

**Housing and Transportation:
Redefining Affordability Research and Development**

Technical Review Panel

Summary of Proceedings

Fifth Convening on June 7, 2013

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Attendees*

Panelists

Darren Smith (National Association of Realtors®; Washington, DC)
Andy Cotugno (Metro; Portland, WA)
Leila Finucane Edmonds, J.D. (formerly NeighborWorks America®; Washington, DC)
Ed Goetz, PhD (University of Minnesota; Minneapolis, MN)
Bart Harvey (Fannie Mae Board; Baltimore, MD)
Chris Nelson, PhD (University of Utah; Salt Lake City, UT)
Vince O'Donnell (LISC, Boston, MA)
Mtamanika Youngblood (Sustainable Development Strategies; Atlanta, GA)
Chris Zimmerman (Arlington County Board Member, Arlington, VA)

Federal Agency Staff

Michael Freedberg, Department of Housing and Urban Development
Joshua Geyer, Department of Housing and Urban Development
Neal Stolleman, Department of Treasury
Roula Sweis, Department of Housing and Urban Development
Shelley Poticha, Department of Housing and Urban Development
Lee Sobel, Environmental Protection Agency

Manhattan Strategy Team

Noreen Beatley, MSG	Sarah Campbell, CNT
Anna Cruz, MSG	Peter Haas, PhD, CNT (via webinar)
Amara Okoroafor, MSG	Linda Young, CNT
Matthew Sussman, MSG	Scott Bernstein, CNT

Background

The U.S. Department of Housing and Urban Development (HUD) Office of Sustainable Housing and Communities (OSHC), in conjunction with the Department of Transportation (DOT), is working with the Manhattan Strategy Group (MSG) and the Center for Neighborhood Technology (CNT) to develop an index that encompasses combined housing and transportation costs and explore how the index might be

*Technical Review Panelists not in attendance: David Kack (Western Transportation Institute; Bozeman, MT), Rolf Pendall, PhD (Urban Institute; Washington, DC), Kevin Kelley (National Association of Home Builders), Tom Sanchez (Virginia Tech)

Observers: Paul Emrath, National Association of Home Builders; Claire Worshtil, National Association of Home Builders; Megan Booth, National Association of Realtors



applied to core HUD program areas. The Housing and Transportation Affordability (HTA) Initiative will enable HUD to be more strategic in pursuing data-driven policies that fulfill HUD's goal of redefining and increasing affordability in HUD-assisted communities.

The HTA Initiative Technical Review Panel (TRP), composed of expert researchers and practitioners in housing, transportation, community development and other related fields, was convened to guide the development and implementation of the Location Affordability Index (LAI) (formerly referred to as the Housing and Transportation Affordability (HTA) Index) and a customizable partner tool, the My Transportation Cost Calculator (MTCC). The TRP reflects a diverse array of perspectives based on area of expertise, experience and geographic location. The TRP provides insight and feedback on the data and methodology used to build the LAI as well as guidance for potential applications of the tool at the federal and local level. The following summary of proceedings is from the last of five full-day convenings held in Washington, DC.

Overview

On June 7, 2013, nine members of the Technical Review Panel (TRP) met with staff from MSG, CNT, HUD and representatives from several other federal agencies to discuss the status of the project and provide input on key tasks.

Participants received updates on the tools and website development process, were apprised of the new direction taken for the Initiative and final iterations of the Location Affordability Index and My Transportation Cost Calculator based on feedback received during the tools' beta testing process (in which many of the attendees participated), received findings from an independent third-party review of the LAI's new housing model and auto cost adjustments, and discussed program and policy research related to the Initiative and outreach efforts.

Panelists provided feedback on updates to the tools, discussed key issues related to the development and application of the tools, responded to the third-party review, and discussed approaches for assessing findings from the LAI. Additionally, the panel discussed outreach efforts and opportunities to build awareness about the tools. Through these conversations, panelists identified key opportunities and challenges for further development and implementation of the Location Affordability Portal (LAP) tools.

Panel Proceedings

Project Update and Introductions

Noreen Beatley, MSG's HTA Director, led a round of introductions, outlined the meeting agenda and provided a brief overview of the project status. Josh Geyer, OSHC's HTA Initiative Project Manager, then updated attendees on the changes to the direction of the project, expectations for the tools, and anticipated HUD activity related to the Initiative in the upcoming months. Based on feedback during the beta testing of the tools and subsequent to the delivery of the tools to HUD, a core theme emerged from stakeholders: it was difficult to determine who the site's audience was and if the tools would meet their needs. There also appeared to be a lack of understanding about what the LAI was demonstrating and how it could be utilized. Finally, time constraints during the development of the tool had preempted a thorough peer review of the housing and auto cost methodologies used within the LAI. Consequently, HUD decided to take a step back and re-evaluate next steps to ensure that the newly designed Location Affordability Index and My Transportation Cost Calculator tools added value to local communities and that the government's investment in the project was preserved.

Key decisions, changes and reallocation of Initiative funding that emerged from the re-evaluation of next steps include:

- Enhancements to the Location Affordability Portal to more clearly articulate its purpose to various audiences and demonstrate capacity of the tools;
- Independent review and validation of the LAI housing model and auto costs, with subsequent enhancements based on reviewer recommendations;
- A shift from policy analysis and recommendations to an analysis of the data findings provided by the LAI;
- Creation of “real life” case examples that demonstrate the tools’ capacities to a variety of user classes, including consumers, practitioners and decision-makers, in different regions;
- An expansion of outreach efforts to promote the tools through additional web content and materials to boost public awareness, consumer education applications and potential research or planning applications; and
- Development of a strategy to better communicate the results of the LAI modeled housing costs on the website for better interpretation of the costs.

Mr. Geyer also advised that, although there is currently not a specific date scheduled for the public release of the LAP, to allow better media coverage of the launch it is tentatively scheduled for release in mid-August. Shelley Poticha, the Director of OSHC, further articulated HUD’s priorities within the Initiative, including a focus on data reliability and usefulness for specific target audiences. She pointed out that there is a lack of understanding of how the LAI should be used among groups with whom HUD staff has met and that HUD was interested in addressing these issues before moving to any potential policy applications.

In response to HUD’s update, panelists raised questions about how the tools would be maintained and updated given the large amount of data and efforts involved in building the LAI. HUD staff responded that they are exploring options for supporting and regularly updating the system, as well as potentially migrating the site to a HUD server.

Mr. Geyer’s presentation of the case study examples and marketing tools under development for the Portal also sparked a number of comments and suggestions from panelists for best approaches. These are highlighted below:

- Ensure household types included in the case examples match the demographic profile of target consumers. One option could be single person or cohabitating couple looking for a home after a job relocation.
- Include an assisted household either in voucher program or in place-based affordable housing as a potential case example.
- Illustrate the LAI’s potential for identifying places where none of the housing stock is affordable to the modeled household.
- Provide an example of how a jurisdiction/housing agency might use the tool in the determining where to site affordable housing.
- One recommendation included inclusion of a municipality in the process of developing their consolidated plan, since plans seek to include information on transportation costs.
- The three case studies focused on households are intended to get consumers interested in using the MTCC to aid their individual location decisions. The three examples involving institutions

are somewhat policy oriented and LAI data would only be one part of the decision-making process.

- An observation was made that location options for low-income housing developers are often so limited it is hard to imagine using the tool to target a particular location;
- As a follow up to the developer observation, the idea that the LAI could be used to support and justify development in places where the per-unit cost may be higher was put forth. Developers could use the tool to garner funding and political will in response to affordable housing need and placement of units where residents' total costs could be reduced.
- As siting of affordable housing is often a regional scale question, the example focused on a regional planning agency was well received.
- It was also suggested that one case study should not focus on mobility, i.e., not include an option to move to address rising housing and transportation cost, and that the example could address, for example, a stagnant suburb exploring new regional transportation connections.

Location Affordability Index (LAI) Development

Following Mr. Geyer's presentation, CNT's Peter Haas reviewed the development of the data, methods and modeling approach currently utilized in the LAI (i.e., as delivered to HUD in mid-December 2012). Dr. Haas described the evolution of the transportation model and housing model used in the LAI and how these changes responded to feedback from the third party reviewers, technical review panel, stakeholders, and federal staff. A brief discussion followed which included questions on how to improve housing cost estimations, particularly in regard to rental housing costs.

In regard to the housing model currently employed in the LAI, panelists discussed what the LAI housing costs tell a user and the fact that there are existing indices such as Case Schiller that are not aligned with other, similar indices (e.g., Fannie and Freddie HPI). It was pointed out that this inconsistency does not make the indices less useful for the purpose of tracking trends because they address relative change over time. However, for consumer use, the trends may be less important than the precision of the information which makes the consumer side of the tool the most difficult to get right and may also impact marketing efforts.

Housing Model and Auto Cost Paper Review

Following Dr. Haas's presentation, Adam Ozimek of Econsult Solutions (Econsult) offered an overview of their review of the LAI housing model and outlined Econsult's recommendations for improvements. Dick Voith, also of Econsult, followed and provided the findings of their review of the automobile cost research developed for the LAI.

Econsult's review of both the housing model employed in the LAI and the approach to auto costs were overall positive. They made observations about the need to more clearly articulate the audience and goals of the LAI, provide maps which provided transportation and housing costs separately, suggested further research on the household types illustrated on the website, as well as provided recommendations regarding the type of information users of the site should receive. They also pointed out issues related to use of ACS data: errors are larger on the block group level data and the 5-year rolling average results in a temporal lag in data. They further noted that, although they considered strategies for updating the ACS housing data, they concluded that the best approach at this time is to maintain the use of 5-year estimates and disclose the temporal lag. In regard to the model's auto costs, Econsult indicated that the approach for reporting expenses paid for autos was appropriate, but that expenses and cost are not the same thing.

They observed that the maintenance costs for low-income households seemed low, as did expenses for auto ownership. It was pointed out that it is a result of owning and operating autos that are delivering less services, i.e., less reliable autos for travel to jobs. The spending captured and reported by the Consumer Expenditure Survey (CEX) does not reflect the cost of procuring and maintaining a reliable road-worthy car.

Additional questions and comments from the review discussion included:

- In response to a question regarding whether or not data from the one or three year ACS estimates could be incorporated into the housing model, it was determined that the sample would be too small to use at the geographies included in the LAI.
- In response to a suggestion to add residuals back in to the model, a question was raised as to whether or not that would simply return the model to its original data. The value add of the change is that it would allow for control of demographic effects.
- A question was raised as to whether or not including variables related to neighborhood amenities (such as schools or parks) for at least some regions would help explain residuals or determine how much of the residual should be added back in.
- In response to a query as to whether or not Econsult recommends including fixed effects at the county or CBSA level, or alternatively, including additional explanatory variables at the county or CBSA level, Econsult responded that, although an explanation of fixed effects could enhance understanding of housing cost differences across regions, adding additional regional variables would increase the complexity of the model.
- An observation was made that the potential relationship between distances driven and the cost of drivability could be because drivers who drive longer distances may have higher standards for the amenities associated with the car.

Auto Cost Research

Linda Young of CNT updated attendees on progress made in vetting the auto cost research conducted for the Initiative. This research developed new estimates for costs related to automobile ownership and usage for inclusion in the LAI. Research focused on the Bureau of Labor Statistics Consumer Expenditure Survey (CEX), which provides data on self-reported household spending habits, including spending on travel. The auto cost report identifies expenses for five income groups categorized into purchase costs, ownership costs, drivability costs, and driving costs. CEX purchase and ownership costs were found to be lower than those used in previous measures such as AAA, which had known limitations due to a focus on newer autos rather than the overall fleet, especially since the recession. Drivability and driving costs were found to be similar to previously used measures. Ms. Young identified a number of areas for additional research including spatial variability, automobile vintage, fleet mix, and commute distance. During her recent interview with the Chief Economist of the BLS, other potential research areas were identified by the Economist. These included using a service flow analysis to account for and pay more attention to the annual depreciation and financing costs related to purchase costs and separating leased and owned autos data. Although, the BLS has unpublished data with more spatial specificity, the project schedule does not allow time to obtain the necessary clearance for this analysis.

- It was suggested that Infogroup, a private database which provides very detailed data on housing costs, age, structure characteristics and demographics at a fine geographic level for a huge sample (~130 million records) might also include information on autos and be worth looking into for both the housing and transportation models.

- A comment was made that data for higher income households may not be relevant to HUD’s HTA Initiative project as affordability is not an issue for these households. The question was raised as to whether the project should be focused primarily on lower incomes.
- Econsult commented that they discussed the service flow approach in their review of the Auto Cost White paper and concluded that, while it is a valid approach, the analysis as currently undertaken is just as valid.

Following the auto cost research presentation, panelists were asked to provide input and suggestions regarding Econsult’s and other expert feedback on the paper. One observation offered was that a tool which supports budgeting based on individual costs is very different from something that shows the average cost for a specific household type across a region (to reveal relative differences) – individual choices and circumstances will vary a great deal and can change (e.g. new job). There may also be issues created by income and wage differences across regions. Panelists also stressed the importance of clearly distinguishing the goals of the LAI and My Transportation Cost Calculator.

Peter Haas then presented the proposed strategy to incorporate Econsult’s recommendations. He clustered the recommendations into five groups:

- Website improvements;
- Communications (especially the purpose of the LAI);
- Transparency of the final product;
- Long-term goal of reporting more market-based housing costs; and
- Econometric improvements to modeling (i.e., the focus of Dr. Haas’ presentation).

The following approach to incorporate the recommendations was proposed:

- Simplifying data transformations will be done for the housing cost and household transportation models;
- The number of interaction terms will be reduced;
- Due to the time constraints of the project, accounting for CBSA/Geographical fixed effects will *not* be done for this iteration and should be considered as a potential future improvement;
- An assessment of the time necessary to address spatial autocorrelation will be conducted prior to making a decision; and
- A method to include residuals for the housing costs will be developed.

LAI Findings Assessment Research

Following lunch, Matthew Sussman of MSG presented a brief overview of the assessment report currently being developed to report findings from the LAI. The presentation focused on the goals of the report and the variables and measures to be included in the analysis. Panelists made a number of suggestions for the report, which are summarized below:

- The census of local governments could provide a useful measure of jurisdictional fragmentations.
- If possible, include a measure of neighborhood opportunity. The Denver Opportunity Index was suggested as a potential measure.
- The Texas Transportation Institute congestion cost per capita estimate may not provide good measures of economic health or of overall transportation cost.
- An updated measure of sprawl/compactness may be available from Reid Ewing for use in the analysis.

- Importance of jobs sprawl was raised and it was suggested that Brookings had looked at percentage of jobs 10-35 miles from city center
- Interest also was expressed in a measure of quality of transit, such as per capita trips.
- A follow up discussion would be warranted in the near future to discuss the potential measures and updated findings.
- The report’s value as a marketing tool should be better defined.

The panel expressed interest in future updates on the assessment findings report and how the report will be used. In particular, panelists were interested in the report’s potential to inform future policy decisions in addition to its value as a marketing or educational tool.

Based on feedback from the panel, the following regional variables were identified for potential inclusion in the Findings Assessment Report:

Characteristic	Metric
Size	2010 Population
Growth typology	Change in center city population since 1970
Sprawl	New Ewing compactness score*
Economic growth	Per capita GRP growth, 2001-2011 and 2007-2011
Economic health*	Regional unemployment rate
Job sprawl	Percentage of jobs 10-35 miles from center city
Jurisdictional fragmentation	Jurisdictions per capita (or per million population) – from census of governments
Auto dependence*	VMT per capita (from DOT?)*

It was agreed that MSG would schedule a follow up call with the TRP the week following the convening to further discuss the research variables and approach

Public Awareness and Outreach

Josh Geyer presented on the outreach efforts currently underway to build awareness of the tools once they are launched. Panelists expressed concern regarding the tool’s release and whether it would receive sufficient coverage with an August release. Panelists suggested that a “soft” launch along these lines might minimize the impact and support for the tool. Alternatively, it was suggested that if the August release were viewed as a “soft” launch it would allow the most invested stakeholders to use the tool and suggest improvements. The “soft launch” could then be followed by a major roll-out in September in connection with other PR and promotional activities. Panelists also suggested tying the launch into key topics of interest, such as the ongoing foreclosure crisis, to illustrate the tools’ relevance and potential usefulness. Another suggestion was to have the Secretaries of HUD and DOT announce the tool in September, as a joint effort.

Key Recommendations

- Needs to be a strong understanding of target audience and direct marketing of the LAI and MTCC to specific market segments and audiences



- HUD is planning to migrate the tools to their website to ensure the sustainability of the tools through updates of the data and the overall tool.
- Future plans for the tool should eventually include policy as part of the usage.
- Tool contents must stay relevant and be updated on an on-going basis.

Next Steps

Assessment Report

- Follow up conversation with panelists to be scheduled for the week of June 11th

Public Outreach and Awareness

- Identify the best possible outlets for marketing the tools;
- HUD will continue to work on communications and marketing strategy;
- HUD requests assistance from interested TRP members to promote the LAI and MTCC;
- Follow up discussion on the future of the LAI and MTCC to be held prior to the release of the tool;
- MSG will send the TRP the draft of the Marketing Report; and
- Three webinars are scheduled to occur in July and early August.