Austin Pedestrian Advisory Council
Sidewalk Master Plan Update Community Discussion Briefing Note

The Pedestrian Advisory Council (PAC) bylaws state that the PAC "shall advise City of Austin on pedestrian planning, policy, design, funding, education, and enforcement efforts regarding the creation, maintenance and operation of pedestrian facilities in order to ensure a safe and enjoyable circulation for both commuting and recreation within the City of Austin. The PAC's goal is to ensure sensitivity to pedestrian issues in the design and implementation of all public and private projects impacting pedestrians."

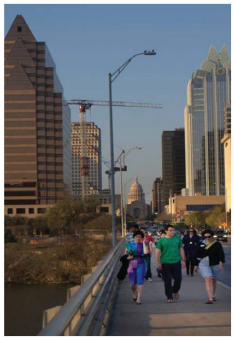
PAC therefore has a responsibility to review and make recommendations regarding city policy in relation to pedestrian infrastructure performance, implementation and maintenance within the city.

The Public Works Department is currently undertaking, in conjunction with its consultant MWM Design Group, an update to the Sidewalk Master Plan (2009). The Sidewalk Master Plan Update (here after 'the Update') was commenced in February 2015 and is due to be completed towards the end of the year.

This Briefing Note provides a summary of research and commentary tracking the PAC and its Technical Subcommittee's discussions and community input on the Update. It is intended as a record of these discussions for use by the City's Public Works Department and their consultant team. These research and discussion topics capture a number of aspirations of the PAC members for consideration by the Public Works Department and its consultants in their efforts for completing the Update.

The following topics are covered within this Briefing Note

1. Integration with other city plans, criteria manuals, and other agencies;
2. Alternative Pedestrian Facilities;
3. Criteria for Maintenance (Asset Management);
4. Goals and performance measures (*other than linear feet of new sidewalk construction/year);
5. Alternative funding sources for new sidewalk construction; and,
6. Integration of GIS software.



Sidewalk Master Plan

PRESENTED TO:

City of Austin
Public Works Department
Bicycle & Pedestrian Program
505 Barton Springs Road, Suite 1300
Austin, Texas 78704

PRESENTED BY:

Julie Hastings, PE
Richard McEntee

Lockwood, Andrews & Newnam, Inc.
10801 North MoPac Expressway
Building 1, Suite 120
Austin, Texas 78759

March 3, 2009

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

[Date: July 31, 2015]

1. Integration with other city plans, criteria manuals, and other agencies

We recommend that the Update takes the opportunity to coordinate with a number of existing plans which impact sidewalk construction in the city, particularly where these plans are scheduled for updating themselves:

- Transportation Criteria Manual - The TCM governs implementation detail and coding for the Sidewalk Master Plan Update. The Update should be coordinated with amendments to the TCM to reflect new design solutions such as Shared Spaces.
- Urban Trails Master Plan – The Update should emphasise the connection between sidewalks and trails.
- Drainage Criteria Manual - The goal of accessibility requirements should not be impinged by drainage and stormwater management. We welcome innovate methods which improve stormwater management at the same time as maintaining or achieving improved accessibility and connectivity.
- Imagine Austin and CodeNext - The Update should provide support for the compact and connected priority within Imagine Austin and place emphasis on sidewalks in Activity Centers, whilst respecting the community character identified through the CodeNext process.
- Train Tracks Guidelines - There is a need for an integrated approach to the interface between the track crossings and immediately adjoining sidewalk network to maintain accessible connected sidewalks over train tracks.
- Vision Zero Taskforce Action Plan - Sidewalks, and the sidewalk master plan update, are an important component of achieving the Vision Zero for the most vulnerable users - pedestrians. The Update should be aware of the draft Action Plan from the Vision Zero Taskforce and seek integration of these two programs where possible.
- Health and Wellness Plans - A functional and connected sidewalk network encourages healthy lifestyles. This should be clearly recognized within the update.

In addition we thank the Public Works department for liaising with these agencies asa part of the Update process:

- Bicycle Advisory Council, Mobility Commission (City Council), Urban Transportation Commission, Planning Commission, Design Commission, PARD, various Quality of Life commissions, Land Development Code Advisory Group, Parks and Recreation Board, Public Safety Commission, Cap Metro, TxDOT, CAMPO.

2. Alternative Pedestrian Facilities

We are excited by the Update taking the opportunity to include a section on Shared Streets. We identified a need to recognize a distinction between 'Shared Spaces' and 'Residential Shared Streets'. The former being in more active urban areas with a mix of uses and the latter being residential streets with benefits from respect for all uses but without the implication that the street will incur a mix of uses.

The PAC would like to see six outcomes from this discussion:

- We see a need for agreement on terminology and typology specific to Austin, for example, "Shared Space" – typically with active ground floor retail or other high volume pedestrian trip generating uses. "Shared Street" – typically residential streets low traffic volumes and lower pedestrian trips, but active play and social use.
- The intention should be to activate streets for a variety of users and remove auto dominated street character
- Shared streets (i.e. those in residential areas) could potentially be used as an alternative to absent sidewalk needs
- Shared streets potentially reduce impervious cover versus a typical sidewalk project
- shared streets could be used to fill 'gaps' in existing neighborhoods which are not connected by sidewalks and where residents prefer to maintain the existing character without adding sidewalks
- Shared Streets could be a solutions for neighborhoods where street connectivity isn't desired but the design could appear as a street with bollards for emergency vehicles one end to prevent through-traffic

Shared Space - Palmer St, Cambridge, MA (Google Earth)

[Date: July 31, 2015]

The PAC has identified several potential issues with the adoption of a shared street typology in Austin that will need to be overcome:

- Community fears over danger of encouraging people and automobiles in the same space.
- There is a need to ensure any adoption of a shared street policy or any pilot projects meet ADA compliance
- Potential liability issues for the City
- The PAC would like to clarify that adoption of a shared street would not remove the requirement for a Fee in Lieu for appropriate development but would alter the allocation of such funding.
- Implications of GPS route finding which may increase traffic on residential streets

Evaluation of concept: While the PAC has found it difficult to identify appropriate retrofitted examples of residential Shared Streets in other US cities, we have identified that much of the functionality of such streets and spaces already operates in Austin without being specifically labelled as 'Shared Streets'. Therefore, the PAC recommends that the Public Works Department and its consultant team identify potential examples of streets in Austin which would be appropriate for Pilot Projects for residential Shared Street following criteria similar to the following:

- Land use context is predomintly residential
- Low speed/volume of traffic
- No existing sidewalks
- Existing on street parking
- Coud include steep changes in topography
- Could include mature trees/landscaping
- Street function - not used as a distributor
- High priority absent sidewalks
- Current good safety/low crash record
- Right of way width sufficient to accommodate multiple users

Design Considerations: The PAC has discussed potential design considerations it would like the Public Works Department which will need further investigation through discusison of a Shared Street Typology. Considerations include:

- "Advisory" maximum speed Limits of 20 mph.
- Speed tables, signs and pavement markings to communicate the start and end of the Shared Residential Street.
- Inclusion of a combination of curb extensions, and landscaping based on the context design.

For Shared Spaces in commercial areas, alleyways can be used where there is sufficient retail demand to keep spaces active a number of excellent examples from around the US have been identified which demonstrate the typology this may take for an Austin 'Shared Space'.

Potential examples within the US:

- Ellswoth Drive, Silver Springs MD
- Winthrop Street, Cambridge MA
- Palmer Street, Cambridge MA
- Penoyer Street
- Theatre Way, Redwood City, CA
- Wall Street, Asheville, NC
- Ithaca Commons, New York

Finally the PAC would recommend coordination with the Transportation Criteria Manual to include language which defines Shared Spaces and Shared Streets, at such a time as this has been agreed through the Update.

Shared Space - Wall St, Ashville, NC (Google Earth)

Shared Space - Theatre Way, Redwood City, CA (Google Earth)

3. Criteria for Maintenance

Even as the Sidewalk Master Plan works to provide new facilities across the city where these are absent, filling critical gaps in the network for all Austinites, there is a separate and just as pressing need for the maintenance of existing facilities. The PAC has the following observations about how this could be approached:

- There is a need for a scoring of 'Level of Service' for existing sidewalks. This should incorporate ADA accessibility, width and qualitative features such as trees and benches, as well as basic condition of the infrastructure.
- Through an inventory of sidewalk repairs/gaps a "Project in lieu" could be established to target a number of small repairs/gaps in one neighbourhood when funding is available.
- 3-1-1 is considered the best tool for reporting sidewalk issues.
- Expansion joints should be used between new and substandard sidewalks to facilitate eventual replacement of substandard sidewalks

Photo credit: John Woodley

4. Goals and performance measures

In the view of the PAC connectivity is the most important aspect of the sidewalk system. A lot of cites have approached measuring this in different ways. Developing ways to inventory and measure connectivity is an important aspect of achieving a successful system. The PAC Recommends the Public Works Despartment and their consultants consider the following performance measures:

- Percentage of streets which are Complete Streets
- Feet of construction per resident and employment density.
- Number of curb ramps constructed / year - Curb ramps should absolutely still be constructed at implied intersections and on single-sides of street when necessary. This would ease getting out of cars and onto the sidewalk for those that need it, even if only on a single side. Also, if we allow curb ramps to not be built without a 'twin' to match on the other side, they may never be built.
- Space Syntax Axial Relationship analysis (See GIS Topic)
- Sidewalk 'Connected Node' Ratio - The Connected Node Ratio (CNR) is the number of sidewalk intersections divided by the intersections. This analysis could be undertaken in GIS.

We also recommend developing a list of types of pedestrian crossings and including these into the study alongside an inventory of number installed per year as a complimentary infrastructure to sidewalks.

The PAC has identified that there are General Performance measures created by Smart Growth America which may be appropriate in their application in Austin. These can be research further here: For a list of performance measurement:

http://www.smartgrowthamerica.org/complete-streets/implementation/measuring-performance

5. Alternative funding sources for new sidewalk construction

The PAC is highly aware of the deficit in funds available to implement the Sidewalk Master Plan placing ever greater need for prioritization and appropriate allocation of limited resources. Through exploration of peer cities and discussion from members the following list of funding sources have been identified which the Public Works Department and its consultants are recommended to explore, in such a case that they have not already included this in their scope:

- Bond election
- City Budgetary Process
- Grant funding – partnering with Health Organizations
- Local taxes, permit fees from festivals, Special events division.
- Special Districts - Neighborhood parking permit program.
- Entitlements for private developers who agree to extend required sidewalks beyond their portions of the public r.o.w.
- Private dollars - Corporate sponsorship of Sidewalks
- Neighborhood Partnering Program
- Alternative pedestrian facilities – e.g. Shared streets could potentially help remove cost of absent sidewalk needs

For reference the following extracts are from recent funding related recommendations made by the PAC. In relation to the ¼ Cent Funding Program the PAC recommended:

> *"As each district, or the Council as a whole, selects potential projects for funding, we urge Council members to give special consideration to giving highest priority to pedestrian connectivity and safety."*

In addition in relation to the recent Budget in A Box program the PAC recommended:

> *"The Pedestrian Advisory Council believes the City needs to begin to allocate money annually to sidewalk construction through the budget process and not rely upon bond dollars for this vital piece of infrastructure."*

AURA event to hold a community discussion on the potential for a Pedestrian and Bike Infrastructure Bond (Photo: Peter Baird)

6. Integration of GIS software

The PAC has investigated the use of GIS through it Technical Subcommittee members who have specialist training in GIS software. This topic has four intended outcomes:

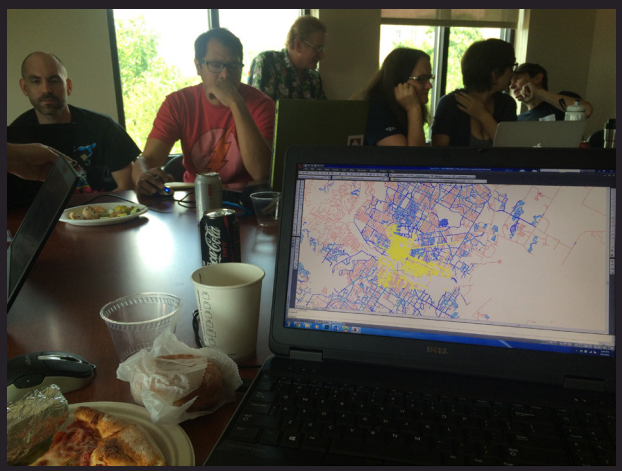
- Tools for Measurement and Analysis of Connectivity - Connectivity tools such as GIS Analysis and Space Syntax can be used to better understand the relative connectivity of the sidewalk network. The PAC has undertaken some work in this [See inset], however, it is suggested that the City could establish a program with the University of Austin to more deliberately engage in GIS analysis of its existing facilities.
- Better coordination with other projects such as Vision Zero - The PAC recognizes the importance of coordinated efforts and recommends that emerging data sets from the Vision Zero Taskforce are used to understand where there may be direct correlations between traffic fatalities and serious injuries as a result of lacking pedestrian infrastructure. This data could be used to inform community workshops on the positioning of new PHBs within the network.
- These ongoing efforts are not intended to supersede the Sidewalk Priority Scoring Matrix but to allow for data to improve dialogue and decision making at a neighborhood level.

Mayor Adler introducing the 2015 Hack for Change event

Hack For Change

Members of the PAC partook in the City of Austin's Hack for Change project in May to pilot the application of GIS in understanding sidewalk connectivity. The question we posed was: How we can investigate the issues of connectivity and use new ways of looking at mapping to investigate how these tools can provide ideas for informing the community at large about the importance of sidewalk connectivity.

Our analysis used a tool from University College London called SpaceSyntax. We digitized part of the city sidewalk data to make the network understandable by the software. The software was then able to output values for the relative connectivity between sidewalks. The usefulness of this is to explore the network, identify poorly connected areas, and see the impacts of additions to the network. Following on we were able to combine this new understanding of the network's connectivity with overlays of other data such as location of fatal or serious injury crashes in the city, 3-1-1 reporting of sidewalk related issues, bus stop usage and demand, the addition of new pedestrian crossings, and intensity of business activity. No hard conclusions were presented from this brief weekend project, except for the clear potential for GIS analysis to assist in the measuring of success and improvements in the sidewalk network through the continued implementation of the Sidewalk Master Plan.



Hack for Change Team: Juliana Terry-Torgerson, Julio Carillo, Luke Urie, Nic Moe, Peter Baird