

Tri-County Health Department in Colorado Does More Than Just Review a Development Plan

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Introduction

Are you involved in land use planning? Do you review applications for development? In Colorado, as in many other states, local public health agencies (LPHAs) do provide these services. When local planning departments want to know the public health impacts of a proposed project, they generally refer the development application to the LPHA's environmental health (EH) division. Typically, local EH officials limit their comments to regulatory requirements for air and water quality, waste and wastewater management, and sanitation. It is essential for LPHAs to identify these requirements for preventing human exposures to environmental hazards. However, LPHAs also work on preventing chronic illnesses (e.g., heart disease, diabetes) and promoting healthy behaviors such as physically active lifestyles. EH specialists have the opportunity to identify not only case-specific regulations to protect public health, but also non-regulatory approaches to promote health through planning and development activities. To advocate for public health in its broadest sense, LPHAs should also recommend the inclusion of public health policies in community master plans for land use, transportation and open space, trails and parks systems, and strategies to implement these policies in local codes and standards. In this way, LPHA input can educate planning professionals and policy makers about potential health impacts and benefits of land use choices and improve the quality of land use decision making.

Background

Tri-County Health Department (TCHD), a district health department serving over a million residents in three counties of the metropolitan Denver area, has offered development review

services to its jurisdictions for several decades. Each year TCHD's environmental health staff receives as many as 200–300 land use referrals from its jurisdictions. The agency provides comments on mandatory issues i.e., those regulated under public health laws, and discretionary issues that may protect or enhance public health, but are not subject to regulatory requirements. Discretionary comments make up the bulk of TCHD's input. This is due to the fact that there are few laws that specifically protect public health as it relates to land use, although historically, zoning and subdivision regulations emerged to deal with nuisance issues, outbreak of infectious disease, and public health risks associated with industrial hazards (International City/County Management Association, 2000). Additionally, in 1926, the U.S. Supreme Court in *Village of Euclid v. Ambler Realty Co.*, cited public health protection as one of the basic responsibilities of local government, thus legitimizing local authority to restrict or control land use impacts through zoning. The *Euclid* case recognizes that planning is also about protecting public health and promoting safety and general welfare. This history suggests a legal basis for TCHD and other LPHAs to address non-regulated yet health-related development issues.

In recent years, TCHD has expanded the scope of its Land Use Program to better address evolving environmental conditions and public health challenges. Emerging public health risks and environmental conditions associated with the rapid growth occurring in TCHD's service area necessitated a more comprehensive and methodical review of all environmental health issues. Failure to consider these issues in land use decisions could result in a variety of negative public health impacts. For example, de-

velopment of contaminated sites could allow human exposure to pollutants through water or indoor air. Incompatible siting could create noise and odor nuisances. Recent research informs us that the built environment can encourage or discourage physical activity, a critical public health challenge because physical inactivity is a risk factor for many debilitating and fatal chronic diseases (e.g., heart disease, diabetes, certain cancers). Studies also show that the way we design and build our communities influences traffic and pedestrian safety and can increase or reduce mobility, access to services, level of stress, and social equity. Thus, an effective public health land use program must address the overall community planning process, not just potential health-related impacts of discrete projects.

The Program

The goal of TCHD's Land Use Program is to routinely include environmental public health principles in local planning and development activities. Key principles include (1) protecting against environmental hazards, (2) preventing the spread of disease, (3) preventing illness and injury, and (4) encouraging healthy behaviors. TCHD's model for involvement in the planning process is simple: land use decisions require the balancing of varied interests, and public health should be among the interests considered. LPHAs should be at the table to promote and protect public health when individual development applications are referred to them for comment, and perhaps more importantly, when land use policies, codes, and master plans are being revised or formulated. This increases the likelihood that public health considerations will be applied consistently and on a community-wide basis.



Planners getting tips on improving ease of walking in Commerce City, CO.

Recognizing this need, TCHD initiated an effort to become more involved in the planning process about seven years ago. Within the environmental health division, the Land Use Program staff (public health engineer and environmental health policy coordinator) met with each county planning department to explain TCHD's program and intended services, and to seek guidance on the most effective way to participate more actively in the planning process. As a result of these meetings, TCHD began attending the planning department's weekly development review meetings in two counties; the third county is on an ad hoc basis. Both approaches have worked well in creating more open and informal lines of communication.

Survey—Process for Evaluating and Expanding Program

In 2002, TCHD conducted a survey of the three county planning departments and boards of county commissioners (BOCCs) to evaluate the Land Use Program's effectiveness in meeting county needs and addressing environmental health issues. The survey asked respondents to rank the importance of TCHD's input on a range of public health topics and planning activities and sought feedback about the quality and timing of TCHD's services and areas for improvement. Fifteen planners, including two of the three county planning directors, completed written surveys.

Two of the three BOCCs referred the survey to their respective planning departments for response, reflecting the way the development review process works. It is the planning department's job to obtain input from a variety of sources, including LPHAs, and to integrate it into a staff report with recommendations for the decision makers' consideration. This underscores the need for LPHAs to work closely with planning department staff, to ensure that they understand and accurately convey LPHA

views. The survey responses were helpful in identifying what was most and least important in each county. The issues ranked highest in importance and the percentage of respondents who listed the issue were as follows: wastewater (100%), solid waste/hazardous materials/waste (60%), air quality (60%), and water quality (47%). The responses also confirmed that while most of the planners ranked their desire for TCHD's involvement lowest in issues such as master planning, injury prevention, and community design for health (e.g., safety, impacts from transportation, or supporting more active lifestyles), two of the three counties encouraged TCHD to maintain involvement in these areas. For a copy of the survey, please contact corresponding author.

In 2003, TCHD scheduled a follow-up meeting with each planning department to evaluate how well the planners felt TCHD had implemented their 2002 recommendations. TCHD believes these periodic surveys and service assessments have been very useful in building constructive working relationships with their planning departments, thus improving the effectiveness of their health interventions. Surveys and assessments have also given TCHD an opportunity to educate the counties about the links between community design and public health, particularly on emerging topics such as active community environments (ACE). An ACE is designed with a pedestrian focus and provides opportunities for people of all ages and abilities to engage in routine physical activity with a minimum goal of 30 minutes of daily moderate activity (Leadership for Active Living, Robert Wood Johnson Foundation, 2005).

TCHD has found that planners are often strong advocates and proactive partners in promoting public health through the land use planning process. Planners in turn can then carry the public health message, either directly or with the LPHA, to other partners in the land use process, e.g., parks and recreation districts, transit agencies, and school districts. Operations that have responsibility for the transportation infrastructure are particularly important. For example, public works engineers ensure proper street function and traffic flow. Fire departments review development plans with an emphasis on road widths and turning radii to guarantee emergency vehicle access. Both of these agencies play a role in the safety and ease of walking and biking, and therefore in the health of communities.

Evolution of TCHD's Involvement in Community Planning for Active Living

LPHAs have long been considered the experts on issues such as air and water quality, immunization, restaurant inspections, and waste management by virtue of professional training and regulatory authority. In contrast, they have had little or no experience participating in the land use planning process. While community planning should remain the bailiwick of the planning profession, local environmental public health officials need to understand planning principles well enough to participate effectively in the area of land use and community design as it affects public health. This involves developing new knowledge, relationships, and skills. (See photo at left.)

The following are examples of TCHD's movement along the learning curve in the area of the design of ACE. Several years ago, the agency chose to include the promotion of active living as an element of its Land Use Program. In 2000, TCHD's first efforts involved offering conceptual level comments on development referrals (see first two examples below). Planners appreciated these comments, but through the survey process described above, indicated that the comments would be more useful if they were more detailed. They encouraged TCHD to provide specific recommendations for revisions to development plans that they could either encourage or require the applicant to adopt. Over time and with education, TCHD's comments have evolved into recommendations that some planners often integrate into their negotiating discussions with applicants or include in their staff reports to policy makers. The third through the fifth comments below (2003 or 2004) are more specific, reflecting TCHD's early efforts to provide the more detailed recommendations requested by planners. (Note: actual project names were changed.)

1. With a project as large as the Bonanza Ranch, our concerns are primarily long-term regional impacts. We have already mentioned wastewater, which includes sewage and storm water impacts to the regional water basin. In addition, there will be increased road congestion and vehicle emissions and significant water use. Once infrastructure and landscaping are in place, the tone is set for traffic-related air emissions and water demand. If this project is approved, we encourage the county and the applicant to do everything reasonably possible during the design stage to minimize these impacts.

2. Vehicle-related emissions are the largest source of air pollution in metro Denver. Because good air quality contributes to public health, Tri-County supports land use measures that maintain or improve air quality by reducing vehicle travel and related emissions. One way to do this is to design projects that offer a range of travel choices in addition to the single occupant vehicle, including pedestrian and bicycle paths and transit (bus). Tri-County also supports the provision of travel choices such as transit, bicycling, and walking because they encourage residents to adopt healthy behavior in the form of regular exercise.
3. Because chronic diseases related to physical inactivity and obesity now rank among the country's greatest public health risks, we encourage community designs that make it easy for people to include regular physical activity, such as walking and bicycling, in their daily routines. Communities that promote walking, bicycling, and transit trips can also help protect air quality by reducing vehicle trips and related emissions. To further develop the "active living" theme, we offer the following:
 - Evaluate and revise the site plan to accommodate bicyclists as well as pedestrians. The Reward Creek Light Rail Station is easily accessible by bike from the property. Also, RTD's express bus that travels along Reward Creek Road and West Drive, should encircle the development and connect to Meadow park-n-Ride and the shuttle through the Business Park and Northland park-n-Ride on weekdays, giving resident bicyclists convenient access to a large variety of work, retail, and recreational destinations. In addition, children living in Rawhide might be able to bike to and from school.
 - Designate bike lanes on major collectors, arterials, or other suitable streets, and on the pedestrian bridge to the Reward Creek Rail Station.
 - Where bike lanes do not exist, widen sidewalks from 5 feet to 8 feet where appropriate so that people on foot and on bicycles can use them jointly.
 - Provide bike storage areas in or outside the residential units, bike racks at retail and recreational destinations throughout the development.
4. We are pleased that this infill project is being developed to meet the needs of aging empty nesters, since seniors comprise the fastest growing segment of the popula-

tion. Because physical activity promotes good health, Tri-County encourages community designs that promote incorporating regular exercise in the form of walking into residents' daily routines. The applicant's mixed-use plan with pedestrian connections between the retail and residential areas should encourage this.

We also encourage designs that facilitate the use of transit where possible, since bus trips include a walking segment and reduce unnecessary vehicle trips. Transit may offer additional benefits for the aging, providing independence, mobility, and access to services for able seniors who may feel uncomfortable driving. The proposed subdivision is served by an RTD express route to downtown Denver; the bus stop is at Basingdale and Yoder Court. The most direct pedestrian access to the bus stop would be through the Halley commercial area or the sidewalks along Yoder Avenue or Basingdale Road. To facilitate the walking route, we encourage the applicant to consider providing pedestrian access between the end of Snowberry and Yoder Road sidewalk. Building such a connection from Snowberry to the sidewalk would reduce the walk to the bus stop from 1,400 feet to a more walkable 500 feet.

5. We encourage county staff to work with the developer between now and final platting to prepare a project-wide transportation and mobility plan that includes design elements such as:
 - a system of well-lit, convenient bicycle and pedestrian paths and open spaces;
 - linear streets that link development areas;
 - connections of streets or paths with residential, commercial, and public (school, recreational) destinations with neighboring developments;
 - pedestrian-friendly streetscapes;
 - building orientations to improve pedestrian and transit access and circulation; and
 - if a school is to be part of the development, locate the school so that neighborhood children can walk to it safely and easily.

Wisdom from Experience

- Don't hesitate to seek involvement in emerging community planning issues while you are educating yourself in these areas. You don't have to be the expert; you can provide just as valuable a service by facilitating collaborations with others who can bring additional expertise or a needed perspective to the table.

- Recognize that it will take time to develop effective interventions. Enlist guidance and periodic evaluation of your efforts from the planning staff.
- Timing of interventions matters! If your local government is giving clear signals that it isn't ready to address an issue, perhaps you need to do more education before offering recommendations.
- Environmental health professionals don't have the luxury of waiting to get involved in community planning until they are experts in the field. Move up the learning curve as quickly as you can, but use your current knowledge to raise environmental public health issues and facilitate positive change. Development doesn't wait—it's happening now and it can positively or negatively impact the future of people who live, play, and work there.

Results and Successes

- LPHA is recognized as having a legitimate role in land use planning and design and specifically as a member of the development review team.
- More detailed, consistent, and useful development review comments.
- Broader range of comments address not only protection from environmental hazards but also safety and physical activity opportunities and access to services for all populations.
- Increased knowledge of and influence regarding the underlying determinants of environmental and community health.
- More discussions among planners about the health implication of community planning.
- Improvements or movement toward more integrated programs, policies or other interventions.
- LPHA input is more likely to be sought and used in the development or revision of some comprehensive land use plans and land use code revisions.

Looking Ahead

Based on initial feedback and some anecdotal results, TCHD's level of involvement and detailed health comments in development reviews have made positive changes. TCHD anticipates its future surveys with the counties will identify how its input into the planning process has affected land use decisions and outcomes.

In 2006 TCHD received a multi-year grant from Kaiser Permanente (more recently called, LiveWell Colorado) to develop an integrated nutrition and physical activity program in one of its core cities as a means of preventing or

reducing the incidence of chronic disease. A fundamental element of the program includes land use policies and physical changes to the environment. Tri-County and city staff from planning, parks and recreation, engineering, and other departments are working together to promote significant community involvement (residents, businesses, schools, and non-profits) in these efforts towards the healthy redevelopment of the historic city core. The overall program is a collaboration among EH Land Use Program staff, epidemiologists, nurses, nutritionists, injury prevention staff, and others. It presents an opportunity to measure the effect of a coordinated interdivisional effort to promote community-wide healthy behaviors.

TCHD's goal is to continually improve its Land Use Program in terms of the quality of its interventions and relationships and its capacity to offer a more comprehensive program. It does this partly by networking with other LPHAs and monitoring best practices nationally. TCHD's methodical process of expanding its scope and collaboration around how the built environment can impact health has been a necessary component of advancing public health through the built environment. 🐼

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Village of Euclid v. Ambler Realty Co., 272 U.S. 365 (1926).

President's Message

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association, don't toot our own horns. Unfortunately, we're most likely to get publicity when something goes wrong—a foodborne illness, for example. When we do things right, which is most of the time, nothing happens, and we get no notice.

As a part of marketing the invisible profession, I want to see NEHA take a more proactive stand in tooting our horn for the many accomplishments that we have made in the 17 years that I have been on the board. NEHA is no longer relegated to going, hat in hand, knocking on doors of organizations, governmental and nongovernmental, to see if they will meet with us. These organizations are now knocking on NEHA's door! "If you want something talked about, go to organization X, but if you want something *done*, go to NEHA," is what we are hearing now!

Second, it seems clear that accreditation of public health and environmental health departments is on the near horizon, and I want to see that NEHA is positioned to be a key player in that effort. No one knows environmental health as well as NEHA, and we *will* be involved with setting standards for accreditation for environmental health.

Finally, the NEHA board and staff have changed their game plan to take more advantage of opportunities that present themselves. Things are changing so rapidly that there is no point in a strategic plan that says that "we will do x action by y date." Instead, NEHA has a Strategic Thinking document that outlines the significant areas that we would like to expand in as the opportunities are created or as they present themselves.

An example of this opportunistic thinking is our recent involvement in submitting a proposal to assist in developing a food safety inspection system in Saudi Arabia. We were asked by a Saudi Arabian company to partner with them in developing a program to establish an environmental health program, which started with updating a food safety inspection system for Saudi Arabia. This opportunity included payment for submitting a proposal whether or not a final contract was awarded. NEHA was rapidly able to develop an excellent proposal and get it submitted. Unfortunately, the contract was not awarded to the Saudi Arabian company that partnered with us, but again, NEHA was paid for the work nevertheless. Developing an environmental health program for Saudi Arabia is certainly not something we could have foreseen or planned on, but the opportunity came up, and NEHA took advantage of it.

Congratulations on 25 Years of Outstanding Service!

At the AEC & Exhibition in Tucson, Nelson Fabian was honored for his 25 years of outstanding service as executive director of NEHA. Nelson is responsible for the day-to-day operations of NEHA. He hires the staff. The board gives Nelson general guidance and leaves it to Nelson to get the job done. I've known Nelson since he was hired. You could not ask for a more dedicated person or a better representative of NEHA. That dedication and professionalism extends to all the staff that Nelson is responsible for hiring and mentoring and coaching.

There was a time, during my tenure on the board, when we were ready to make plans to cut back to the bare essentials, because we were just about broke. We now have a surplus enough to carry us for more than four months, which is exceptional for nonprofit organizations.

Congratulations and thank you, Nelson!

Well, that's probably more that you wanted to know, but as you can tell, I'm bullish on NEHA. Let me know if there are things you would like me to talk about in this column over the next year, and I'll do my best to accommodate you. Thanks for your support in the coming year.

Dick Pantano