	27	7	13	Level II - A
KAYSVILLE	DAVIS	104039	MAIN ST @ 360 S (KAYSVILLE)	28	26	56	13	Level II - A
BOUNTIFUL	DAVIS	301323	500 W @ 2520 S	28	22	35	13	Level II - A
CLEARFIELD	DAVIS	633026	STATE ST @ 712 S	28	21	15	13	Level II - A
CLEARFIELD	DAVIS	632004	1000 W @ 345 N	32	21	30	14	Level II - A
KAYSVILLE	DAVIS	104055	MAIN ST @ 325 S	12	21	76	13	Level II - A
KAYSVILLE	DAVIS	301357	MAIN ST @ 250 N	18	20	77	14	Level II - A
CLINTON	DAVIS	627016	2000 W @ 1830 N (CLINTON)	38	16	60	14	Level II - A
SUNSET	DAVIS	628161	MAIN ST @ 2001 N	16	14	18	14	Level III - B
LAYTON	DAVIS	634003	ANTELOPE DR @ 415 W	32	14	8	14	Level III - B
NORTH SALT LAKE	DAVIS	111079	US HWY 89 @ 270 S (N. SALT LAKE)	15	11	25	16	Level II - A
NORTH SALT LAKE	DAVIS	111036	ORCHARD DR @ 3422 S	34	11	17	14	Level III - B
CLEARFIELD	DAVIS	301096	1450 S @ 1157 E	16	10	3	14	Level II - B
LAYTON	DAVIS	101062	MAIN ST @ 145 N	16	9	13	14	Level II - B
CLEARFIELD	DAVIS	632008	1000 W @ 762 N	32	7	1	14	Level II - B
NORTH SALT LAKE	DAVIS	301283	FOX HOLLOW DR @ 631 N	70	5	97	15	Level II - B
NORTH SALT LAKE	DAVIS	301282	FOX HOLLOW DR @ 620 N	70	4	50	14	Level I - B
NORTH SALT LAKE	DAVIS	111027	MAIN ST @ 3563 S	27	3	1	14	Level I - B
CENTERVILLE	DAVIS	301147	400 W @ 1689 N	39	3	1	14	Level I - B
WOODS CROSS	DAVIS	108025	800 W @ 1415 S	26	2	1	14	Level I - B
BOUNTIFUL	DAVIS	112060	DEBORAH DR @ 1153 E	135	2	1	14	Level I - B
NORTH SALT LAKE	DAVIS	301321	MAIN ST @ 44 S	23	2	73	14	Level I - B
BOUNTIFUL	DAVIS	112003	ELAINE AVE @ 931 E	135	1	1	14	Level I - B
NORTH SALT LAKE	DAVIS	301190	FOXBORO DR @ 467 N	70	1	1	14	Level I - B
FARMINGTON	DAVIS	106001	STATE ST @ 398 W	11	1	1	14	Level I - A

City	County	Stop Abbr	Stop Name	Time Between Buses	Total Stop Activity	Total Ramp	Score	Recommended Amenity
MURRAY	SALT LAKE	153170	COTTONWOOD ST @ 5149 S	5	1020	1442	20	Level VII - A
MILLCREEK	SALT LAKE	136071	3900 S @ 61 W	18	532	998	21	Level VII - A
SALT LAKE C	SALT LAKE	126511	STATE ST @ 355 S	5	449	861	18	Level VII - A
SALT LAKE C	SALT LAKE	117005	NORTH TEMPLE ST @ 275 W	3	384	629	19	Level VII - A
SALT LAKE C	SALT LAKE	126513	STATE ST @ 185 S	4	377	888	18	Level VII - A
SALT LAKE C	SALT LAKE	126729	STATE ST @ 420 S	7	254	516	18	Level VII - A
WEST VALLE	SALT LAKE	101208	6200 S @ 5699 W	5	240	651	24	Level VII - A
SALT LAKE C	SALT LAKE	117020	1300 N @ 1710 W	9	237	353	21	Level VII - A
SALT LAKE C	SALT LAKE	126631	200 S @ 129 E	8	233	569	18	Level VII - A
SALT LAKE C	SALT LAKE	117003	NORTH TEMPLE ST @ 198 W	4	223	679	18	Level VII - A
WEST VALLE	SALT LAKE	101386	REDWOOD RD @ 3538 S	18	215	765	19	Level VII - A
SALT LAKE C	SALT LAKE	126530	200 S @ 120 E	8	212	450	18	Level VII - A
SALT LAKE C	SALT LAKE	101522	UNIVERSITY ST @ 160 S	7	208	44	18	Level VII - A
TAYLORSVIL	SALT LAKE	153076	REDWOOD RD @ 5595 S	18	202	1753	19	Level VII - A
SALT LAKE C	SALT LAKE	125197	Redwood Road @ 1722 S	14	184	1246	18	Level VII - A
SALT LAKE C	SALT LAKE	126468	STATE ST @ 1730 S	16	182	459	19	Level VII - A
SALT LAKE C	SALT LAKE	125021	200 S @ 255 W	5	179	445	18	Level VII - A
WEST VALLE	SALT LAKE	135245	3500 S @ 3980 W	12	171	196	18	Level VII - A
SALT LAKE C	SALT LAKE	126558	Stadium Station	17	164	289	19	Level VII - A
SALT LAKE C	SALT LAKE	198356	GARSDIE ST @ 129 N	9	163	559	22	Level VII - A
TAYLORSVIL	SALT LAKE	153007	REDWOOD RD @ 5480 S	18	153	749	18	Level VII - A
SALT LAKE C	SALT LAKE	127127	FOOTHILL DR @ 585 S	7	150	215	18	Level VII - A
SALT LAKE C	SALT LAKE	125450	200 S @ 316 W	3	150	701	18	Level VI - A
SALT LAKE C	SALT LAKE	101974	SOUTH CAMPUS DR @ 1665 E	8	118	17	19	Level VI - A
MILLCREEK	SALT LAKE	137360	4500 S @ 930 E	17	115	644	19	Level VI - A
MILLCREEK	SALT LAKE	101915	4500 S @ 877 E	18	107	479	19	Level VI - A
MILLCREEK	SALT LAKE	137013	900 E @ 3265 S	17	104	813	19	Level VI - A
MURRAY	SALT LAKE	137352	4500 S @ 155 E	9	103	316	20	Level VI - A
TAYLORSVIL	SALT LAKE	153069	REDWOOD RD @ 5375 S	18	100	563	19	Level VI - A
MILLCREEK	SALT LAKE	137029	900 E @ 3334 S	18	96	547	19	Level V - A
SALT LAKE C	SALT LAKE	126339	2100 S @ 1671 E	16	95	219	19	Level V - A
SALT LAKE C	SALT LAKE	127139	2100 E @ 2001 S	15	92	213	19	Level V - A
SALT LAKE C	SALT LAKE	127153	2100 E @ 1954 S	15	90	246	21	Level V - A
SALT LAKE C	SALT LAKE	198460	200 N @ 413 W	6	90	43	19	Level V - A
SALT LAKE C	SALT LAKE	117015	REDWOOD RD @ 720 N	18	85	688	20	Level V - A
SALT LAKE C	SALT LAKE	125170	REDWOOD RD @ 1945 S	13	82	560	20	Level V - A
MURRAY	SALT LAKE	137452	STATE ST @ 4540 S	9	82	282	19	Level V - A
SOUTH SALT	SALT LAKE	137085	500 E @ 3275 S	17	81	400	20	Level V - A
SALT LAKE C	SALT LAKE	126451	2100 S @ 201 E	16	81	1591	19	Level V - A
SALT LAKE C	SALT LAKE	125014	400 S @ 65 W	16	77	248	21	Level IV - A
MAGNA	SALT LAKE	133029	3500 S @ 8345 W	17	76	234	21	Level IV - A
MURRAY	SALT LAKE	154097	900 E @ 5545 S	17	68	203	20	Level IV - A
MURRAY	SALT LAKE	154071	900 E @ 5640 S	18	62	401	20	Level IV - A
TAYLORSVIL	SALT LAKE	136030	4700 S @ 1685 W	17	55	227	19	Level III - A
SALT LAKE C	SALT LAKE	117070	NORTHSTAR DR @ 1675 W	9	48	286	22	Level III - A
SALT LAKE C	SALT LAKE	126482	STATE ST @ 1495 S	16	47	205	19	Level III - A
SALT LAKE C	SALT LAKE	117226	300 W @ 505 N	15	43	73	19	Level III - A
SALT LAKE C	SALT LAKE	117221	300 W @ 610 N	16	37	155	20	Level III - A
WEST VALLE	SALT LAKE	135119	3650 S @ 3101 W	8	22	515	19	Level III - A
SALT LAKE C	SALT LAKE	117088	1000 W @ 196 N	31	9	260	19	Level III - A

City	County	Stop Name	Stop Abbr	Time Between Buses	Total Stop Activity	Total Ramp	Score	Recommended Amenity
PROVO	UTAH	900 N @ 792 E	830032	11	155	800	15	Level VII - A
OREM	UTAH	1200 S @ 735 W	816038	11	342	401	15	Level VII - A
PROVO	UTAH	900 N @ 783 E	830116	11	186	912	15	Level VII - A
OREM	UTAH	CAMPUS DR @ 900 S	816119	10	634	200	14	Level VII - A
OREM	UTAH	CAMPUS DR @ 791 W	816003	4	383	607	16	Level VII - A
OREM	UTAH	STATE ST @ 44 N	812003	18	125	203	15	Level VI - A
OREM	UTAH	1000 S @ 1418 W	801284	12	128	150	18	Level VI - A
SPANISH FL	UTAH	800 E @ 713 N	825021	28	99	157	21	Level V - A
PROVO	UTAH	UNIVERSITY AVE @ 885 S	820080	8	93	748	22	Level V - A
PROVOxxx	UTAH	UNIVERSITY AVE @ 872 S	830044	8	87	280	22	Level V - A
SPRINGVILL	UTAH	MAIN ST @ 444 S	823100	40	27	48	15	Level IV - B
PROVO	UTAH	STATE ST @ 2051 S	821006	37	20	46	14	Level IV - B
OREM	UTAH	SANDHILL RD @ 1355 S	816131	32	24	301	17	Level IV - B
OREM	UTAH	1200 W @ 1586 N	812048	31	29	122	14	Level IV - B
OREM	UTAH	1200 W @ 1575 N	812047	30	26	99	15	Level IV - B
AMERICAN	UTAH	STATE ST @ 1084 E	806011	18	27	87	15	Level IV - B
PLEASANT	UTAH	STATE RD @ 1344 W	806106	18	27	37	14	Level IV - B
AMERICAN	UTAH	STATE ST @ 433 E	806001	18	19	162	15	Level IV - B
OREM	UTAH	STATE ST @ 1975 N	812027	18	19	171	14	Level IV - B
PLEASANT	UTAH	STATE RD @ 1909 W	806024	17	27	126	15	Level IV - B
OREM	UTAH	1200 W @ 712 S	816049	14	63	41	15	Level IV - A
OREM	UTAH	CAMPUS DR @ 950 S	816078	10	77	30	16	Level IV - A
SPRINGVILL	UTAH	MAIN ST @ 865 N	823053	40	11	11	15	Level III - B
PROVO	UTAH	CENTER ST @ 2084 W	830181	39	14	348	15	Level III - B
PROVO	UTAH	900 E @ 44 N	820251	28	18	261	16	Level III - B
PROVO	UTAH	500 W @ 931 N	817251	18	13	106	15	Level III - B
PROVO	UTAH	UNIVERSITY AVE @ 455 S	820081	8	44	578	19	Level III - A
PROVO	UTAH	UNIVERSITY AVE @ 320 S	820090	8	41	227	19	Level III - A
SPRINGVILL	UTAH	400 E @ 212 S	823105	40	7	3	15	Level II - B
PROVO	UTAH	CENTER ST @ 548 W	830179	39	7	189	16	Level II - B
PROVO	Utah	CENTER ST @ 2915 W	830200	39	6	255	16	Level II - B
OREM	UTAH	UNIVERSITY PKWY @ 40 W	816111	11	9	302	15	Level I - A
OREM	UTAH	UNIVERSITY PKWY @ 145 W	816047	11	0	109	15	Level I - A
PROVO	UTAH	UNIVERSITY AVE @ 110 S	820089	9	4	197	15	Level I - A
PROVO	UTAH	1720 N @ 745 W	817034	32	55	226	18	Level III - A
OREM	UTAH	1435 S @ 420 W	816134	32	41	275	16	Level III - A
OREM	UTAH	1435 S @ 429 W	816128	32	52	292	17	Level III - A
PROVO	UTAH	300 S @ 780 E	820017	32	29	159	15	Level III - A
PROVO	UTAH	900 E @ 470 N	817058	28	45	9	15	Level III - A
PROVO	UTAH	STATE ST @ 1730 N	817371	18	48	44	14	Level III - A
PROVO	UTAH	500 W @ 852 N	817256	18	41	88	14	Level III - A
LINDON	UTAH	STATE ST @ 660 N	807002	18	33	142	14	Level III - A
AMERICAN	UTAH	STATE ST @ 695 E	806013	18	46	43	15	Level III - A
OREM	UTAH	800 S @ 334 E	816127	18	60	162	15	Level III - A
PROVO	UTAH	100 N @ 485 W	820184	18	52	229	16	Level III - A
OREM	UTAH	STATE ST @ 1360 S	817240	18	51	355	17	Level III - A
PROVO	UTAH	500 W @ 1145 N	817249	18	39	203	16	Level III - A
OREM	Utah	1200 W @ 707 S	830243	16	51	58	14	Level III - A
OREM	Utah	980 W @ 919 N	830236	16	44	61	14	Level III - A
AMERICAN	UTAH	STATE ST @ 218 N	801126	16	29	59	15	Level IV - B

Box Elder County

City	County	Stop Abbr	Stop Name	Time Between Buses	Total Stop Activity	Total Ramp	Score	Recommended Amenity
BRIGHAM CI	BOX ELDER	603014	MAIN ST @ 395 N	64	12	191	14	Level III - B
BRIGHAM CI	BOX ELDER	603013	MAIN ST @ 485 N	64	7	8	11	Level II - B
BRIGHAM CI	BOX ELDER	605020	MAIN ST @ 910 S (BRIGHA	64	5	16	13	Level II - B
BRIGHAM CI	BOX ELDER	605047	MAIN ST @ 1120 S	64	4	4	13	Level II - B
WILLARD	BOX ELDER	636007	US HWY 89 @ 198 S	64	4	1	14	Level I - B
BRIGHAM CI	BOX ELDER	603015	MAIN ST @ 267 N	64	3	30	11	Level I - B
WILLARD	BOX ELDER	636013	US HWY 89 @ 1025 N	64	2	0	11	Level I - B
BRIGHAM CI	BOX ELDER	605015	MAIN ST @ 310 S	64	2	2	12	Level I - B
WILLARD	BOX ELDER	605083	US HWY 89 @ 20 S	64	1	18	12	Level I - B
PERRY	BOX ELDER	605052	US HWY 89 @ 2670 S	64	1	4	12	Level I - B
BRIGHAM CI	BOX ELDER	605017	MAIN ST @ 510 S	64	1	2	12	Level I - B
WILLARD	BOX ELDER	636014	US HWY 89 @ 735 N	64	1	0	11	Level I - B
WILLARD	BOX ELDER	605074	US HWY 89 @ 1435 N	64	1	0	11	Level I - B
BRIGHAM CI	BOX ELDER	605016	MAIN ST @ 404 S	64	1	2	11	Level I - B
PERRY	BOX ELDER	605053	US HWY 89 @ 3460 S	64	0	6	12	Level I - B
BRIGHAM CI	BOX ELDER	605065	MAIN ST @ 696 S (BRIGHA	63	6	58	14	Level II - B
BRIGHAM CI	BOX ELDER	605060	MAIN ST @ 1175 S (BRIGH	63	3	3	11	Level I - B
BRIGHAM CI	BOX ELDER	603009	100 E @ 801 N	63	2	35	12	Level I - B
PERRY	BOX ELDER	605056	US HWY 89 @ 2435 S	63	2	18	11	Level I - B
PERRY	BOX ELDER	701003	US HWY 89 @ 2075 S	63	2	0	11	Level I - B
WILLARD	BOX ELDER	610050	US HWY 89 @ 8705 S	63	2	1	12	Level I - B
PERRY	BOX ELDER	605059	US HWY 89 @ 1755 S	63	1	2	12	Level I - B
BRIGHAM CI	BOX ELDER	603008	MAIN ST @ 898 N	63	1	12	11	Level I - B
WILLARD	BOX ELDER	636011	US HWY 89 @ 760 N	63	1	2	11	Level I - B
BRIGHAM CI	BOX ELDER	603017	700 N @ 5 W	60	8	0	12	Level II - B
BRIGHAM CI	BOX ELDER	701005	300 E @ 625 S	60	7	0	11	Level II - B
BRIGHAM CI	BOX ELDER	603039	500 W @ 51 N	60	3	0	13	Level I - B
BRIGHAM CI	BOX ELDER	603043	500 W @ 206 S	60	2	0	12	Level I - B
BRIGHAM CI	BOX ELDER	603018	500 W @ 491 N	60	1	0	11	Level I - B
BRIGHAM CI	BOX ELDER	605004	MAIN ST @ 751 S	39	10	38	13	Level III - B
BRIGHAM CI	BOX ELDER	603001	MAIN ST @ 112 N	39	6	16	11	Level II - B
BRIGHAM CI	BOX ELDER	603005	MAIN ST @ 510 N	39	5	40	12	Level II - B
BRIGHAM CI	BOX ELDER	603002	MAIN ST @ 206 N	39	5	30	12	Level II - B
BRIGHAM CI	BOX ELDER	605005	MAIN ST @ 585 S	39	5	10	13	Level II - B
BRIGHAM CI	BOX ELDER	605003	MAIN ST @ 889 S	39	5	12	13	Level II - B
BRIGHAM CI	BOX ELDER	603006	MAIN ST @ 610 N	39	4	4	12	Level I - B
BRIGHAM CI	BOX ELDER	603003	MAIN ST @ 306 N	39	3	32	11	Level I - B
BRIGHAM CI	BOX ELDER	605001	MAIN ST @ 1065 S	39	3	7	13	Level I - B
BRIGHAM CI	BOX ELDER	605007	MAIN ST @ 395 S	39	1	2	12	Level I - B
BRIGHAM CI	BOX ELDER	605084	MAIN ST @ 493 S	39	1	4	13	Level I - B
BRIGHAM CI	BOX ELDER	603004	MAIN ST @ 410 N	39	1	18	11	Level I - B
BRIGHAM CI	BOX ELDER	603011	700 N @ 75 E (BRIGHAM	32	57	215	18	Level IV - A
BRIGHAM CI	BOX ELDER	605006	1100 S @ 765 W	32	12	55	12	Level III - B
BRIGHAM CI	BOX ELDER	605018	800 W @ 1055 S	32	9	83	13	Level II - B
BRIGHAM CI	BOX ELDER	605034	950 S @ 665 W	32	7	65	14	Level II - B
BRIGHAM CI	BOX ELDER	701008	MEDICAL DR @ 950 S	28	8	0	11	Level II - B
BRIGHAM CI	BOX ELDER	605035	MEDICAL DR @ 984 S (BR	25	17	156	16	Level III - B
BRIGHAM CI	BOX ELDER	605042	MEDICAL DR @ 1050 S	25	8	51	13	Level II - B
BRIGHAM CI	BOX ELDER	605014	1100 S @ 305 W	25	3	3	12	Level I - B
BRIGHAM CI	BOX ELDER	701021	800 W @ 960 S	0	2	24	11	Level I - B

Tooele County

City	County	Stop Abbr	Stop Name	Time Between Buses	Total Stop Activity	Total Ramp	Score	Recommended Amenity
TOOELE	TOOELE	165002	UT-36 @ 2450 N Park & Ride	15	139	31	11	Level VI - A
STANSBURY	TOOELE	146022	STANSBURY PARKWAY @ 6670 N	61	18	2	14	Level III - B
TOOELE	TOOELE	501033	MAIN ST @ 989 N	28	17	1	14	Level III - B
STANSBURY	TOOELE	146027	STANSBURY PARKWAY @ 188 W	61	17	0	11	Level III - B
STANSBURY	TOOELE	146024	STANSBURY PARKWAY @ 189 W	67	14	1	13	Level III - B
TOOELE	TOOELE	501038	SADDLEBACK BLVD @ 1635 S	73	13	1	11	Level III - B
STANSBURY	TOOELE	146021	STANSBURY PARKWAY @ 6675 N	67	12	0	13	Level III - B
GRANTSVILL	TOOELE	161011	MAIN ST @ 294 E	211	0	0	12	Level I - B
GRANTSVILL	TOOELE	501027	MAIN ST @ 793 E	195	1	0	13	Level I - B
GRANTSVILL	TOOELE	161013	MAIN ST @ 345 E	195	1	0	13	Level I - B
GRANTSVILL	TOOELE	162003	MAIN ST @ 727 E	195	0	0	11	Level I - B
GRANTSVILL	TOOELE	162004	MAIN ST @ 647 E	195	0	0	13	Level I - B
GRANTSVILL	TOOELE	162005	MAIN ST @ 503 E	195	0	0	13	Level I - B
GRANTSVILL	TOOELE	161014	MAIN ST @ 303 E	195	0	0	12	Level I - B
GRANTSVILL	TOOELE	161026	QUIRK ST @ 180 S	156	5	0	16	Level II - B
GRANTSVILL	TOOELE	161027	CHERRY ST @ 195 E	156	3	0	15	Level I - B
GRANTSVILL	TOOELE	161006	CENTER ST @ 1 S	156	3	0	14	Level I - B
GRANTSVILL	TOOELE	161009	MAIN ST @ 98 E	156	2	0	14	Level I - B
GRANTSVILL	TOOELE	161025	QUIRK ST @ 11 S	156	2	0	14	Level I - B
GRANTSVILL	TOOELE	501028	MAIN ST @ 236 E	156	1	0	13	Level I - B
GRANTSVILL	TOOELE	161028	CHERRY ST @ 75 E	156	0	0	13	Level I - B
GRANTSVILL	TOOELE	501002	MAIN ST @ 17 W	156	0	0	14	Level I - B
GRANTSVILL	TOOELE	161029	CHERRY ST @ 16 W	156	0	0	15	Level I - B
GRANTSVILL	TOOELE	161010	MAIN ST @ 200 E	156	0	0	12	Level I - B
STANSBURY	TOOELE	146018	COUNTRY CLUB DR @ 5501 N	148	1	0	11	Level I - B
STANSBURY	TOOELE	146004	COUNTRY CLUB DR @ 6025 N	148	1	0	11	Level I - B
STANSBURY	TOOELE	146008	COUNTRY CLUB DR @ 5551 N	148	1	0	11	Level I - B
STANSBURY	TOOELE	146007	COUNTRY CLUB DR @ 5625 N	148	0	0	11	Level I - B
STANSBURY	TOOELE	146019	COUNTRY CLUB DR @ 5550 N	125	4	0	11	Level I - B
TOOELE	TOOELE	182029	200 W @ 1 S	73	2	0	12	Level I - B
TOOELE	TOOELE	182024	400 S @ 96 W	73	1	0	12	Level I - B
TOOELE	TOOELE	182028	200 W @ 105 S	73	1	0	12	Level I - B
TOOELE	TOOELE	182026	200 W @ 305 S	73	0	0	11	Level I - B
STANSBURY	TOOELE	146023	STANSBURY PARKWAY @ 465 W	67	3	0	13	Level I - B
TOOELE	TOOELE	182021	200 N @ 125 W	62	2	0	12	Level I - B
STANSBURY	TOOELE	146028	STANSBURY PARKWAY @ 470 W	61	4	0	12	Level I - B
TOOELE	TOOELE	501021	UTAH AVE @ 475 W	48	3	0	11	Level I - B
TOOELE	TOOELE	501054	400 E @ 2319 N	48	2	0	11	Level I - B
TOOELE	TOOELE	501010	VINE ST @ 122 W	45	3	0	12	Level I - B
TOOELE	Tooele	501042	BROADWAY ST @ 86 N	44	3	0	12	Level I - B
TOOELE	Tooele	501040	400 N @ 29 E	44	2	0	13	Level I - B
TOOELE	Tooele	501049	400 N @ 176 W	44	0	0	12	Level I - B
TOOELE	TOOELE	182025	400 S @ 198 W	38	8	0	14	Level II - B
TOOELE	TOOELE	501005	400 S @ 10 W	38	0	0	14	Level I - B
TOOELE	TOOELE	501023	1000 W @ 114 S	25	2	0	11	Level I - B
TOOELE	TOOELE	501075	UTAH AVE @ 468 W	24	4	0	11	Level II - B
TOOELE	Tooele	501041	COLEMAN ST (600 W) @ 41 N	24	1	0	11	Level I - B
TOOELE	TOOELE	182030	200 W @ 60 N	21	6	0	14	Level II - B
GRANTSVILL	TOOELE	161012	MAIN ST @ 348 E	21	1	0	11	Level I - B
GRANTSVILL	TOOELE	162001	MAIN ST @ 820 E	21	1	0	11	Level I - B