



March 28, 2016

Steve Larson
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City of Helena
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REVISED FINAL REPORT REGARDING ACCESSIBILITY AT HATS STOPS

Dear Steve:

Please accept this letter as the introduction to our final reports to Helena Area Transit Service (HATS), regarding our access audit of HATS red and blue line stops.

Authority

Title II of the Americans with Disabilities Act (42 USC 12131) prohibits the more than 89,000 units of state and local government, such as City of Helena from discrimination on the basis of disability in the delivery of programs and services. The definition of programs and services is broad and includes public transportation, both fixed route systems and demand responsive systems. As HATS is a system that is managed by the City of Helena, it is clearly subject to the ADA requirements.

The Department of Justice (DOJ) issued an amended implementing regulation for title II, which became effective on March 15, 2011. This supplemented the regulation issued January 26, 1992. The DOJ regulation is integral to this audit and can be found at 28 CFR Part 35. The amended regulations were anticipated for quite a few years.

Title II requirements that come into play in our work for the City include:

- section 35.105 self-evaluation;
- the section 35.133 maintenance requirement; and
- the section 35.151 requirements for new facilities and alterations to old facilities.

Final and Enforceable Regulations...and Final Guidelines

Regarding accessibility, two sets of federal guidelines were applied to the HATS access audit. One is the Americans with Disabilities Act Accessibility Guidelines, also known as

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ADAAG. Published by the US Department of Justice (DOJ) on July 26, 1991 as Appendix A to 28 CFR Part 36, this final and enforceable regulation is now known as the 1991 Standards. This older Standard adequately addresses some elements of transit stops, such as cross slope and running slope.

On September 14, 2010 the DOJ published the 2010 Standards for Accessible Design. As these Standards were already available as a final guideline, we have long used this as our guide for an access audit. The US Access Board developed the 2010 Standards and the 2010 Standards apply to alterations or new development that occurs after March 15, 2012.

It is important to know that there is **not yet a final standard** for some City of Helena assets, such as public rights-of-way. There is considerable guidance though in the form of a final guideline. This Public Rights-of-way Accessibility Guideline (PROWAG) is an excellent guide for pedestrian routes such as sidewalks, or sidewalk segments that connect the HATS stops.

We cite to the 2010 Standards in our work. Where any Montana requirements are more stringent, we cite to those.

Analysis and Approach

Fixed route transit systems are subject to the requirements of the Americans with Disabilities Act (ADA). Specifically, the statutory requirements are found at ADA title II Part B, which addresses state and local government transit. The US Department of Transportation developed implementing regulations for this portion of the ADA and those regulations are found at 49 CFR Part 27, 49 CFR Part 37, and 49 CFR Part 38.

The Helena Area Transit Service (HATS) is subject to the title II Part B requirements, and the subsequent regulations issued by the Department of Transportation. This model is the same as for other municipal services, which are subject to the ADA statute and to the implementing regulation issued at 28 CFR Part 35.

Our interpretation of the requirements is that as new routes, or redesigned routes, are developed that all stops must be accessible. We view each stop as a component of a route, and as new construction where stops are added or changed. Each stop is interconnected.

Because of this requirement, in consulting with HATS staff, we have agreed to a plan for two routes, one with 11 stops and one with nine stops. As Phase One, these would be retrofit with funds in the HATS FY 17 fiscal year that starts July 1, 2016. Phase Two would address approximately 20 other stops that would be added to the routes as they are made accessible, some of which could occur in FY 17.

We also cite heavily in this report to the National Council on Disability report dated May 4, 2015, regarding accessibility to public transit systems. The report, on page 243, simply states "The inaccessibility of bus stops is one of the most persistent (and) significant transportation problems faced by people with disabilities in the United States."

With that statement as context, we offer our recommendations in the following pages.

Conclusions and Recommendations

Introduction and Scope of Work

In 2015, the City of Helena retained our firm for an access audit of HATS transit stops and connecting sidewalk segments. Our work also includes a policy and communication report, coming under separate cover. We recommend a step-by-step approach to help the City understand and address the deficits in the Blue Line and Red Line route reports. We suggest the following to attain the goal of making all HATS stops accessible to people with disabilities.

A Guide to this Section

There are access deficits at every stop on both the Red Line and the Blue Line. Some are slight, such as a cross slope at a transit stop landing that is modestly more steep than the maximum permitted. Others are significant, such as curb ramp flares that are far too steep, or stops without a firm, stable, and slip resistant surface.

In our work for the Blue Line and the Red Line, we have identified every access deficit at every stop, as well as at alternate stops under consideration by HATS. And, for every deficit, a solution is identified.

This section is all about the big picture. It should be used as a complement to the two Route reports. Here we have attempted to identify systemic solutions, such as the refreshing of all signage for transit stops, as a way to address issues identified in the two route reports. We believe this will help HATS better manage compliance. Consider these systemic changes as a complement to the route reports. However, the scope of our work does ***not*** include the design of a solution. Rather, it is performance based.

For example, if a transit stop needs to have a landing that is less steep, we'll make that recommendation. We will not design a solution that includes boundary information or topographical information. Those are tasks for HATS staff or contractors. We do however know of qualified and capable designers. If, once you are considering implementation, referrals are needed we can certainly help.

This is also about accountability. The elimination of changes in level, filling gaps, and other recommendations are ineffective if not regularly maintained by HATS employees. We recommend the following steps to facilitate review:

First, read this Conclusion section addressed to Steve Larson. As mentioned above, this is a big picture review of the issues and solutions we recommend.

Second, read the Blue Line Route Report and the Red Line Route Report. Use your computer and you'll have instant access to the report for that site, the photos, and the checklists. We caution staff to avoid the Route reports until the Conclusion has been digested, as there is simply too much detail in the Route reports. We'd prefer that HATS staff see the forest before the trees.

Third, review the checklists. Again, a great amount of detail is here. You'll see not only what isn't accessible, but what is accessible. Don't review checklists until the conclusion and the route reports have been reviewed.

Compliance Overview

At the 44 stops we evaluated, we observed and reviewed 864 distinct measures. Of those, 532, or 61.6% were compliant, with 332, or 38.4% being noncompliant.

Within the Red Line, we observed and reviewed 434 distinct measures. Of those, 256, or 59% were compliant, with 178, or 41% being noncompliant.

Within the Blue Line, we observed and reviewed 359 distinct measures. Of those, 232, or 64.6% were compliant, with 127, or 35.4% being noncompliant.

Of the three additional stops audited, we observed and reviewed 71 distinct measures. Of those, 44, or 62% were compliant, with 27, or 38% being noncompliant.

The objective is 100% compliance at every stop. This is not just an admirable goal, but a necessary achievement. Compliance can still be achieved even when a retrofit at a stop cannot meet the technical requirements because it is technically infeasible to do so.

Common Issues

In our evaluation, some common issues arose. These included the way maintenance affects access to transit stops. These common issues are also "big picture" items for HATS and incorporate many of the specific site recommendations.

Maintenance

We understand that HATS does not have a maintenance staff. That said, the ADA title II requirement at section 35.133 imposes on the City an obligation for the maintenance of accessible features, and that includes HATS stops. This is critical; even with maintenance, over time, every stop yields to wear and tear. The recommendations below describe ways in which maintenance can specifically address some access deficits.

1. **Provide training** to maintenance staffs regarding the features of an accessible route and how to ensure that it remains unobstructed so that assets such as garbage cans or signs, are placed in a way that the accessible route is not blocked.
2. **Purchase some new tools.** The HATS staff should have enough battery-powered 2' digital levels to equip staff for spot-checks of new stops, or stops being retrofit.

Relationship Between Stops and Transit Vehicle Maintenance

Lifts that drop onto an uneven transit stop surface may not function properly, or may be damaged. That can cause greater vehicle maintenance costs, and more out-of-service hours

for HATS vehicles. Making retrofits to correct transit stops can reduce maintenance costs, much like any other investment. See title II section 35.133 regarding maintenance.

3. **Track** time lost for vehicle maintenance prior to transit stop retrofit, and contrast that record to time lost after retrofits are made.

Changes in Level and Gaps

The routes and sidewalk segments connected to HATS stops are in fair condition. However, wear and tear, settling, weather, and other factors combine to cause changes in level and gaps along portions of those accessible routes, making that portion noncompliant and a barrier to many residents with physical and sensory disabilities.

Removing changes in level and gaps has a significant universal design benefit too, as more people with all types of conditions can more easily use HATS stops.

4. **Add** change in level of more than .25" **to HATS maintenance safety checklists** in 2016. This will help identify and correct these problems before they expand. Make or buy pre-measured shims and distribute to employees for their use and ease of measurement.
5. **Eliminate changes in level** by the end of 2018. Using the rationale that the most severe changes in level are the greatest barriers to access, make changes in level of greater than .75" the highest priority. Make changes in level of between .5" and .75" the second priority. Make beveling of changes in level of .25" to .5" the third priority.
6. **Add inspections for gaps** of greater than .5" **to maintenance safety checklists** in 2016. Identify and fill these gaps before they expand. **In the alternative, consider resurfacing segments of deteriorated routes.**

Running Slope and Cross Slope

We saw running slopes that lead to HATS stops that are steeper than permitted. At some stops this was a minimal issue, but at other stops it was a significant variance. This condition naturally occurs when concrete settles, or when connections between new and old routes are off by fractions of an inch. Cross slope is equally important, allowing drainage as well as providing access.

The intent of the following recommendation is to have the City modify its specifications for design and construction so that a slope gentler than the maximum slope is understood by City contractors and design professionals to be preferred, as opposed to a slope at the maximum grade. A slope specified at the maximum grade, if it is 1/100th of a point too steep when constructed, fails. Aiming for a lower grade allows room for field error.

This practice of aiming for a lower grade also makes ramps easier to use for everyone, not just people with disabilities. This universal design approach is also a risk management tool. As a note, we observed no ramps leading to HATS stops.

7. ***Adopt as a City practice*** that in new construction and alterations the slope of the AR shall not exceed 1:21, or 4.7%, as opposed to 1:20, or 5%.
8. ***Adopt as a City practice*** that in new construction and alterations the ramp slope shall not exceed 1:13, or 7.7%, as opposed to 1:12, or 8.33%.
9. ***Adopt as a City practice*** that in new construction or alterations the cross slope shall be an integral part of the project and shall not exceed 2% or 1:50.

Detectable Warnings

When the Access Board issued the 1991 Standards for Accessible Design (ADAAG), the guidelines contained a requirement for detectable warning surfaces on curb ramps. There evolved some disagreement between persons with sight impairments and persons who used mobility devices about whether raised truncated domes were helpful or a barrier.

The requirement for detectable warnings was temporarily suspended between 1994 and 2001 pending additional research and review of issues relating to requirement, conducted by the US Access Board. The Access Board chose to defer addressing detectable warning surfaces on curb ramps in the 2004 ADA and ABA Accessibility Guidelines, pending completion of the guidelines for pedestrian facilities in the public right-of-way (the final guideline now known as PROWAG).

Many jurisdictions continued to apply a type of detectable warning. Some of these are a cross-cut of concrete, or a grid laid on wet concrete to create a diamond-shaped indentation. Over time these should be replaced.

As a result of these actions, there are different requirements for detectable warning surfaces on curb ramps in the accessibility standards included within the regulations issued by the Department of Justice implementing Title II of the Americans with Disabilities Act and by the Department of Transportation implementing Section 504.

We still, however, as a smart practice, recommend the use of detectable warnings. We believe the safety value is important. It is typical to see noncompliant detectable warnings in every community.

10. ***Develop a template for detectable warnings*** that adheres to the US DOT requirements.

Signage

Signs serve several purposes. First, signs assist wayfinding in large sites. Second, signs identify important permanent elements of sites, such as a transit stop. Third, signs facilitate access by people with vision and physical limitations.

The 2010 Standards treats two types of signs differently. Signs for permanent spaces, such as a transit stop, must be in both Grade 2 Braille and raised lettering. Signs that are directional or informational only require visual lettering of a certain size.

Signs, signals, and traffic markings must also comply with the requirements of the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA). We note here that our scope of work was limited only to the accessibility of transit stops and we take no position on signs other than whether those signs meet accessibility requirements.

Do incorporate these approaches into signs in buildings and sites operated by HATS.

11. **Develop a sign template** in 2016 that describes where at a HATS stop signs will be used. The template could include size of sign, mounting height, mounting location, size of characters, space between characters, contrast between characters and background, icons or symbols used in the signs, HATS information in the signs (name? phone number? main office number?), and more. Do adhere to MUTCD requirements.
12. **Implement signage template and refresh** HATS signage in 2017.

Transit Stop Detectability

Helena streets have many types of posts and poles: stop lights, stop signs, speed limit signs, street lights, and more. Many transit systems have succeeded in making transit stops more detectable by using a certain type of post. Often a square post is the answer, meaning that no other City or County sign can use a square post (see Eugene, Oregon). Other transit systems have used octagonal posts (see StarTransit in Tallahassee, Florida). This will likely require coordination, as HATS isn't the "owner" of sidewalks and intersections.

This also has a **positive** fiscal impact. Research shows that the more detectable a transit stop for persons with sight impairments, the less likely that person will use paratransit.

13. **Develop a detectable sign or sign post that is unique to transit stops** in 2016. Consult with the disability community on this subject.
14. **Communicate the shape of the sign or sign post** to the disability community in 2016.
15. **Implement** the new signs in 2017.

Route Brochures

The printed route brochures are an important tool for HATS riders with disabilities. Create one to incorporate the access work that staff completes and indicate in where, for example, the accessible stops are, which other stops will be made accessible, and by what date those will be accessible.

16. **Update the transit stop** information in HATS print materials to reflect plans regarding our recommendations, and to note when stops will be made accessible.

Website

The title II regulation requires that all HATS communications to the public by way of the HATS website must be available to people with disabilities. Many people with vision impairments use websites every day with the aid of technical equipment.

The HATS system is required to evaluate its website and make necessary changes so that the website can be read by that type of equipment.

A link at the US Department of Justice website offers guidance on this. The City IT staff should become familiar with this issue. Go to <http://www.ada.gov/websites2.htm>. The HATS staff can also check the accessibility of its website at a free service. Link to Cynthia Says at http://www.icdri.org/test_your_site_now.htm and test your website.

17. **Evaluate the HATS website** and make changes so that the information on the site is accessible to people with disabilities.

Public Feedback

An integral part of the self-evaluation of HATS transit stops, and the development of a retrofit plan, is the involvement of the public. A public forum should be conducted for this purpose. We would be happy to return to assist with this process.

These can be very positive events. The community typically appreciates what steps have been taken by HATS and provide valuable feedback regarding priorities and preferences.

Accessibility Feasibility Plan

The HATS system must have an accessibility feasibility plan per 35.150(d) of the DOJ title II regulation. The plan should identify the barrier, the corrective work, the date by which the work will occur (in our reports, the Phase), and the person responsible for barrier removal.

Barriers should be removed as soon as is possible. Phasing the work to be done allows for access to occur and makes the best use of HATS resources.

We believe that a HATS accessibility feasibility plan is the most effective approach, allowing greater transparency and making it less likely that plan activity will be deferred. That said, another approach could be the integration of HATS retrofits into the City transition plan.

In the HATS accessibility feasibility plan, we recommend work in three phases. We acknowledge that each phase likely requires one or two fiscal years for completion. HATS should match the mandate with its resources and develop a schedule for each phase.

We have made cost *references* for the corrective work recommended. We note that these are not estimates and should be used only for planning purposes. The final design, the year in which the work will occur, local cost differences, the relationship with the contractor, and many other factors must be considered before a cost estimate is made.

The total of corrective work we recommend is \$432,237.50. We believe the retrofit work can be implemented over a two-year period.

In Phase One, we recommend work in the amount of \$180,628.75. ***Here we would suggest that Phase One occurs in FY 17.***

In Phase Two, we recommend work in the amount of \$251,608.75. These stops would come on line to the two routes after being made accessible. ***Here we would suggest that Phase Two is a one-year process.***

Risk Management

Investing in transit safety saves money for a transportation system by avoiding legal expenses related to transportation related litigation. The same concept applies here. Investing in accessibility retrofits saves the HATS system the cost of staff time and attorneys to defend against ADA lawsuits or administrative complaints.

As noted in several places in this report, that same investment will reduce maintenance costs and likely result in an increase in fixed route use over paratransit use.

While we do not believe a decision about access should hinge solely on risk management factors, we do recommend that HATS leadership be aware of this factor going forward. Enforcement continues to grow and touch more and more communities. The US Department of Justice and the US Department of Transportation have issued several joint technical assistance statements, and we should only expect more in the future.

The HATS system has two routes and both have access issues. The HATS staff operates a service that is needed by all in the City. This report identifies some issues that are typical in a transit infrastructure.

The City should determine to what extent it will act on our HATS recommendations and any staff recommendations. Access work should occur every year.

We believe two years is a fair pace for making stops accessible. While no one can say with certainty how long the City can stretch HATS projects, the City must make access retrofits an ongoing part of its annual plans and budgets. US Department of Justice, and US Department of Transportation officials have said work must be completed as soon as is possible. State of Montana officials have echoed those thoughts.

Be certain to understand that the City could be forced to accelerate its pace. Making access work a high priority is critical.

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The City and HATS leadership should be commended for undertaking this task. Accessibility is required. More importantly, taking these steps is the right thing to do for HATS riders, and the residents of the City of Helena.

In closing, thanks again to the HATS staff and the City staffs for their cooperation. All of the team at our firm enjoyed working with them.

Call me at Recreation Accessibility Consultants at 224/293-6451 if there are any questions. Thanks again for inviting us to work with the Helena Area Transit Service.

Submitted by

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