



## **Zoning for Walkable Mixed-use Neighborhoods: A Desktop Health Impact Assessment**

The Omaha Planning Department is responsible for crafting a shared vision for how key government functions such as transportation, housing, and future land use can help create a higher quality of life in Omaha. Both the Environment Element and Transportation Master Plan hold that Omaha's economic and environmental sustainability, and well as its health as a community, would be improved if residents had viable transportation options other than driving exclusively. As a result, the Planning Department is considering creating a zoning classification for walkable mixed-use neighborhoods.

To better understand how this zoning might affect the health of current and future Omaha residents, the Planning Department asked the Douglas County Health Department to conduct a health impact assessment (HIA) on this proposed zoning tool. As spelled out in the Omaha Municipal Code, the historical and legal purpose of zoning is "serving the public health, safety, and general welfare of the city" so requesting a health perspective on a zoning issue makes sense.

The following information offers a concise summary of the background, findings, and recommendations of this HIA.

### **Background**

Omaha is frequently recognized as a city that provides a very high quality of life. A few recent examples include:

- #9 – Best Cities for Families (*Parenting* – July 2012)
- #3 – Best Cities for Successful Aging – Large Metros (*Milken Institute* – July 2012)
- #5 – Best Cities to Find a Job (*US News* – January 2012)
- #1 – 10 Best Value Cities for 2011 (*Kiplinger* – July 2011)
- #2 – Best Cities for Recent Grads (*The Daily Beast* – June 2011)
- #1 – America's Most Affordable Cities (*Forbes* – January 2011)

One of the primary functions of the Omaha Planning Department is to prepare and maintain the City of Omaha Master Plan. Created through a public engagement process and broken down into various elements (e.g. Future Land Use Element), this vision help government and other sectors work together toward continuing to maintain and enhance Omaha's quality of life into the future.

One of these planning efforts – the Environment Element – focused on how more responsible and efficient use of energy and natural resources could leave Omaha an even better place for the children and grandchildren of residents to inherit. Unanimously approved by the City Council in December 2010, one goal of the Environment Element was to support the creation of neighborhoods where residents had more options than the automobile to be able to meet their daily needs. In May 2012, City Planning staff began reviewing a proposal from its consultant, Clarion Associates of Fort Collins, Colorado, for the creation of a Walkable Mixed-Use Neighborhood (WMUN) zoning classification. The idea of creating walkable mixed-use neighborhoods was further supported by the 5-2 approval of the Transportation Element in August 2012.

At that time, City Planning asked the Douglas County Health Department to utilize a health impact assessment (HIA) to better determine if developing walkable mixed-use neighborhoods would improve the health of people living in them. The purpose of an HIA is to better inform decision-makers outside of the health sector about the likely health benefits or costs of choices they are considering. HIAs bring together scientific evidence, health expertise, and stakeholder input so they can be factored into the decision-making process. The process used for the WMUN is referred to as a "desk-top" approach. It focuses more heavily on reviewing the scientific research than gathering stakeholder input and is used when it is necessary to complete an HIA in weeks instead of months.



## **Research Questions**

For the WMUN zoning, the HIA sought to better inform the Omaha Planning Department (and any subsequent decision-makers) around four questions:

1. Has designing neighborhoods to be more walkable actually been shown to increase walking?
2. Does walking improve health outcomes?
3. Is there enough evidence to justify creating walkable mixed-use neighborhoods?
4. Are there other aspects of health besides physical activity that creating walkable mixed-use neighborhoods would likely affect?

## **Findings**

*Has designing neighborhoods to be more walkable actually been shown to increase walking?*

- Very strong evidence exists that the way neighborhoods and cities are designed has a significant impact on how much people walk. Systematic reviews of this research find that neighborhood design is highly associated with how much walking people choose to do.
- This research faces several challenges. Most importantly, since people cannot be randomly assigned to live in different neighborhoods, it is difficult to separate out the effect due to neighborhood design from the effect of people choosing neighborhoods that fit their preferences.
- Studies that do separate out neighborhood design effects from neighborhood selection effects find that neighborhood design remains an important contributor to amount of walking.
- The neighborhoods design impact seems to be stronger for transportation walking than recreational walking.
- Factors that shorten the distance that has to be traveled – such as mixed uses, improved connectivity, and higher densities – are most associated with increases in walking.

*Does walking improve health outcomes?*

- Brisk walking is considered moderate intensity physical activity, which has been shown to help control weight and reduce the risk of heart disease, stroke, diabetes, and several types of cancer. It has also been shown to reduce improve mood and increase mental functioning.
- Research has shown that people who are physically active for approximately seven hours a week have a 40% lower risk of dying early than people who are active for less than 30 minutes a week.
- Even small amounts help – the biggest decrease in risk is when people go from being inactive (30 minutes or less of physical activity) to low levels of activity (90 minutes a week).
- Walking is the most common form of physical activity – largely because it is affordable and safe.

*Is there enough evidence to justify creating walkable mixed used neighborhoods?*

- Market research finds that an unmet demand for walkable neighborhoods exists. This demand is likely growing due to shifts in demographics and consumer preference.
- Developers are interested in meeting that demand and list government regulations as the biggest reason they don't build more walkable neighborhoods.
- Walkable neighborhoods can be justified based on market-driven principles as well as benefits to health. Several researchers stress that this approach is more likely to lead to productive dialogues.

*Are there other aspects of health besides physical activity that creating walkable mixed-use neighborhoods would likely affect?*

- The scarcity of walkable mixed-use neighborhoods compared to demand results in higher prices, which decreases housing affordability. Affordable housing is related to health because it allows people to have sufficient money for healthy food and healthcare expenses, it reduces exposure to pests, allergens, and toxins, and it reducing stress through greater housing stability.
- Neighborhoods that decrease dependency on the automobile reduce transportation costs which can free up resources for other health-improving expenses. Air quality is also improved which reduces asthma & cancer.



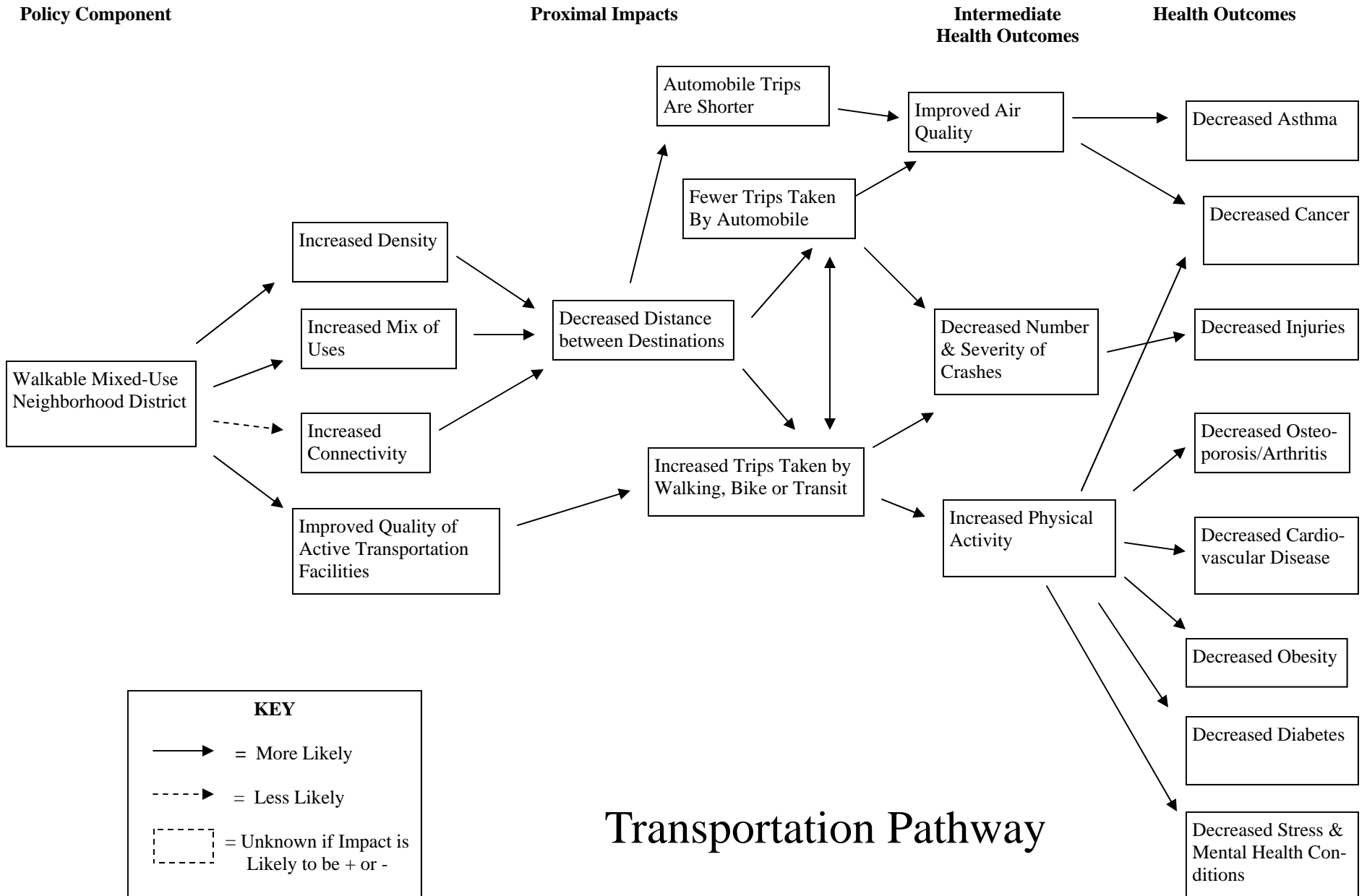
## **Conclusions and Recommendations**

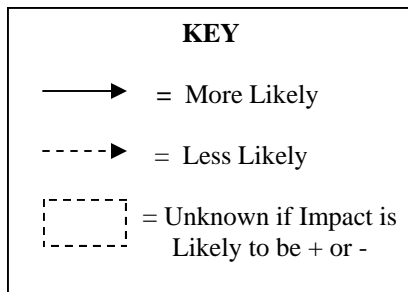
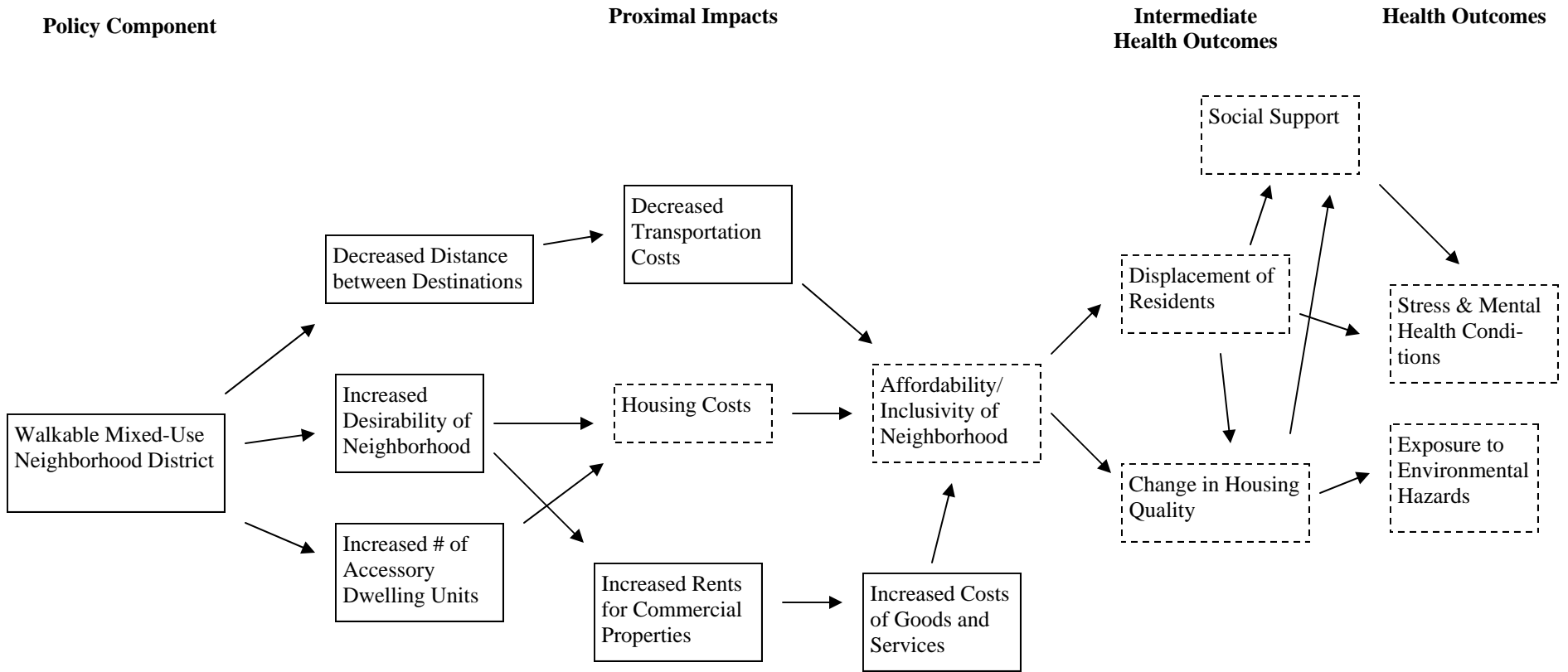
One phrase captures the heart of this research well – “People shape places and places shape people.” How much people choose to walk – and thus how healthy they are – is a factor of how convenient their neighborhood makes it for them to walk. The best evidence shows that “making the healthy choice the easy choice” requires shortening traveling distances. When evaluating the details of the WMUN zoning, one of the questions that City Planning should ask is “Does this decrease the distance enough so walking is convenient?”

Another related factor to consider is what should serve as the heart of the neighborhood. With a “Main Street” approach, residential builds around commercial which means private space orbits around public. The dynamic is reversed in a “strip mall” approach. Commercial builds around residential so public space orbits around private. A person who has to walk to the periphery of their neighborhood and then around the edge for buying a coffee and then a gallon of milk is much less likely to do it than someone who can walk to a hub at the center of their neighborhood to get both. For walkable mixed-use neighborhoods, City Planning should focus more on how housing can be built around concentrated business instead of businesses being built around concentrated housing.

A surprising finding of the scientific research (especially the work of Jonathan Levine) was how a dominant paradigm often undermines efforts to create walkable mixed-use neighborhoods. When planning departments propose such zoning changes, they are often met with accusations of improper government interference in the private sector. The paradigm – often shared by both planners and developers – is that the current auto-focused pattern of development is the result of the free market. In fact, land use is highly regulated and the current pattern of development is the result of numerous government policies. As a result, highlighting market-based justifications and looking for regulations that could be eased or eliminated would be more likely to create win-win dialogues.

Lastly, developing language around these concepts that could be grasped by average citizens would be invaluable. For example, “20 minute neighborhoods” – the term being used by Portland, Boulder, and Baltimore – relies less on jargon than the term “walkable mixed-use neighborhood,” which makes it much easier for a layperson to understand what it means and what the potential benefits might be. Another benefit is that “20 minute neighborhood” lends itself more easily to being measured. This term would also likely resonate with people in Omaha who pride themselves on having a “20 minute city.”





# Housing Pathway

## References

- Belden, Russonello & Stewart, LLC. **The 2011 Community Preference Survey: What Americans Are Looking for When Deciding Where to Live.** *National Association of Realtors.* March 2011.
- CDC National Center for Chronic Disease Prevention and Health Promotion – Division of Nutrition, Physical Activity, and Obesity. **More People Walk to Better Health.** *CDC Vital Signs.* August 2012.
- Clarion Associates. **City of Omaha 2011 Zoning and Building Code CEMP Diagnosis.** August 2011. (Report by Consultant to City of Omaha).
- Clarion Associates. **City of Omaha Comprehensive Energy Management Plan Zoning and Building Code Review: Walkable Mixed-Use Neighborhood District.** May 2012. (Staff Review Draft by Consultant to City of Omaha).
- Commission to Build a Healthier America. **Where We Live Matters for Our Health: The Links Between Housing and Health.** *Robert Wood Johnson Foundation.* September 2008.
- Ding D, Gebel K. **Built Environment, Physical Activity, and Obesity: What Have We Learned from Reviewing the Literature?** *Health & Place.* 2012; 18: 100-105.
- Frank LD, et al. **Stepping Towards Causation: Do Built Environments or Neighborhood and Travel Preferences Explain Physical Activity, Driving, and Obesity?** *Social Science & Medicine.* 2007; 65: 1898-1914.
- Frank LD, et al. **A Hierarchy of Sociodemographic and Environmental Correlates of Walking and Obesity.** *Preventive Medicine.* 2008; 47: 172-178.
- Giles-Corti B, et al. **Encouraging Walking for Transport and Physical Activity in Children and Adolescents: How Important is the Built Environment.** *Sports Medicine.* 2009; 39 (12): 995-1009.
- Goldberg D, et al. **New Data for a New Era - A Summary of the SMARTRAQ Findings: Linking Land Use, Transportation, Air Quality and Health in the Atlanta Region.** *Smart Growth America.* 2007.
- Handy SL, et al. **How the Built Environment Affects Physical Activity: Views from Urban Planning.** *American Journal of Preventative Medicine.* 2002; 23 (2S): 64-73.
- Health GW, et al. **The Effectiveness of Urban Design and Land Use and Transport Policies and Practices to Increase Physical Activity: A Systematic Review.** *Journal of Physical Activity and Health.* 2006; 3 (Supp 1): S55-S76.
- Jelleyman T, Spencer N. **Residential Mobility in Childhood and Health Outcome: A Systematic Review.** *Journal of Epidemiology and Community Health.* 2008. 62: 584-592.
- Kahn EB, et al. **The Effectiveness of Interventions to Increase Physical Activity.** *American Journal of Preventative Medicine.* 2002; 22 (4S): 73-107.

*Note: Because URL addresses change often and most users rely on search engines for finding information online, URLs and access dates have not been included unless it would be difficult to find the source without the URL.*

- Keeley L, et al. **The Shifting Nature of U.S. Housing Demand.** *The Demand Institute.* May 2012.
- Levine J, Inam A, Torng G. **Innovation in Transportation and Land Use as Expansion of Household Choice.** University of Michigan - *Taubman College of Architecture and Urban Planning.* 2000.
- Levine J, Inam A. **The Market for Transportation-Land Use Integration: Do Developers Want Smarter Growth Than Regulations Allow?** *Transportation.* 2004; 31: 409-427.
- Levine J. **Zoned Out: Regulations, Markets and Choices in Transportation and Metropolitan Land-Use.** Washington, DC: Resources for the Future; 2006.
- Litman, Todd. **Where We Want to Be: Home Location Preferences and Their Implications for Smart Growth.** *Victoria Transport Policy Institute.* July 2012.
- Logan G, Siejka S, Kannan S. **The Market for Smart Growth.** *Robert Charles Lesser and Company, LLC.* Retrieved on August 7, 2012 at <http://www.epa.gov/smartgrowth/pdf/logan.pdf>.
- McCormack GR, Shiell A. **In Search of Causality: A Systematic Review of the Relationship Between the Built Environment and Physical Activity Among Adults.** *International Journal of Behavioral Nutrition and Physical Activity.* 2011; 8 (125).
- Physical Activity Guidelines Advisory Committee. **2008 Physical Activity Guidelines for Americans.** *U.S. Department of Health and Human Services.* 2008.
- Greater Omaha Economic Development Partnership. **What Others Have Said.** *Greater Omaha Chamber of Commerce.* Retrieved on October 5, 2012 at [http://www.selectgreateromaha.com/news\\_center-recent\\_rankings.aspx](http://www.selectgreateromaha.com/news_center-recent_rankings.aspx).
- Saelens BE, Sallis JF, Frank LD. **Environmental Correlates of Walking and Cycling: Findings From the Transportation, Urban Design, and Planning Literature.** *Annals of Behavioral Medicine.* 2003; 25 (2): 80-91.
- Saelens BE, Handy S. **Built Environment Correlates of Walking: A Review.** *Medicine & Science in Sports & Exercises.* 2008; 40 (7 Suppl): S550-S566.
- Sobel L. **Market Acceptance of Smart Growth.** *United States Environmental Protection Agency.* February 2011.
- Thomson H, Petticrew M, Douglas M. **Health Impact Assessment of Housing Improvements: Incorporating Research Evidence.** *Journal of Epidemiology and Community Health.* 2003; 57: 11-16.
- Thomson H, et al. **The Health Impacts of Housing Improvement: A Systematic Review of Intervention Studies From 1887 to 2007.** *American Journal of Public Health.* 2009; 99 (S3): S681-S692.

*Note: Because URL addresses change often and most users rely on search engines for finding information online, URLs and access dates have not been included unless it would be difficult to find the source without the URL.*