Introduction

In recent years there has been a growing understanding of the connection between how our communities are designed and our health. Health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”¹ Research has revealed a strong relationship between our physical environment and a wide spectrum of health issues connected to physical activity, including chronic diseases such as diabetes, cardiovascular disease, and obesity. The way we design and build our neighborhoods determines how we live, work, eat, visit, walk, shop, worship and play. Well-designed neighborhoods can improve our health, and poorly-designed communities can harm our health.²

In response to this awareness, Councilwoman Judy Montero (representing District 9 including Globeville and Elyria Swansea in North Denver) led the Denver City Council in prioritizing health considerations for neighborhood planning in its 2014 Priorities,³ including use of “Health Impact Assessment (HIA)” in all Neighborhood Plans. (For more on Health Impact Assessment, see “About This Report”). This Health Impact Assessment for the Globeville and Elyria Swansea Neighborhood Plans is the first such HIA to be conducted under this City directive.

In 2012, the City of Denver–Community Planning and Development Department (CPD) began a neighborhood planning process with the Globeville and Elyria Swansea communities. Globeville and Elyria Swansea are among Denver’s oldest neighborhoods, established in the 1880s around the railroads. The neighborhoods still have a number of historic churches and homes built by the Central and Eastern European ethnic communities that originally settled the area. Today the neighborhoods are characterized by a strong Hispanic culture and influence, with many families with young children.

The City of Denver currently has several major redevelopment and infrastructure projects taking place in the area (the “North Denver Cornerstone Collaborative”), including construction of transit rail, reconstruction of an interstate highway, and convention and tourism attractions. The Neighborhood Plans provide a unique and historic opportunity to envision a rebuilt, connected community, with a new gateway to downtown Denver and improved amenities and quality of life for residents.

This HIA looks at how neighborhood planning in Globeville and Elyria Swansea can positively impact residents’ health. The Neighborhood Plans will shape how the community looks in the next 5 to 10 years. The “Recommendations” in this HIA are designed to inform and strengthen the “Recommendations” of the Neighborhood Plans, by adding community health as a consideration for the future vision, design and development of the neighborhoods.
The Denver Department of Environmental Health led this HIA process beginning in July 2013. The purpose was to inform the decision-making process of Neighborhood Planning, which is expected to conclude in late 2014 and early 2015 with City-adopted Neighborhood Plans.

The HIA was done in collaboration with residents, City staff, and local nonprofit organizations. The scope of the report was determined through input from residents at public meetings during the neighborhood planning process, and from a wide range of community members surveyed by local nonprofit organizations that are engaged in environmental and health promotion. This report addresses the following five priorities:

- Environmental quality
- Connectivity and mobility
- Access to goods and services
- Community safety
- Mental wellbeing

The City’s HIA staff was invited to participate in the Neighborhood Plan steering committee meetings and public meetings. Resident groups, community organizations and City of Denver agencies provided input to the Globeville and Elyria Swansea HIA throughout each phase of the process, including over a dozen public and steering committee meetings for the neighborhood planning process, and 10 surveys and studies completed before this HIA commenced. Also, the HIA team collected primary data from residents with a survey on safety and stress, and hired a qualitative researcher to augment community input by conducting detailed interviews with community service providers who work in the areas of health services, health promotion, education, and public safety. A detailed list of community engagement and survey data used can be found in the Appendices.

A Health Impact Assessment (HIA) is a process to incorporate community health considerations into a plan, project or policy. HIA provides a framework for collaboration among interdisciplinary partners to better understand how environmental, physical, economic, and social conditions determine health. It aims to bring a greater understanding of human health consequences to public policy and decision-making, and strives to achieve the following principles:

- **Democracy** – involve and engage the public while informing and influencing decision-makers;
- **Equity** – consider the potential uneven health impacts on vulnerable groups of people;
- **Sustainable development** – judge the short-term and long-term impacts of the proposed plan to meet the needs of current and future residents;
- **Ethical use of evidence** – use unbiased evidence to judge impacts and inform recommendations; be rigorous and transparent.
- **Comprehensive approach to health** – emphasize that health is determined by a wide array of factors in environment and society.4

An HIA assesses the potential effects a proposed plan, policy, or project can have on health, and makes recommendations to maximize health benefits and minimize negative effects. HIA uses a six-step process:

1. **Screening**: Determine whether an HIA will add value to the decision-making process.
2. **Scoping**: Identify key issues (“health determinants”) that can impact the plan, policy or project alternatives.
3. **Assessment**: Analyze baseline conditions and predict health impacts based on existing data, empirical research, expert and local knowledge.
4. **Recommendations**: Develop practical solutions that can be implemented within the limitations of the plan or project, to maximize health benefits.
5. **Reporting**: Disseminate the findings to decision makers, affected communities and other stakeholders.
6. **Monitoring and Evaluation**: Monitor the changes in health or health risk factors and evaluate the effectiveness of the measures that are implemented, and the HIA process as a whole.

Part of the HIA process is forming predictions about how the proposed plan will impact health, based on evidence and research studies. Predictions can be quantitative or qualitative depending on the data available. The predictions in this HIA are largely qualitative, and designed to help inform the decision points in the Neighborhood Plans since the HIA was conducted early enough during the neighborhood planning process. The predictions for each health factor can be found in Sections 3-7, in the “Predictions” subsections, and framed as to how the Neighborhood Plans can affect each factor.
About the Globeville and Elyria Swansea Neighborhood Planning Process

A neighborhood plan is a policy document that provides the vision and guidance for future development of a community over the next five to ten years, including current issues and potential opportunities. Many neighborhoods in Denver have Neighborhood Plans, or are updating their plans. The 2014 Neighborhood Plans for these two communities – the first ever for Elyria Swansea and the first in 25 years for Globeville – will consider previous assessments and plans, including the 2003 Elyria Swansea Neighborhood Assessment, 2008 Globeville Assessment, Denver’s Comprehensive Plan 2000, Blueprint Denver 2002, all adopted by the City of Denver, and the resident-led plan, Elyria Vision Plan 2020. Both neighborhoods worked with the City Planning staff to select a resident-led steering committee for each neighborhood, and have met monthly since late 2012 to envision future development in each community. The Neighborhood Plans are expected to be completed in late 2014 to early 2015.

The Neighborhood Plans will address multi-modal connectivity, community safety and economic vibrancy, environmental and physical elements that can support health, and the unique history of the communities. At the start of the HIA process, the neighborhood steering committees had not identified specific elements to be addressed in the Neighborhood Plans. As the two processes ran concurrently, though, factors were identified that became priorities in both; for example, connectivity and community safety. This created the opportunity to form recommendations that addressed both neighborhood planning goals and health goals.

Factors that Impact Health

The health of an individual or population is only partly determined by genetics and behaviors. In fact, education and economic status are the strongest predictors of health in the U.S. People with higher incomes or personal wealth, more years of education, and who live in a healthy and safe environment have, on average, longer life expectancies and better overall health outcomes. Conversely, those with fewer years of education, lower incomes, less accumulated wealth, living in poorer neighborhoods, or substandard housing conditions have worse health outcomes. The recognition that physical, economic, and social factors have powerful effects on health means that improving public health requires going beyond treating illness and looking at the larger factors that impact health, including the built environment, a term used to describe all the settings and surroundings designed and maintained by human efforts, such as homes, schools, offices, parks, neighborhoods, roadways and transit systems.6

FIGURE 2: A Socio-Ecological Model of Health

SOURCE: World Health Organization
Resources that are distributed unevenly across communities contribute to health status that also varies widely across communities. In other words, where a person lives can have a dramatic effect on health.\(^7\)

For example, the physical or built environment can present significant barriers to health-promoting behaviors. Some communities are not conducive to health because they bear a heavy burden of industry, traffic, or highways, causing noise, odors, air, or water pollution. Some do not encourage physical activity because they do not have safe places to walk or bike, attractive destinations, or a well-connected street network. Others have high levels of crime or low-quality schools that force parents to keep kids indoors, and limit access to education. Many such communities have limited access to essential goods and services, notably full-service grocery stores selling affordably priced fresh and healthy foods. When these physical and socio-economic determinants limit the opportunity of residents of a community to achieve their full health potential, that community suffers from health inequity, or differences in health which result from factors which are considered to be both avoidable and unjust.

To address this inequity, it is necessary to approach public health from a collaborative and cross-disciplinary perspective. Public health practitioners across the United States are collaborating more closely with other government agencies to devise policies that promote improved health, including environmental quality, land use, transportation, education, employment, and housing policies.

**Health equity is “the fair and equal opportunity to lead healthy, productive lives regardless of race, ethnicity, income or where we live.”**\(^8\) Some differences in health between neighborhoods can be traced to unequal physical, economic and social conditions and are systemic and avoidable.\(^9\)

---

### History and Environmental Justice Issues in the Globeville and Elyria Swansea Neighborhoods

The towns of Elyria, Swansea and Globeville were established in the 1870s and 1880s. They were annexed into Denver by 1902. The towns grew up around the Kansas Pacific and Union Pacific railroads and the Globe smelter, established in 1886. The smelter processed the gold, silver, copper, and lead delivered from Colorado’s mountain mining communities. The smelter drew immigrants from all over the globe – hence its name. Polish, Slovenian, Russian Croatian, Serbian, Czechs, and Volga Germans were all recruited to come work the dangerous jobs at the smelter and at the adjoining rail yards. Later, Hispanic families came to work in industries such as the meatpacking operations that came afterward.\(^10\)

Globeville and Elyria Swansea (as it is known today) were always physically isolated from the rest of Denver by the train tracks, large industrial sites, and the South Platte River. Later, the construction of two interstate highways through these neighborhoods further reduced connectivity and increased their isolation. Interstate 25 (I-25) was completed in 1958 and divided Globeville, significantly restricting east-west access. Interstate 70 (I-70) was completed in 1964, dividing Globeville again – the “mousetrap” intersection of these two interstates occupies the center of Globeville – and divided Elyria Swansea as well, restricting north-south connectivity in both neighborhoods.\(^11\)

---

A group of men pose with stacks of silver ingots processed at the Omaha and Grant Smelter in Globeville, circa 1890-1900. Credit: Western History/Genealogy Dept., Denver Public Library
While many of the impacts of the interstates were fairly obvious and immediate, the long-term impacts of smelting and other industries are not always readily apparent or easily comprehended. ASARCO (the American Smelting and Refining Company), bought the Globe smelter in 1901, and processed lead until 1919, when it began production of arsenic trioxide for use in insecticides, medicine, and glass. From 1926 until it closed in 2006, ASARCO produced cadmium for coating iron and steel. In 1983, the State health department sued ASARCO for damages to natural resources, and in 1989 a class action lawsuit was filed on behalf of neighborhood residents asking, among other things, that contaminated soils be removed.

The U.S. Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people…with respect to the development and enforcement of environmental laws, regulations, and policies.” In other words, “no group of people should shoulder a disproportionate share of pollution.” The EPA considers Globeville and Elyria Swansea to be affected communities in terms of environmental justice. In addition to the two interstate highways, they are impacted by the ASARCO site, as well the Vasquez Boulevard/I-70 Superfund site, a four-square mile area also impacted by historical smelting activities. The clean up (remediation) activities on the historic smelter sites are nearly complete; the status of remediation is described in the section on Environmental Quality.

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In the U.S., low-income and minority communities have historically been disproportionately exposed to environmental risks while receiving fewer benefits derived from the development of natural resources.

Health equity and environmental justice are both are rooted in a concern for just and equitable treatment and access to the benefits of society.