



Department of Public Works

October 25, 2002

The Access Board
1331 F Street NW, Suite 1000
Washington, D.C. 20004-1111

Re: Draft Rights-of-Way Guidelines

Dear Access Board Members:

The City of Lenexa Transportation Division of Public Works has reviewed the proposed guidelines and has prepared the following comments. I would like to express that the City of Lenexa certainly supports providing facilities to be accessible for all people. We do however have concerns with many of the proposed requirements as they will have unintended consequences, will be excessively costly and we believe are unnecessary to provide an accessible community.

These comments have been prepared with the section referenced from the proposed guidelines in bold followed by the requirement or statement from the guidelines in italics then our comments in normal text following.

---- Comments----

Defined Terms – Crosswalk – *Crosswalk is defined to include “in the absence of a sidewalk on one side of the roadway”*

This would seem to imply that all the requirements of a crosswalk would be appropriate whether or not a sidewalk is present, or whether or not the intersection is intended for use by pedestrians. Many roadways are designed to prohibit pedestrians (e.g.: freeways, highways and rural roadways) and the implication that crosswalks exist on these roadways is not appropriate.

Defined Terms – Pedestrian Access Route – *An accessible corridor for pedestrian use within the public right-of-way.*

This seems to imply that pedestrian access routes should be provided in all public rights-of-ways. Some public rights-of-ways are not intended for use by any

pedestrians. These public rights-of-ways should not be subject to the requirements to provide an accessible route.

Section 1102.2.2 Existing Public Right-of-Way - Alterations – *All alterations are required to meet the current standard except where “technically infeasible”*

This provision may make maintenance and rehab work much more costly. For example a simple sidewalk replacement may require the purchase of additional right-of-way, additional grading and maybe even retaining walls to meet the current standard. This might be “technically feasible” but would not be very practical nor economically reasonable. “Technically infeasible” needs a clearer definition and could result in projects not being “altered” or repaired due to the unreasonably high cost of compliance with current standards.

Section 1102.3 Alternate Circulation Path – *An alternate pedestrian circulation path shall be provided through construction areas.*

The discussion on this section indicates that the alternate path must be on the same side of the street as the disrupted sidewalk. This may not be feasible in some instances. It should be possible to re-direct pedestrians to the other side of the street, or to another reasonably accessible alternate path. Costs and volume of pedestrians should be appropriate factors to consider when making this decision.

Section 1102.5 Protruding Objects – *Objects shall not protrude more than 4” into the circulation path.*

It appears that this requirement would prohibit drinking fountains, telephones, call boxes, pole mounted traffic signal, street light control boxes, signs, etc. This would make it difficult to construct projects with limited space and appears to preclude the use of devices that would be beneficial to pedestrians.

Section 1102.7.2 Pedestrian Signs – Informational Signs and Warning Signs – *Informational signs and warning signs for pedestrians shall comply with 703.5.*

Section 703.5 defines Braille signs. This would not be practical for all pedestrian signs. Some signs are placed to be read from long distances and some are primarily for the motorists. Many signs cannot be reached by blind persons, and it would not be practical to place them where blind pedestrians could read them. This requirement may result in signs being placed at inappropriate locations and result in unsafe applications.

Section 1102.13 Bus Stop – *shall comply with 810.2 and 810.3*

Cannot find these sections. They do not exist in the document available on the Internet.

Section 1102.14 On-Street Parking – *On-street parking should have one handicap space per block face.*

An all-inclusive statement requiring one handicap space per block face is unreasonable. Most of the locations where on-street parking is permitted are in residential areas. Most locations are sparsely used and homeowners park in front of their home. In these residential areas it is unreasonable to mark any handicap spaces, unless requested by the adjacent homeowner.

In commercial areas one space per block may be too many if there are only two or three parking spaces on each block. At other locations where there may be 50 or more parking spaces along a block it may be necessary to provide several handicap parking spaces. Also it may depend on the availability of off-street parking spaces. Some areas provide ample convenient off-street parking spaces with reasonable accommodations for handicap parking; while in other areas the off-street parking is less convenient and difficult to access. In the latter condition it may be necessary to provide several on-street handicap parking space to serve the adjacent businesses.

Section 1103.5 Pedestrian Access Route - Grade – *Grade of the pedestrian access route shall not exceed the grade established for the adjacent roadway except if it is less than 1:20 or meets 405.*

Section 405 requires the use of handrails and extended floor or ground surface or guard curb or barrier. Should this be required on sidewalks? The discussion on pedestrian access route, however, indicates that handrails will not be required. This should be clarified. It does not seem reasonable to provide handrails and extended floor or ground surface or guard curb or barrier for sidewalks.

Section 1103.8 Pedestrian Access Route – Changes in level– *Changes in level shall comply with 303.*

Section 303.4 indicates that changes in level greater than ½ inch shall be ramped and comply with 405 or 406. Section 405 indicates that handrails and extended floor or ground surface or guard curb or barrier are required on the ramp if the grade change is greater than 6". This would imply that handrails and extended floor or ground surface or guard curb or barrier are require on changes in grade

level greater than 6". This does not seem appropriate on sidewalks.

Section 1104 Curb Ramps and Blended Transitions – *In the discussion of this section it indicates that normally two separate ramps should be provided.*

Two separate ramps at intersections with large radii could create some unintended consequences. This would force the ramps to be located further away from the intersection placing the crossing for pedestrians further away from the intersection. This is not where drivers are looking for pedestrians to cross. Also the crosswalk and related stop bar would be further from the intersection. When the stop bar and crosswalk are too far from the intersection drivers tend to encroach into the crosswalk thereby blocking the pedestrians path. Also as vehicles attempt to make right-turns on red with the stop bar too far back may have to maneuver well into the crosswalk area to see oncoming traffic. Finally the further back from the intersection the stop bar is located the longer clearance time is required for the signal operation and motorists would experience greater delays.

At intersections with small radii (30' or less) separate curb ramps would work well and provide better operation, however at intersections with large radii (50' or more) a single ramp typically works best.

Section 1104.3.2 Curb Ramps and Blended Transitions – Detectable Warnings – *Detectable warnings shall be provided, where curb ramps, landing or blended transition connects to a crosswalk.*

It will be difficult to remove snow and ice from detectable warnings. Snow and ice accumulated in detectable warnings is potentially unsafe for all pedestrians.

Section 1105.2.1 Crosswalk - Width – *Crosswalks shall be 96 inches.*

This is in conflict with the MUTCD, which only requires crosswalks to be a minimum of 6' wide. In many locations where pedestrian volumes are low 6' should be more than adequate. Wider crosswalks create larger intersection areas and are generally undesirable when not needed.

Section 1105.2.2 Crosswalk - Cross Slope – *The cross slope shall not exceed 1:48.*

This standard would require a "table" to be created at every intersection where the grade of the road exceeds 1:48 (about 2%). This could create a very difficult design requirement especially at locations where the design speed is high (requiring very long transitions to meet the 1:48 required) or at locations where

intersections are rather close together (for example in residential areas). This could have a very significant impact on the cost of a roadway in hilly terrain and will likely result in some unintended consequences like: steeper grade between intersections, or the agency may prohibit all pedestrians completely on a steep roadway or projects may be dropped completely due to the excessive cost requirements. This is an unreasonable requirement.

Section 1105.2.3 Crosswalks – Running Slope – *The running slope shall not exceed 1:20.*

Same comment as above. Also this could be a problem with roadways that are super elevated where the cross slope of the roadway might be 7-8%, which would exceed the required minimum of 5%.

Section 1105.3 Pedestrian Signal Phase Timing – *The pedestrian walk speed shall be 3.0 ft/sec. And the crossing length should include the length of the curb ramp.*

This is an unreasonable requirement. Currently the requirements in the MUTCD indicate that the walking speed should be 4.0 ft/sec and allow the pedestrian to get to the far side of the traveled way (currently proposed with revision 2). Adding the entire length of the crosswalk plus the curb ramp could add 15 to 20 feet or more to the crossing length. With only considering a walking speed of 3.0 ft/sec. the increased pedestrian clearance time would be excessive. At large intersections where 8 or more lanes might be crossed the pedestrian crossing time could be increased by as much as 10 to 15 seconds or more. This would create excessive and unnecessary delays to the motoring public.

Excessive pedestrian clearance times may also tend to encourage pedestrians to attempt to start to cross during the clearance time as they see that the timing is excessive for normal crossing. This will lead to disrespect for the signal indications, more violations by pedestrians, and reduce safety.

Section 1105.4 Medians and Pedestrian Refuge Islands – *The width is not mentioned.*

Should the width be 48 inches as required for a pedestrian access route or should it be 96 inches as is required for the crosswalk? This needs to be clarified

Section 1105.5.3 Pedestrian Overpasses and Underpasses – Approach – *Where the rise exceeds 60 inches an elevator or limited use /limited-application elevator shall be provided.*

The advisory committee has asked for input on the minimum height where an elevator would be required. The requirement to install an elevator should not only be based on the height, but also on the volume of pedestrians and in association with the needs of the disabled community. It seems unreasonable to install an elevator that might only be needed once a week or once a month (this is assuming that there is another alternate pedestrian access route). On the other hand an elevator that is used several times an hour might be appropriately justified.

The cost of a pedestrian overpass is often times difficult for a community to justify. The extra cost required to install, operate and maintain an elevator would likely prohibit many new installations or alterations to existing facilities.

Section 1105.6.1 Roundabouts – Separation – *Continuous barriers are required along the street side of the sidewalk where pedestrian crossing is prohibited.*

The advisory committee indicates that this is to keep visually impaired pedestrians from inadvertently entering the roundabout. This is excessive and unreasonable. The edge of the sidewalk and the curbing on the road should be clear indications that pedestrians are not to walk into the roundabout.

Section 1105.6.2 Roundabouts – Signals – *Signals are required at each pedestrian crossing location in a roundabout.*

The requirement to signalize the pedestrian crossings at roundabouts is unreasonable. It appears from the discussion that the advisory committee feels that roundabouts are unsafe for pedestrians. There is no documented proof, that we are aware of, that indicates roundabouts are unsafe for pedestrians. Roundabouts are a good form of traffic control that has been used for many years successfully in other countries. The experience in the U.S. has been tainted by poor designs of circular intersections in the early years of transportation development. These rotary intersections have serious operational problems, which have resulted in a reluctance to consider circular intersections. Modern roundabouts are considerably different and at the right location may be a good, safe and efficient alternative to standard signalized intersections.

There also seems to be a misunderstanding that standard signalized intersections are in some way “safe” for pedestrians. When in-fact pedestrians are exposed to very real hazards at a signalized intersection as they cross the street, even in a marked crosswalk with pedestrian signal indications. The hazards include right-turns on red, right turns, left-turns that are permitted during the circular green phase and possible violations of the red light. Left-turn movements during the

green ball, while pedestrians are in the parallel crosswalk to the left can be particularly problematic, especially if the pedestrian is traveling in the same direction as the vehicle. The driver of the vehicle is paying attention to selecting an appropriate gap in oncoming traffic and not typically looking at the crosswalk; an unnoticed pedestrian in the crosswalk behind or directly to the side could certainly be vulnerable. In this case it is essential that the pedestrian pay attention to what is happening so that conflict with the vehicle is avoided especially if the driver is not paying attention to activity in the crosswalk.

Mid-block pedestrian signals can also be problematic. Most pedestrian signals are seldom used, drivers get accustomed to the signals staying green and when activated the unexpected requirement to stop can result in violations and rear-end accidents.

In summary, every type of traffic control is not fool proof. If drivers obey the laws all intersections can be safe. Roundabouts are a good safe alternative that can be used by traffic engineers in appropriate situations. Roundabouts require reduced speeds and although the accident rate may not be significantly lower certainly the severity of the accidents is reduced. If the pedestrian crossings were signalized at roundabouts the added complexity, increased congestion and degraded traffic operations would certainly increase driver frustration and confusion and likely result in higher accident rates. The objective should be to improve safety and reduce accidents for everyone.

1105.7 Turn Lanes at Intersections – *It is required to signalize all pedestrian crosswalks that cross right or left turn slip lanes.*

Slip lanes are not defined. It is assumed that these are free-flowing turn lanes. The requirement to signalize all free-flowing turn lanes appears to be unnecessary and could certainly be problematic. Is a free-flow right-turn lane at an unsignalized intersection a slip lane? Would this requirement then extend to all unsignalized intersections? I'm certain that this is not the intent of the requirement. Additional unnecessary and unwarranted signals will increase driver frustration and likely increase violations and degrade the overall public safety.

1106.2.1 Accessible Pedestrian Signal System – Location – *specific requirement for the location are identified.*

The location criteria should be included as guidance rather than specific requirements as some of the requirements may be very difficult to meet.

1106 Accessible Pedestrian Signal Systems – *Requires signal systems to have audible and vibrotactile devices.*

Is this necessary? It seems that many blind people do not feel that this is necessary. Also it has been our understanding that most blind people will walk a route with a coach to learn the location of devices and the pathway they should follow before they venture out on their own. These requirements will significantly increase the cost of a traffic signal and do not seem necessary.

1106.4.2 Directional Information and Signs – Street Name – *Street name signs are required to comply with 703.2. Requiring signs to be both tactile and visual.*

This will require a new set of custom-made signs for each signalized intersection in addition to the street name signs already provided for the motoring public. This does not seem necessary.

1107.4 Public Telephones – *All public telephones shall have volume controls, and have TTY capability.*

Increasingly it is becoming more and more difficult to find a public pay phone. Some of the reasons that pay phones are being removed or not installed in public places include: increased availability of cell phones (less need for pay phones), use by drug dealers, vandalism, and general loitering around the phones. These increased requirements will further add to the reasons that pay phones will not be installed.

1109.2 On-Street Parking – Parallel Parking Spaces – *An access aisle at least 60 inches wide at accessible parking spaces shall be provided at street level the full length of the parking space.*

This will require significant reconfiguration of the street and sidewalk in order to accommodate a handicap parking space. As the need for on-street handicap parking will likely need adjustment periodically to accommodate changes in adjacent land uses is it perhaps better to just provide a curb ramp associated with each handicap on-street parking space.

1109.6 On-Street Parking – Signs – *Signs are required to be 60" minimum above the ground.*

This height is too low to be seen by traffic when vehicles are parked nearby. The minimum height requirement should be the same as required in the MUTCD and should be 7 feet.

1110.6 Two-Way Communication – *Shall comply with sections 708.2 and 708.3.*

Cannot find these sections. They do not exist in the document available on the Internet.

1110.6.2 Two-Way Communication – TTY – *A TTY shall be provided*

Will this requirement make the two-way communication devices too complex, expensive and difficult to maintain thus eliminating them from installation?

----- **End of Comments** -----

We certainly appreciate the opportunity to comment on these proposed guidelines. We want to develop a transportation system that is accessible to all members of the community and is cost effective. Maximizing the limited dollars available is important in this day of limited resources.

Sincerely,

CITY OF LENEXA

A handwritten signature in black ink, appearing to read "Steven R. Schooley". The signature is fluid and cursive, with the first name being the most prominent.

Steven R. Schooley, P.E., PTOE
Transportation Manager