



## Americans with Disabilities Act Transition Plan

Prepared for:

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## EXECUTIVE SUMMARY

The ADA Transition Plan has been prepared pursuant to the Americans with Disabilities Act (ADA), which requires a transition plan to be completed by all public agencies with more than fifty (50) employees. The purpose of this Plan is to document the City of Ladue's evaluation of its public facilities and develop reasonable objectives for making those facilities accessible for all people, including those with disabilities. This Plan focuses on Administrative Documents, pedestrian facilities within the public rights-of-way, and City owned buildings. The City Clerk has been designated as the City's ADA Coordinator, and will serve as the primary clearing house and record keeper for all issues related to ADA accessibility.

### Administrative Documents

All programs and services were evaluated to determine the level of ADA compliance, specifically the City's website and various City documents. The City's website appears compliant, but there are several modifications to City documents that may be desired to help ensure future construction meets all applicable ADA standards. See **Chapter 5** and **Exhibit 3** for additional information.

### Sidewalks, Curb Ramps & Pedestrian Signals

Since the ADA requires a self-inventory of pedestrian facilities within the public rights-of-way, all City sidewalks, curb ramps, and pedestrian traffic signals were inspected and categorized using the information gathered. The City created a comprehensive GIS database that will be used by City staff for future planning. If a sidewalk or ramp was found to be non-ADA compliant, curb ramps and segments were prioritized based on physical condition and proximity to pedestrian traffic generators. A missing curb ramp represents the highest barrier to ADA compliance based on physical condition. The highest activity areas are those around public facilities, schools, and commercial developments along busy streets.

The City of Ladue should develop a programmatic plan to ultimately address all areas of noncompliance throughout the City. However, since it is most likely not feasible for the City of Ladue to improve all pedestrian facilities in one year, a scoring system was developed to allow the City to prioritize future improvements. The sidewalk and curb ramps were then divided into four tiers to help prioritize future improvements. 1<sup>st</sup> Tier Improvements are those sidewalk and curb ramps that are in the worst physical condition and most likely to have high pedestrian traffic. While 4<sup>th</sup> Tier Improvements are those sidewalk and curb ramps that have minor ADA concerns and are least likely to have high pedestrian traffic. The cost estimate associated with addressing the 1<sup>st</sup> Tier Improvements is \$135,500, the cost associated with addressing the 2<sup>nd</sup> Tier Improvements is \$307,000, the cost associated with addressing the 3<sup>rd</sup> Tier Improvements is \$312,000, and the cost to address the remaining ADA deficiencies (4<sup>th</sup> Tier Improvements) is \$2,973,500. Pedestrian signals will be upgraded to meet ADA compliance as the accompanying vehicular traffic signals are upgraded. The cost to update the pedestrian signal at a given intersection is \$30,000. See **Chapter 6** and **Appendix A** for additional information.

### Buildings & Facilities

All City buildings where public services are offered were inspected for ADA compliance. Within these buildings, all public spaces (e.g., public restrooms, parking lots, lobbies, etc.) and employee common areas (e.g., break rooms, employee restrooms, etc.) were evaluated. The improvements were prioritized by building and the end user, with the highest priority given to spaces where the public travels to perform City business (e.g., council chambers). Planning level cost estimates for each building are summarized in Appendix B. The City of Ladue currently budgets general maintenance for each building for projects greater than \$5,000 through the Capital Fund and remaining maintenance needs are budgeted through various department budgets. The City of Ladue should develop a programmatic plan to address all areas of noncompliance throughout City buildings. See **Chapter 7** and **Appendix B** for additional information.

## 1.0 REGULATORY REQUIREMENTS

The Americans with Disabilities Act Transition Plan, (referred to as "the Plan") documents the City of Ladue's evaluation of existing City owned facilities and develop objectives for making those facilities accessible for all people including those with disabilities. This Plan focuses on City owned buildings and facilities and public pedestrian facilities, including sidewalks and curb ramps located on public rights-of-way. The Plan has been prepared pursuant to the Americans with Disabilities Act (ADA), which requires a transition plan to be completed by all public agencies with more than fifty (50) employees.

### 1.1 Americans with Disabilities Act

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, is a comprehensive civil rights act that prohibits discrimination on the basis of disability. As listed below, the act is divided into five separate titles that cover specific applications: Employment, Public Services (state and local government), Public Accommodations (commercial facilities), Telecommunications and Miscellaneous Provisions. The ADA is meant to compliment the minimum guidelines presented in Section 504 of the Rehabilitation Act of 1973. **This Plan focuses on Title II of the ADA.**

- Title I – Employment: This title is designed to remove barriers that would deny qualified individuals with disabilities access to the same employment opportunities and benefits available to others without disabilities. Employers must reasonably accommodate the disabilities of qualified applicants or employees.
- Title II - Public Services: This title prohibits discrimination by public entities on the basis of disability. The public entity is required to provide access to programs, services and activities provided by the state or local government.
- Title III - Public Accommodations: This title prohibits discrimination on the basis of disability by private entities in places of public accommodation. Examples include hotels, restaurants, golf courses, etc.
- Title IV – Telecommunications: This title requires telephone companies to have developed interstate and intrastate telephone relay services in every state.
- Title V - Miscellaneous Provisions: This title has a variety of provisions relating to the ADA as a whole, including its relationship to other laws and its impact on insurance benefits.

### 1.2 Definitions

Title II of the ADA addresses discrimination in relation to public services including "public entities". The ADA definition of a "public entity" includes any state or local government. Title II of the ADA requires that no person shall by reason of such disability be excluded from participation in or denied the benefits of services, programs, or activities of a public entity, or be subjected to discrimination by any such entity. Sidewalks and curb ramps are considered a "program" per Title II of the ADA, and therefore must meet the requirements of the Americans with Disabilities Act.

According to Sec. 12102 of the ADA the term "disability" means, with respect to an individual:

- (a) A physical or mental impairment that substantially limits one or more major life activities of such individuals;
- (b) A record of such an impairment; or
- (c) Being regarded as having such impairment.

The ADA does not specifically name all the impairments that are covered, but describes in detail the conditions that are included or excluded as disabilities under the ADA. An example of an excluded disability is a transitory impairment; an impairment with an actual or expected duration of 6 months or less.

### 1.3 ADA Requirements of the City of Ladue

The ADA presents specific items that the City of Ladue or any "public entity" must perform to achieve compliance. The NCHRP 20-7 (232) – *ADA Transition Plans: A Guide to Best Management Practices* was developed to provide guidance in achieving ADA compliance. This document was used to create this Plan. These steps include:

- Perform a self-evaluation
- Develop a grievance procedure
- Provide notice about the ADA requirements
- Designate an individual to oversee Title II compliance (ADA Coordinator)
- Develop a transition plan if structural changes are necessary for achieving program accessibility
- Retain all grievances reports and ADA compliance checklists for a minimum of three years

The Transition Plan lays out the steps and actions to ensure compliance with the above listed steps and achieving ADA compliance. Achieving ADA compliance will require a long-term plan based on funding availability.

#### Administrative Requirements

The City of Ladue is responsible for ensuring all-inclusive access for all properties, services, and programs offered by the City. In addition to sidewalks, curb ramps, and City owned buildings and facilities for which additional information is listed below, the City of Ladue also maintains a website, in addition to other programs and services offered by various City departments. The City of Ladue must have a notice to the public stating the public's rights related to City properties, services, and programs offered by the City. Additionally, the City must have a process in which the public can file a complaint on ADA accessibility. While it will take time for the City to bring the entirety of their buildings and facilities into compliance, the City has an obligation to modify existing programs to accommodate all users.

#### Sidewalk, Curb Ramp & Pedestrian Signals Inventory Requirements

The sidewalks, curb ramps and pedestrian inventory must be available for inspection online through the City's website as well as at City Hall and is also available in alternative format (e.g. large print, Braille) by request. This inventory identifies physical barriers in public rights-of-way under the jurisdiction of the City of Ladue. This inventory will serve as a guide to help schedule repairs that have a higher priority and greater impact on the public. **See Appendix A** for the sidewalk and curb ramp inventory.

#### Building & Facility Inventory Requirements

The building & facility inventory must be available for inspection online through the City's website as well as at City Hall and be available in alternative format (e.g. large print, Braille), by request. This inventory identifies physical barriers at City owned buildings and facilities under the jurisdiction of the City of Ladue. This inventory will serve as a guide to help schedule repairs that have a higher priority and greater impact on the public. **See Appendix B** for the inventory of City buildings and facilities.

## 2.0 STEPS TO A COMPLIANT TRANSITION PLAN

The National Cooperative Highway Research Program (NCHRP) Project Number 20-7 (232) – *ADA Transition Plans: A Guide to Best Management Practices* was used as a basis for the development of this Plan. The following steps were taken to meet the requirements identified in Chapter 2:

### 2.1 Designating an ADA Coordinator

The City Clerk will serve as the ADA Coordinator and he/she will be the primary point of contact on all issues related to ADA accessibility within the City of Ladue. She will also oversee the requirements outlined in the ADA notice to the public and in the grievance procedure. All written requests should be sent to the City Clerk:

Laura Rider, City Clerk  
Ladue City Hall  
9345 Clayton Road  
Ladue, MO 63124  
Email: [lrider@cityofladue-mo.gov](mailto:lrider@cityofladue-mo.gov)  
Phone: 314-993-3439

### 2.2 Providing notice to the public about ADA requirements

The public participation process included specific efforts to include persons with disabilities, as well as the outreach groups that represent them. Because of their sensitivity to pedestrian travel, this group has specific concerns that differ from the general population. The public participation process also included City officials and the public. See Chapter 3 for documentation of the City's public outreach effort. A notice to the public about ADA requirements has been developed; after approval of the plan it will be posted at all City buildings and on the City's website. A copy of the notice is included in **Exhibit 1**.

### 2.3 Establishing a grievance procedure

The ADA Coordinator is responsible for ensuring that the grievance procedure is followed and that records are kept for at least three years. A grievance procedure has been developed and will be approved by the City after the development of this plan. A copy of the grievance form is provided in **Exhibit 2**.

### 2.4 Developing internal design standards, specifications, and details

#### City owned sidewalks and curb ramps

The City of Ladue sidewalks references St. Louis County Department of Highways and Traffic sidewalk policy and the Missouri Department of Transportation standards, specifications, and construction details for compliance with accessibility requirements.

#### City owned buildings and facilities

The building code of the City of Ladue is currently the International Building Code, 2006 edition.

### 2.5 Assigning personnel for the development of the Plan and collecting data

Oates Associates (OA) was contracted by the City of Ladue to inventory the existing facilities including City owned buildings, curb ramps, and sidewalks within City rights-of-way, identify ADA

deficiencies, and develop procedures for implementing and scheduling work to provide an ADA compliant system.

The inventory for sidewalks and curb ramps was completed by OA by walking the City's sidewalk system and recording the observed deficiencies on the sidewalks and curb ramps on a block by block basis. This information was recorded using a mobile global positioning satellite (GPS) unit. All the information collected was stored within a Geographic Information System (GIS) database. The GIS database developed for this project will be integrated into the GIS system that the City already implements. The database will be periodically updated as improvements are performed throughout the City.

All City owned buildings and facilities were also evaluated for ADA compliance. OA personnel collected data inside and outside of the buildings to determine the current compliance of the buildings. A report was prepared for each facility to bring the building into full ADA compliance.

## **2.6 Approving a schedule and budget for the Plan**

By adopting this plan, the City has developed an implementation procedure to identify the sidewalk sections or curb ramp locations that are the most critical. While this Plan does include a prioritization for pedestrian facility improvements throughout the City of Ladue, projects will be logically grouped together for construction efficiency and cost savings. Additionally, should projects be identified that are eligible for either federal or state funds these projects should be pursued regardless of the prioritization rank of these given segments or curb ramps. The implementation procedure will help guide the City to identify specific projects that will allow the City to maximize the improvements that can be performed within the available budget.

The City of Ladue currently provides funding for sidewalk improvements, but does not currently have a dedicated line item in the budget. The Road & Bridge Fund is the funding source for future ADA improvements on public right-of-way. The final budget for sidewalk and curb ramp improvements within a given year will be determined by the Council during the development of the fiscal budget. Various state and federal funding sources are also available to fund specific projects throughout the City (e.g., Surface Transportation Program).

The Capital Improvements Fund will be the funding source for ADA improvements to facilities that exceed \$5,000. Improvements less than \$5,000 will likely be paid for from the General Fund. The schedule and budget for upgrading buildings and facilities will also be determined by the City Council. In addition, City owned buildings will be upgraded to meet current ADA compliance during any remodeling or major reconstruction projects. In addition to any individual ADA improvement projects, the Department of Justice requires that any improvements require 20% of the project cost be dedicated to ADA improvements. These ADA improvements include not only the project area but also the accessible path of travel between the parking lot and the project area (e.g., parking lot, sidewalk, doorways, or toilet rooms.)

## **2.7 Monitoring the progress on the implementation of the Transition Plan**

The City of Ladue is responsible for monitoring the progress of the Plan. The Plan should be updated as projects are completed and changes to ADA requirements are enacted. The City Clerk will be responsible for assigning staff to monitor the various components of the Transition Plan, with the expectation that Public Works will be responsible for ensuring compliance associated with improvements within the public rights-of-way and building and facilities improvements.



### 3.0 PUBLIC OUTREACH

The ADA states that public entities are required to make available to all applicants, participants, residents, and other interested parties information regarding the formation of the Plan. A primary goal of the Plan was to actively seek input from all interested parties, including those with disabilities and the groups that represent them. The ADA also requires that a copy of the Plan be made available for public review during a citizen review period.

#### 3.1 Public Review and Comment Period

The ADA requires, as part of the development of the Plan, public input throughout the process. The previous sections have detailed the actions taken in the development of the plan. Since the Plan is a multi-year process that is designed to be flexible, it is critical that public involvement and comment continue to be sought through the entire length of the plan. A public meeting was also held to present the draft plan to residents of the City and provide the residents with an opportunity to comment on the plan. Additionally, anyone wishing to comment on the plan can do so in writing or by contacting the City. The Plan was sent out for public comment in February of 2018 and the public comment period was established as 30 days. A copy of the public comment form is included in **Exhibit 4**. Should any resident or visitor have a desire to comment on the Plan the public comment form can be completed at any time and submitted back to the City.

#### 3.2 Coordination with Paraquad

The City of Ladue met with Paraquad on October 17<sup>th</sup>, 2017 to discuss the ADA Transition Plan and gather insight and advice on the prioritization of future sidewalk and curb ramp improvements throughout the City of Ladue. Paraquad is a non-profit organization whose mission is to empower people with disabilities to increase their independence through choice and opportunity. As part of this mission Paraquad meets with various interested parties to promote and encourage a more accessible St. Louis to all residents. Paraquad provided valuable information related to the key factors that limit the ability of the disability community to access public transportation and City buildings and facilities. A copy of the meeting minutes is included in **Exhibit 4**.

## 4.0 ADA DESIGN STANDARDS

### 4.1 Incorporation into City of Ladue Standards

See Appendix A.1 for a list of definitions used through the Sidewalk Transition Plan.

The following statutes, codes, guidelines, and standards were used in the development of this plan. Should other new statutes, codes or standards become applicable after the adoption of the plan, such new codes or standards shall be incorporated into this plan if they are more restrictive and/or exceeds the existing standards.

- (a) The Americans with Disabilities Act Accessibility Guidelines (ADAAG), published by the U.S. Architectural and Transportation Compliance Board in July 1991 (with several revisions through September 2010) is an appendix to Title III of the ADA. The technical standards of the ADAAG also provide a technical definition for accessible elements. **The ADAAG was used as the ADA standards when reviewing City buildings and facilities.**
- (b) Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG), published by the U.S. Architectural and Transportation Barriers Compliance Board on July 26, 2011. These guidelines are currently published for review and comment and will replace the current ADAAG guidelines within the public rights-of-way upon final approval. The guidelines have not been approved by the U.S. Department of Justice, but are currently identified as the best practice for pedestrian accommodations in public right-of-way. Once the PROWAG, in either its present form or a modified version, is adopted by the Department of Justice, the PROWAG will be the federal standards for accessibility compliance on public right-of-way. **Since PROWAG represents the most current guidelines regarding public rights-of-way it was used as the guiding federal standards for the plan.**
- (c) **The design elements, standards and specifications published by the Missouri Department of Transportation and St. Louis County are used as the standard construction documents by the City of Ladue.**
- (d) The 2006 *International Building Code (IBC)*, Third Printing, published by the International Code Council in March 2007 is the design standards established by the City of Ladue for building construction within the City of Ladue. **The 2006 IBC was used as the building code when reviewing City buildings and facilities.**

The ADA Codes and Standards described in this section are intended to apply to all construction undertaken within City rights-of-way after the final approval and adoption of the Plan. This is meant to include all new construction, both private and public, as well as all construction undertaken as part of the Plan.

All dimensions and numerical requirements contained in these standards and any applicable local, state, and federal codes or statutes are absolute and requirements have been derived taking into account construction practices and constraints, and no dimensional or slope tolerances beyond the stated maximum or minimum are allowed. The person responsible for the construction operations will be responsible for ensuring that all equipment is calibrated properly. For contracted work, the City reserves the right to have any construction that is not built to the standards as listed, removed and reconstructed at no cost to the City.

### Pedestrian Facilities

The ADA Design Standards for public rights-of-way within the City of Ladue have been developed as a result of a review process to determine the most stringent standards from federal, state, and local guidelines and codes as they relate to various accessibility issues throughout the City. The City of Ladue currently references the standard drawings that have been developed by the St. Louis County Department of Transportation. The standards developed to collect inventory data as part of this plan were determined by comparing the St. Louis County standard drawings to the standards detailed in the *Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way* (dated July 2011).

### Public Buildings and Facilities

The ADA Design Standards for public buildings and facilities owned or operated by the City of Ladue have been developed because of the existing codes that have been adopted by the City of Ladue and applicable federal standards for construction. The relevant existing codes that have been adopted by the City of Ladue are the *2006 International Building Code (IBC)*, Third Printing. The applicable federal standards were the *2010 Americans with Disabilities Act Accessibility Guidelines (ADAAG)*.

## **4.2 Implementation of ADA Design & Construction Standards**

### New Construction/New Alignment

All areas of newly designed and constructed facilities located on City property/right of way shall comply with all applicable ADA standards.

### New Construction/Existing Alignment

Each addition on City property/right of way shall comply with all applicable ADA standards except as modified below.

### Alterations to Existing Facilities/Existing Alignment

When existing elements located on City property/right of way are to be altered, each altered element shall comply with all applicable ADA standards including PROWAG, ADAAG and others standards list in Section 4.1 except as modified below:

- (a) Exception: In alterations, where compliance with applicable provisions is technically infeasible, the alterations shall comply with the standards to the maximum extent possible without placing undue burden on the City.
- (b) Exception: When new sidewalk is tying into an existing element that does not meet ADA standards at a project terminus, all sidewalk panels except the sidewalk panel directly adjacent to the existing elements shall comply with all applicable ADA standards. The sidewalk panel from existing to new shall not result in reduced accessibility.
- (c) Prohibited Reduction in Access: An alteration that decreases accessibility for the general public on a public right-of-way, site arrival points to the buildings or other facilities adjacent to the proposed adjustments on public right-of-way or to a room within a building, below the requirements for new construction at the time of the alteration will be prohibited.

Approval Procedures for Exceptions and Technically Infeasible Conditions

The City of Ladue requires a written request to the ADA Coordinator for making all determinations of exceptions and technical feasibility. Upon a determination on the status of an exception and technical infeasibility, such determination of the applicable City department shall be final, except that any member of the public can appeal a determination, per the procedures laid out in the City of Ladue Grievance Procedures under the Americans with Disabilities Act.

## 5.0 ADMINISTRATIVE DOCUMENTS

### 5.1 Inventory Methodology

All programs and services were evaluated to determine the current level of ADA compliance, specifically the City's website and various City documents.

### 5.2 City's Website

The City owned website, [www.cityofladue-mo.gov](http://www.cityofladue-mo.gov), must meet the requirements of Section 508 of the Rehabilitation Act of 1973. The City of Ladue offers several services through its website, [www.cityofladue-mo.gov](http://www.cityofladue-mo.gov). The City's website appears compliant based on a cursory review; however, the website provider should be contacted on a yearly basis to perform any necessary updates to meet Section 508 standards.

### 5.3 City Documents

The City documents were evaluated to determine if any modifications were necessary to either provide a higher level of ADA compliance to employees, citizens, or visitors to the City of Ladue. Additional City documents were evaluated to determine if the current design standards for new construction require Developers to construct all proposed improvements to current ADA standards. See **Exhibit 3** for proposed changes to City documents.

### 5.4 Alterations and Undue Burden

Alterations to programs and services that do not cause an undue burden should occur as soon as feasible. An example of alterations that do not cause an undue burden is relocating a program to a handicap accessible meeting room. If alterations are deemed necessary, the City is not required to undertake action if it would alter the program or would create a hazardous situation, or represent an undue burden to the City.

### 5.5 Recommendations

The City should adopt the proposed recommendations to various City documents as listed in **Exhibit 3**. The City should ensure that all staff is prepared to fully accommodate individuals with disabilities and provide the services needed. The City shall also provide all employees with reminders about the ADA requirements and any information on changes to ADA law.

## 6.0 SIDEWALK TRANSITION PLAN

### 6.1 Inventory Methodology

Self-inventory of pedestrian facilities is one of the requirements for any public entity according to the ADA. The City has created a comprehensive GIS database from the inventory information gathered that will be used by the City staff for future planning. All pedestrian facilities within the City were inventoried.

Collection procedures for sidewalk segments, obstructions, and curb ramps were done by walking every block of pedestrian accommodations within the City. Data was obtained through visual inspections and measurements and collected using a mobile GIS data collection unit. The unit had customized forms for OA staff to insert data that they collected related to sidewalks, obstructions, and curb ramps. The staff was trained on the current ADA guidelines and field procedures. The information collected was then analyzed using a scoring system. The scoring was modified as necessary to reflect the goals determined by the City in prioritizing repairs.

### 6.2 Sidewalk Data Collected

The sidewalk inventory was conducted in segments based on City blocks. A sidewalk segment is considered a continuous length of sidewalk between two termini; with termini points set at either intersecting roadways or at 200' intervals. **See Appendix A.2** for the sidewalk data measurements collected.

### 6.3 Obstruction Data Collected

An obstruction is any permanent or temporary condition that affects that ability of a pedestrian to travel along a pedestrian access route. Obstructions were recorded where encountered along the sidewalk section. There could be several obstructions taken within a sidewalk segment. **See Appendix A.3** for the obstruction data to be collected.

### 6.4 Curb Ramp Data Collected

Because there are comprehensive ADA requirements specifically for curb ramps detailed measurements were taken at each curb ramp. **See Appendix A.4** for the curb ramp data collected.

### 6.5 Scoring and Ranking

A criteria system was developed to prioritize the ADA compliance by both physical condition and proximity to pedestrian traffic generators. Location is a factor because the *Department of Justice Title II Technical Assistance Manual* points to the fact that a public entity's programs related to sidewalk and curb ramps may be prioritized with respect to the location of a particular sidewalk or curb ramp.

#### Impedance Score

To evaluate physical condition, a scoring system was developed to assist the staff in prioritizing the severity of sidewalk segments and curb ramps. Each component of the ADA compliance criteria that was gathered during the sidewalk and curb ramp inventory was assigned a score based on overall impedance and the severity of obstructions within the route. Impedance includes overall elements that affect travel like slope and surface condition. Obstructions are point obstacles like poles or vertical displacements that also impact the functionality of sidewalk and

curb ramps. Obstructions located within a curb ramp are included in the Curb Ramp Impedance Score. For the sidewalk score, a separate Sidewalk Obstruction Score was determined for sidewalk segments to account for the possibility of multiple obstructions being present along one given sidewalk segment.

The scoring system equations are:

**Sidewalk Segments** (Between 1 AND 50)

$$\text{Sidewalk Score} = (\text{Sidewalk Impedance Score} + \text{Sidewalk Obstruction Score})$$

**Curb Ramps** (Between 1 AND 50)

$$\text{Curb Ramp Score} = \text{Curb Ramp Impedance Score}$$

After the scores were calculated, each location was categorized into a grouping of sidewalks with similar physical deficiency levels. The five groups are (1) no curb/sidewalk present, (2) high impedance, (3) medium impedance, (4) low impedance, and (5) no major impedance observed.

See **Appendix A** for a detailed description of the scoring of sidewalks, curb ramps, and traffic generators within the City.

Activity Factor

The proximity to traffic generators was evaluated after the physical sidewalk condition was determined. The goal of this scoring system is to assign the highest priority to a sidewalk segment that is the most likely to have a high amount of pedestrian traffic. The activity factor takes into account these traffic generators and predicts the likelihood of pedestrian usage based on six different categories. For this plan, government facilities, parks, and arterial and collector routes are considered the highest priority locations. The Activity Factor sums the activity scores and divides by the maximum number of available activity scores. That number is then added to 1 to get the Activity Factor (See Equation below). An Activity Factor with a lower number represents a greater potential for pedestrian traffic.

**Activity Factor** (Between 1 AND 2)

$$\text{Activity Factor} = 1 + (\text{Sum of Activity Points} / \text{Maximum Number of Activity Points})$$

After the activity factors were calculated, each location was categorized three groupings with similar pedestrian activity levels. The three groups are (1) high activity, (2) medium activity, and (3) low activity. A high priority activity factor represents a segment that is within a close proximity to all pedestrian traffic generators. While a low priority activity factor represents a segment that is not near any of the pedestrian traffic generators.

See **Appendix A.6** for the traffic generators used as part of the Pedestrian Facility Report and the point values attached based on the proximity to the various traffic generators.

## 6.6 Prioritization

Because City funding is limited the program to upgrade pedestrian facilities within the City of Ladue will be a multi-year program, the City has developed a matrix using the Impedance Score and Activity Factor to prioritize improvements. The City will initially focus on high priority deficiencies located in areas with high levels of pedestrian traffic as shown in red. Once these areas have been addressed, the City's next focus will be on high priority deficiencies in areas with medium levels of pedestrian traffic as shown in orange. The third focus will be on medium deficiencies in areas with high levels of pedestrian traffic as shown in yellow. The remaining work - as shown in green - will be addressed in the out years of this Plan or in conjunction with other improvements.

		Impedance Score				
		No Significant Deficiency	Low	Medium	High	None Present
Activity Factor	Low					
	Medium					
	High					

Priority Legend	
	1st Tier Improvements - Initial Focus
	2nd Tier Improvements
	3rd Tier Improvements
	4th Tier Improvements - Long Term Priorities
	No Significant Deficiency

Figure 1: Sidewalk and Curb Ramp Improvement Priorities



## 6.7 Cost Estimating

## Opinion of Probable Cost – Public Right of Way

1 <sup>st</sup> Tier Improvements - Initial Focus					
Scoring Category	Number of Ramps in Category	Cost of Repairs	Scoring Category	Number of Segments in Category	Cost of Repairs
Curb Ramps			Sidewalk Segments		
No Ramp / High Activity Factor	4	\$12,000			
High Impedance / High Activity Factor	11	\$28,500	High Impedance / High Activity Factor	7	\$95,000
Cost of Improvements		\$40,500	Cost of Improvements		\$95,000
Total Cost of 1st Tier Improvements:					\$135,500

2 <sup>nd</sup> Tier Improvements					
Scoring Category	Number of Ramps in Category	Cost of Repairs	Scoring Category	Number of Segments in Category	Cost of Repairs
Curb Ramps			Sidewalk Segments		
No Ramp / Medium Activity Factor	5	\$18,000			
High Impedance / Medium Activity Factor	21	\$54,000	High Impedance / Medium Activity Factor	27	\$235,000
Cost of Improvements		\$72,000	Cost of Improvements		\$235,000
Total Cost of 2 <sup>nd</sup> Tier Improvements:					\$307,000

3 <sup>rd</sup> Tier Improvements					
Scoring Category	Number of Ramps in Category	Cost of Repairs	Scoring Category	Number of Segments in Category	Cost of Repairs
Curb Ramps			Sidewalk Segments		
Medium Impedance / High Activity Factor	12	\$32,000	Medium Impedance / High Activity Factor	22	\$280,000
No Ramp / Low Activity Factor	0	\$0	No Sidewalk / Low Activity Factor	0	\$0
Cost of Improvements		\$36,000	Cost of Improvements		\$280,000
Total Cost of 3 <sup>rd</sup> Tier Improvements:					\$312,000

4 <sup>th</sup> Tier Improvements - Long-Term Priorities					
Scoring Category	Number of Ramps in Category	Cost of Repairs	Scoring Category	Number of Segments in Category	Cost of Repairs
Curb Ramps			Sidewalk Segments		
High Impedance / Low Activity Factor	9	\$22,500	High Impedance / Low Activity Factor	4	\$20,000
Medium Impedance / Medium Activity Factor	16	\$42,500	Medium Impedance / Medium Activity Factor	69	\$730,000
Medium Impedance / Low Activity Factor	7	\$17,500	Medium Impedance / Low Activity Factor	15	\$150,000
Low Impedance / High Activity Factor	19	\$52,000	Low Impedance / High Activity Factor	48	\$310,000
Low Impedance / Medium Activity Factor	27	\$71,500	Low Impedance / Medium Activity Factor	222	\$1,330,000
Low Impedance / Low Activity Factor	7	\$17,500	Low Impedance / Low Activity Factor	53	\$210,000
Cost of Improvements		\$223,500	Cost of Improvements		\$2,750,000
Total Cost of 4 <sup>th</sup> Tier Improvements – Long Term Improvements:					\$2,973,500

**Figure 2: Estimate of Probable Cost**

Note 2: Cost estimates are based on correcting ADA deficiencies. Additional improvements may be desired but the cost of this work is not included in these estimates.

## 6.8 Potential Funding Sources/Programming

### City of Ladue Budget

The City of Ladue's Budget includes a street maintenance fund that could be used to help fund the sidewalk transition plan. This program is an annual fund to perform scheduled maintenance within the City of Ladue. Included in this funding source are general and emergency road repairs in addition to sidewalk replacement and repairs. While the budget does not include a specific set aside for sidewalk improvements, sidewalk improvements are included within this fund. In the future, a designated line item within the Road and Bridge Fund could be set aside.

### Local / Federal / State Programs

There are several local, state and federal funding sources available to assist municipalities with capital improvement projects. Most of these programs are competitive and have individual

restrictions that must be reviewed for compliance with the proposed project. Below are descriptions of a few funding sources that may be applicable to the implementation of the Plan.

This is not an all-encompassing list of the available federal programs. Funding sources should be monitored and sought as situations arise to complete the goals and objectives of the City and the Plan.

- (a) Surface Transportation Plan (STP): The STP program provides flexible funding for local agencies to improve public roads and bridges, transit capital projects, and improvements to transit terminals and facilities. "Transportation enhancements" including historic preservation, alternative non-motorized transportation, and landscaping are also funded using STP funds. STP funds can be used for wide variety improvements including road improvements with accompanying pedestrian accommodations as well as new construction and reconstruction of sidewalk and curb ramps. The East West Gateway Council of Governments currently administers STP funds for the St. Louis Metropolitan area.
- (b) Congestion Mitigation and Air Quality Improvement Program (CMAQ): The CMAQ program provides funds to help mitigate congestion and improve air quality. CMAQ projects commonly include intersection improvements and reconstruction. Pedestrian accommodations including accessible pedestrian signals can be included with CMAQ projects to improve pedestrian safety at the intersection. The East West Gateway Council of Governments currently administers CMAQ funds for the St. Louis Metropolitan area.
- (c) Transportation Alternatives Program (TAP): The Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) transportation bill combined multiple funding sources that fund pedestrian projects including Safe Routes to Schools (SRTS) and Recreational Trails Program (RTP). Money is still allocated for projects that were previously under these funding sources through the Transportation Alternative Program (TAP). The East West Gateway Council of Governments currently administers TAP funds for the St. Louis Metropolitan area.

#### Private Developers

Private development can have a direct impact on the adjacent public right-of-way. A City ordinance could be developed requiring Developers, as a condition of the approval of a project, to construct or improve pedestrian accommodations directly adjacent to the private development. On larger projects that may include the construction of new intersections with traffic signals, the developer could be required to include pedestrian accommodations including but not limited to curb ramps, marked crosswalks, pedestrian signals, and accessible pedestrian devices.

### **6.9 Monitoring of Sidewalk Transition Plan**

The majority of construction projects include pedestrian accommodations in some form or another. All curb ramps and sidewalks constructed on City-owned right-of-way or future right-of-way should be inspected by the City prior to acceptance. New sidewalk should be logged into the GIS system using the same mobile GIS that was utilized in the original catalog. If the construction replaces an existing sidewalk or curb ramp, the new data should be stored over the existing data to provide an up-to-date look at the status of the Transition Plan. If the project includes an expansion to the existing pedestrian network, the data should be added to the existing GIS system.

## **6.10 Recommendations**

The following recommendations are proposed to increase ADA accessibility within the City and ensure future construction of public right of way is constructed to meet ADA standards:

- (a) Designate a line item within the Road and Bridge Fund for ADA improvements on public right of way.
- (b) Enact changes to the City Ordinances as detailed in Exhibit 3.
- (c) Inspect all sidewalk and curb ramps prior to the City taking over maintenance responsibilities.
- (d) Keep the ADA Transition Plan current by inventorying new ramps and sidewalk segments.
- (e) Keep assigned City staff educated on current ADA requirements.
- (f) Consider requiring public rights-of-way pedestrian improvements in conjunction with improvements to residential and commercial properties adjacent to the public rights-of-way.

## 7.0 CITY BUILDING AND FACILITIES TRANSITION PLAN

### 7.1 Inventory Methodology

The self-inventory of the City owned buildings and facilities is one of the requirements for any public entity according to the ADA. An individual ADA Transition Evaluation was prepared for each building or facility to document ADA deficiencies. A qualified architect inspected each building for compliance. The inventory checklist that was used is the *ADA Checklist for Readily Achievable Barrier Removal*, which was developed for the New England ADA Center, a project by the Institute for Human Centered Design and the ADA National Network. A copy of the checklist can be found in Appendix B.3.

All buildings owned by the City where services are offered to the public were inspected for ADA compliance except for the two new fire stations which have been constructed within the past 5 years and were reviewed for ADA compliance during the time of construction. All public spaces where the public travels to conduct City business were investigated including parking lots, ingress and egress locations, meeting rooms, public toilet rooms, drinking fountains and other public areas. Additionally, community areas used by municipal employees were evaluated for ADA compliance including break rooms, employee only toilet rooms, and kitchen facilities. Private offices and work spaces that are not routinely used by the public was not included in this study.

### 7.2 Data Collected

The City building and facilities documented were:

- (1) City Hall Building
- (2) Police Department Building
- (3) Public Works Building
- (4) Building Department

### 7.3 Prioritization

Improvements to buildings and facilities will be prioritized in two ways. The first set of priorities will follow the *ADA Checklist for Readily Achievable Barrier Removal* (obtainable at [www.adachecklist.org](http://www.adachecklist.org)). The second set of priorities was developed on a building by building basis based on the amount of public usage.

#### Prioritization: ADA Checklist for Readily Achievable Barrier Removal

The checklist follows the four priorities in the Department of Justice ADA Title III regulations. These priorities are equally applicable to state and local government facilities.

The regulation suggests that public entities first priority should be to enable individuals with disabilities to physically enter its facility. This priority on “getting through the door” recognizes that providing physical access to a facility from public sidewalks, public transportation, or parking is generally preferable to any alternative arrangements in terms of both business efficiency and the dignity of individuals with disabilities. **This priority is listed as Priority 1: Approach and Entrance.**

The next priority is for measures that provide access to area where goods and services are made available to the public. For example, in City Hall individuals with disabilities should be given

access not only to assistance at the front desk, but access to all facilities that the public has access to including council chambers. **This priority is listed as Priority 2: Access to Goods and Services.**

The third priority is providing access to toilet rooms, if toilet rooms are provided for use by the public. **This priority is listed as Priority 3: Toilet Rooms.**

The fourth priority is to remove any remaining barriers to using the public entities facilities (e.g., public telephones, drinking fountains, etc.). **This priority is listed as Priority 4: Additional Access.**

#### Prioritization: Usage

A higher priority was placed on buildings and spaces within the building that the public frequently utilizes. The priority of City buildings and facilities are:

- (1) City Hall
- (2) Police Department Building
- (3) Building Department
- (4) Public Works Building

ADA upgrades will generally follow this priority list but may vary based on planned upgrades to various buildings including but not limited to restorations, renovations, and construction of new City buildings and facilities. Additionally, a specific building should be prioritized if alterations are necessary to accommodate a disabled employee whose work functions take place in any City building.

## **7.4 Cost Estimating & Summary of Results**

Programmatic level cost estimates were developed based on the *2015 RS Means Building Construction Cost Data* published by Reed Construction Data. The cost estimate for each City owned building and facility can be found in Appendix B.2.

The total cost of ADA improvements for all four public buildings is \$259,600. A more detailed breakdown is shown in the following tables.

**Opinion of Probable Cost – Facilities**

<b>1st Tier Improvements – Initial Focus</b>	
City Hall: Priority 1 - Approach & Entrance	\$26,000
Police Station: Priority 1 – Approach & Entrance	\$18,000
Building Department: Priority 1 – Approach & Entrance	\$15,500
Public Works Building: Priority 1 – Approach & Entrance	\$21,500
<b>Total Cost of 1<sup>st</sup> Tier Improvements – Initial Focus:</b>	<b>\$81,000</b>

<b>2nd Tier Improvements</b>	
City Hall: Priority 2 – Access to Goods & Services Public Areas	\$24,500
City Hall: Priority 3– Toilet Rooms Public Areas	\$17,000
Police Station: Priority 2 – Access to Goods & Services Public Areas	\$25,000
Building Department: Priority 2 – Access to Goods & Services Public Areas	\$19,500
<b>Total Cost of 2<sup>nd</sup> Tier Improvements:</b>	<b>\$86,000</b>

<b>3rd Tier Improvements</b>	
Police Station: Priority 3 – Toilet Rooms	\$28,000
Building Department: Priority 3 – Toilet Rooms	\$10,000
Public Works Building: Priority 2 – Access to Goods & Services Public Areas	\$19,000
Public Works Building: Priority 3 – Toilet Rooms	\$9,000
<b>Total Cost of 3<sup>rd</sup> Tier Improvements:</b>	<b>\$66,000</b>

<b>4th Tier Improvements</b>	
City Hall: Priority 2 Minor Violations – Access to Goods & Services Public Areas	\$5,000
City Hall: Priority 4 – Additional Access Public Areas	\$12,000
Police Station: Priority 2 Minor Violations – Access to Goods & Services Public Areas	\$7,000
Police Station: Priority 4 – Additional Access	\$500
Building Department: Priority 2 Minor Violations – Access to Goods & Services Public Areas	\$2,100
Building Department: Priority 4 – Additional Access	\$0
Public Works Building: Priority 4 – Additional Access	\$0
<b>Total Cost of 4<sup>th</sup> Tier Improvements:</b>	<b>\$26,600</b>

Note 2: Cost estimates are based on correcting ADA deficiencies. Additional improvements may be desired but the cost of this work is not included in these estimates.

## **7.5 Potential Funding Sources / Programming**

The City of Ladue currently budgets general maintenance for each building for projects greater than \$5,000 through the Capital Improvement Fund and remaining maintenance needs are budgeted through various department budgets.

## **7.6 Monitoring of Buildings and Facilities Transition Plan**

The design and construction of all future City-owned building construction or renovation should be reviewed and overseen by the ADA Coordinator, Building Department, or Public Works Department to help ensure ADA compliance.

## **7.7 Recommendations**

The following recommendations are proposed to increase ADA accessibility within the City and ensure future improvements to City owned buildings are constructed to meet ADA standards:

- (a) Dedicate a specific funding source for building related ADA improvements.
- (b) Develop or modify city ordinances as detailed in Exhibit 3.
- (c) Coordinate ADA improvements with future building improvement studies and projects.
- (d) Keep the ADA Transition Plan current by documenting ADA improvements within City owned buildings.
- (e) Keep assigned City staff educated on current ADA requirements.
- (f) Relocate public meetings to renovated spaces as renovations are completed.