Advocating for Active Living on the Rural-Urban Fringe: A Case Study of Planning in the Portland, Oregon, Metropolitan Area

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Abstract This case study is about the politics of incorporating active-living elements into a concept plan for a new community of about 68,000 people on the edge of the Portland, Oregon, metropolitan area. Development on the rural-urban fringe is ongoing in metropolitan areas around the United States. In this article, we evaluate the product of the concept-planning process from the standpoint of the extent to which environmental elements conducive to active living were included. We also analyze four issues in which challenges to the incorporation of active-living features surfaced: choices related to transportation facilities, the design and location of retail stores, the location of schools and parks, and the location of a new town center. Overall, the Damascus/Boring Concept Plan positions the area well to promote active living. Analyses of the challenges that emerged yielded lessons for advocates regarding ways to deal with conflicts between facilitating active living and local economic development and related tax-base concerns and between active-living elements and school-district planning autonomy as well as the need for advocates to have the capacity to present alternatives to the usual financial and design approaches taken by private- and public-sector investors.

This case study is about the politics of incorporating active-living elements into a concept plan for a new community of about 68,000 people on the edge of the Portland, Oregon, metropolitan area. Development on the rural-urban fringe is ongoing in metropolitan areas around the United States. Two coauthors (Dobson and Fox) were participant-observers in the process in Damascus/Boring, Oregon, outside of Portland. Concept planning opened up an exciting opportunity for collaboration between a public

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health expert (Dobson) and an urban-design and planning expert (Fox); they seized the opportunity to advocate jointly for creating an environment conducive to active living. Their participation was part of a partnership between Robert Wood Johnson Foundation's Active Living by Design Portland project, American Heart Association Pacific Mountain Affiliate, 1000 Friends of Oregon (1000 Friends), and Coalition for a Livable Future (CLF). Other participants, including nonprofit groups, regional planners, and community residents, also advocated in various ways. In this article, we evaluate the product of the concept-planning process from the standpoint of the extent to which environmental elements conducive to active living were included. We also analyze four issues in which challenges to the incorporation of active-living features surfaced: choices related to transportation, the design and location of retail stores, the location of schools and parks, and the location of a new town center.

In recent years academics and leaders within the planning and public health practice communities have expressed growing levels of interest in reintroducing public health goals into urban planning and development processes. In 2003, *American Journal of Health Promotion* and *American Journal of Public Health* both devoted special issues to analyzing the relationships between health and the built environment. *Journal of the American Planning Association* followed suit in 2006. A recent article in *Journal of Planning Education and Research* proposed a joint-research agenda, providing more evidence of interest by urban-planning academics (Malizia 2006).

Several writers have noted that public health and urban-planning reformers during the late nineteenth and early twentieth centuries both focused on addressing the individual and social crises evident in urban-industrial centers, which grew rapidly during that period. Sloane (2006), for example, says that congestion was the issue that unified reformers back then. Schilling and Linton (2005) note that those reformers argued that zoning, a tool used to address perceived congestion-related problems, was based in public health at that time. However, Sloane (2006) and Corburn (2004) argue that the trajectories of the two fields diverged as their leaders pursued professionalization. Schilling and Linton (2005) point out that the court system in the United States moved away from health as a legal justification for zoning as well.

O'Donnell (2003: iv) calls the move toward reintegrating public health and urban planning a "true paradigm shift," as the public health profession has moved from a focus on motivating individuals to make lifestyle changes to one that promotes the creation of supportive physical environ-

ments that enable people to engage in healthful activities more easily. The basis for this reintegration of health and planning is the concept, advocated by Frank, Engelke, and Schmid (2003), among others, that community design influences human behavior and that the ways in which communities are designed and built impact how people live and work. Thus, urban planning, the profession that guides the physical development of cities, has a critical role to play in encouraging daily physical activity, thereby improving the health of urban dwellers. Sloane (2006) says that a shared concern with impacts of sprawl on health has emerged as the umbrella concept, replacing congestion, that facilitates collaboration between public health specialists and urban designers and planners. Moudon (2005) notes the important role played by the Robert Wood Johnson Foundation's Active Living Research program in this process.

The Damascus/Boring concept-planning process offered the opportunity for active-living advocates to influence the design of a large new community on the edge of a rapidly growing metropolitan region. It was an opportunity to get urbanization right from the start by creating an environment conducive to active living. Malizia (2006: 430) claims that the "features of land use and transportation plans per se have received little attention" in the existing research literature. Given the renewed attention to the link between public health and urban planning, it is indeed relevant to examine how a planning process can influence a community's built environment, particularly on the rural-urban fringe.

At a conceptual level, the advocates had a relatively easy time generating support for an active community environment in Damascus/Boring. Many stakeholders agreed that the planning elements that would encourage active living ought to be included. Not only did many participants support active-living elements, but the state and regional plans and regulations that formed the context of this plan, in essence, required a number of them. Even though the context and many of the participants were supportive, it still proved problematic to address several planning elements to the advocates' complete satisfaction; challenges involving some elements surfaced as advocates sought to specify land-use and design commitments, to foreclose certain development options, and to balance competing priorities.

Methods and Outline

The methods used to evaluate the process of producing the Damascus/Boring Concept Plan include a review of literature about the links between

the design of the built environment and active-living outcomes, review and analysis of documents related to the plan, and analyses of individual and focus group interviews with participants. We generate a list of urban-design and development elements that have been identified in the literature as supportive of active living and perform analyses regarding the extent to which these design elements were incorporated into the concept plan. In addition, we examine in detail the dynamics associated with these four important elements. When features supporting active living compete with other priorities, we are able to focus on the dynamics of advocacy and study its possibilities and limits.

The next section of this article sets out the state, regional, and local policy and planning contexts within which the Damascus/Boring Concept Plan was produced. The mandate to plan was triggered by a decision made by Metro, the nation's only directly elected regional government, to expand the urban-growth boundary surrounding the Portland region to include the Damascus/Boring area. The first major step in the process of developing urban land uses in a currently rural area is the preparation of a conceptual plan. This plan must take into account several standards articulated by state, regional, and local authorities.

The literature-based analysis regarding the extent to which active-living–related elements were incorporated into the concept plan follows the sections on context and dynamics. Mini–case studies of those areas in which challenges surfaced follow those sections. The article concludes with a discussion of the lessons that can be learned by planners and advocates elsewhere. It is important to note that this discussion is based on a context of planning in Oregon that is, in many ways, quite different from that which characterizes other places. As DeGrove (1992: 149) points out, "The Oregon land use planning program is the oldest and longest-lived comprehensive state growth management system in the country." In a recent study of the politics of smart growth at the state level, DeGrove (2005: 39) referred to Oregon as "the nation's leading system to manage . . . growth and change." Levine (2006: 195) argues in *Zoned Out* that land-use regulations adopted by local governments play an important role in producing the sprawling, low-density, exclusionary pattern of development in the United States that makes physical activity as a part of daily life a challenge and notes that "Oregon stands out as the sole U.S. state with significant powers to require its communities to allow compact development." He goes on to add that "Portland's 'Metro,' . . . unique among U.S. metropolitan planning organizations[,] . . . can require the municipalities to accept development they might otherwise be inclined to exclude" (195).

Figure 1 Typical Damascus Scene before Urban Development

Advocates in other parts of the country will still likely, however, confront urban-design and development challenges similar to those that surfaced here. This particular context, in which the planning system disposes planners to design communities that support active living, permits us to see those challenges especially clearly.

The Context of Concept Planning

Metro Council brought the Damascus/Boring area inside the region's urban-growth boundary in December 2002. Approximately nine thousand people, living on 12,200 acres, were resident in the area of primary interest (see figure 1), "a landscape of wooded lava domes (buttes), pastoral valleys and deeply cut streams. Environmentally sensitive creeks drain into the Clackamas River, which supports endangered fish species and is the source of drinking water for more than a quarter of a million people" (Clackamas County et al. 2006a: 1).

The council action triggered a concept-planning process to guide the transition from rural to urban land uses. All new areas added to the urban-growth boundary are required to create a conceptual plan. This conceptual plan develops land-use, transportation, natural-resource, and public-

facilities recommendations that will guide development and revision of a future comprehensive city plan and ordinances.

The existing planning context in Oregon and the Portland metropolitan region stipulates many conditions that apply to land brought into the urban-growth boundary and the development of a concept plan. Among the general conditions of interest to this case study was a requirement that the Damascus/Boring Concept Plan "provide for bicycle and pedestrian access to and within school sites from surrounding area designated to allow residential use" (Clackamas County et al. 2006a: 180). Among the conditions specifically applicable to the Damascus/Boring area, two dealt with the planning for a new town center: (1) the center would become the focal point for office and retail uses, and (2) there would be separations between the new town center and neighborhood centers elsewhere to maintain the distinct identities and functions of each. As set out in Metro's 2040 Growth Concept, adopted in 1995, a town center is a specific design type that is intended to be the focal point for people living within a two- or three-mile radius. It is a mixed-use area that includes commercial services as well as gathering places. In both these general and specific ways, Metro aimed to increase the likelihood that future residents would walk and bike instead of drive around their new community.

Metro's Urban Growth Management Functional Plan, adopted in 1996 to implement the 2040 Growth Concept, contains additional requirements that structure the production of conceptual plans for new urban areas. Among those pertaining to this case study are requirements regarding density, variety of housing types, and transportation (Clackamas County et al. 2006b). Density would have to average at least ten dwelling units per net buildable residential acre throughout the entire area, a figure arrived at after subtracting from the total number of acres in the plan area acreage allocated to environmentally constrained land, future streets, parks, schools, institutions such as churches, and already developed land. The functional plan mandate to provide for a diversity of housing types to meet anticipated housing requirements is guided by the Metropolitan Housing Rule, adopted in 1981 by the Land Conservation and Development Commission (LCDC), the state agency that directs land-use planning in Oregon (Toulan 1994). It stipulates that at least 50 percent of planned new housing units be either single-family attached — row houses — or multifamily (Clackamas County et al. 2006a).

The housing-related standards dovetail neatly with the transportation requirements. The functional plan mandates that conceptual transpor-

tation plans are consistent with Metro's Regional Transportation Plan, which, in turn, had to be consistent with LCDC's Transportation Planning Rule (Adler 1994; Adler and Dill 2004). Adopted in 1991, the rule is "designed to reduce reliance on the automobile" and "to improve the livability of urban areas by promoting changes in land-use patterns and the transportation system that make it more convenient for people to walk, bicycle and use transit, and drive less to meet their daily needs" (Oregon Administrative Rules 660–012–0000 [1991]). Metro was directed by the state to integrate its land-use and transportation planning efforts in order to facilitate bicycle, pedestrian, and transit modes. The state also set forth ambitious targets for Metro, including the reduction of vehicle miles traveled and the number of parking spaces per capita in the region. Local governments were required to revise the ways in which their zoning ordinances structured the orientation of buildings, the connectivity of streets, and the mix of land uses so as to encourage people to walk, bike, and take transit to stores, offices, and facilities like parks and schools.

Taken together, the housing and transportation mandates articulated by state and regional authorities were intended to enhance the likelihood that the concept planners would recommend a fairly dense, compact urban form that would feature mixed land uses — a form that, in conjunction with supportive transport networks, would encourage active living.

The Dynamics of the Concept-Planning Process

The concept-planning process got under way in 2003 and moved through a series of steps that included the identification of the core values of the community that would lay the foundation for the plan, analyses of existing conditions in the Damascus/Boring area, a major design charrette that produced alternative concepts, analyses of those alternatives, and, finally, the development of a hybrid recommended concept plan and a set of implementation strategies. State, regional, county, and city government representatives; residents of the area; advocates representing a variety of stakeholder interests; and consultants contributed to the plan. Clackamas County, within which most of the Damascus/Boring area is located, appointed a twenty-six–person Damascus Advisory Committee (DAC), which was authorized to recommend adoption of the final concept. It began meeting in March 2004 and adopted a recommended plan and implementation guide in November 2005 (Clackamas County et al.

2005). The work of this committee was informed by a set of technical teams addressing land-use, transportation, natural-resources, and public-facilities issues.

Four groups of stakeholders advocated on behalf of active-living principles: representatives of nonprofits 1000 Friends and CLF; Active Living by Design representatives; planners and consultant planners representing local, regional, and state governments; and Damascus area residents. Stakeholders representing each of these groups were generally supportive of active-living objectives; however, their motives sometimes differed, and their responses to specific challenges to these objectives sometimes varied.

A classic example of a nongovernmental watchdog organization, 1000 Friends has played a central role in the evolution of the statewide land-use planning system since its creation in the mid-1970s and continues to do so (Bartholomew 1999). Attorneys and planners for 1000 Friends monitor land-use–related developments at the state, regional, and local levels and act legally and politically to enforce existing regulations, to establish new ones when they deem it necessary, and to defend the system in ways that are difficult for government officials to do. The planning and design approaches generally associated with smart growth inform its practice. In recent years, 1000 Friends has gone beyond its roles as monitor, enforcer, and defender to add the role of experimenter on behalf of innovative ideas. The organization undertook a technically very sophisticated land-use and transportation-modeling exercise that figured centrally in the evolution of the Transportation Planning Rule mentioned earlier. The Damascus Area Design Workshop in 2002, a six-day event involving leading U.S. and Canadian urban designers, is another example of such an experimental approach to innovation. Reflecting its stature in the region, a 1000 Friends staff attorney was appointed to DAC, the project coordinating team, and land-use technical team.

Coalition for a Livable Future was created in the mid-1990s; 1000 Friends played a key role in establishing it. Sixty environmental, social-justice, affordable-housing, and other advocacy organizations belong to the coalition, a U.S. version of what in Europe would be called a red-green alliance. It is a regionalist organization that engages Metro on a variety of policy issues. Reflecting its stature, CLF was asked by the concept planners to conduct a formal review of the draft concept plan before the advisory committee took it up for final adoption.

Active Living by Design is a Portland area partnership of diverse interests that has been funded by the Robert Wood Johnson Foundation since

2002. Partners work on both regional and community-level initiatives to address the social and environmental conditions that impact physical activity and healthy lifestyles. Representatives from the Active Living by Design partnership (Dobson and Fox) were appointed to the Project Coordinating Team and sat on the land-use, transportation, natural-resources, and public-facilities technical teams. Both were members of charrette design teams, participated in community forums, and observed numerous DAC meetings. Playing these roles, they sought generally to influence public opinion about the potential for active living in a future Damascus and about the recommendations made to and by DAC.

Members of the planning community working on the concept plan, especially those public-sector planners working at the state and regional levels or as consultants, supported incorporating active-living elements. Existing state and regional ordinances in many ways support active-living elements, including multimodal transportation; dense, mixed-use development; and protection of natural-resource areas such as trails and open space. Public-sector planners and consultants worked throughout the process to educate others about and promote those active-living objectives that were rooted in existing state and regional policy. Local planners were generally supportive in principle, but some — Clackamas County staff particularly — took positions that challenged active-living advocates. These positions usually reflected feasibility concerns expressed by public service providers and private developers who were concerned about the impact of the pursuit of certain active-living objectives on the viability of plan implementation.

Current residents of the Damascus/Boring area participated in several ways, most notably as members of DAC, which made the final recommendation regarding the concept plan. Residents also sat on some of the technical committees and participated in multiple community forums, public meetings, and a ten-day design charrette (see figure 2). Many were longtime Damascus residents who embraced the area's rural lifestyle. Others were relative newcomers drawn to the small community and its surrounding natural amenities such as the Clackamas River and proximity to Mount Hood. Although many old and new residents initially resisted the idea of urbanization, those who became active in the process worked to ensure that the inevitable growth would create a complete, thriving community and avoid the pitfalls of urban sprawl. Before conceptual planning began, residents participated in a public involvement process to develop core values to guide planning. These values included well-designed core areas, an effective transportation system with viable options for walking

Figure 2 Damascus/Boring Residents Review Planning Designs at One of Several Community Open Houses

and biking, rural character, a sense of community, responsibility for the environment, and protection of special places (Clackamas County et al. 2006a). In their various roles throughout the process, residents built upon these core values and advocated for compact, mixed-use development; a thriving, pedestrian-friendly town center; and a multimodal transportation system, all integrated with the area's rich natural resources and rural character.

Early Intervention by Advocates

The work of the Damascus Advisory Committee was informed by presentations made to it at early meetings by one of the coauthors (Dobson) about Active Living by Design concepts. The presentations were based on *A Healthy Active Oregon: The Statewide Physical Activity Plan*, which had been produced by Oregon Coalition for Promoting Physical Activity in February 2003. The coalition, a voluntary group of organizations and individuals that was a state affiliate of the National Coalition for Promoting Physical Activity, sought, among other goals, to "create communities that support and promote daily physical activity" (Oregon Coalition for Promoting Physical Activity 2003: 7). This plan had several objectives which not only reinforced the state and regional mandates mentioned above, but also placed those urban planning and design ideas in a public health context. Increasing the percentage of trips to school that kids make by walking and biking by providing safe and accessible routes and

locating schools in close proximity to residential areas were linked, for example, to the need to address health problems associated with overweight and obesity among youth. In forums like the Damascus/Boring concept-planning process, advocacy on behalf of the objectives and strategies outlined in the Statewide Physical Activity Plan was one of the major ways in which the authors of the plan attempted to implement it. The linkage between planning, design, and health, established through advocacy, became an important part of the context within which the concept plan was developed.

The process of developing alternative plan concepts was also intentionally informed by a project managed by one of the coauthors (Fox) that was completed shortly before the Damascus/Boring planning process began. Orchestrated by 1000 Friends and CLF during summer 2002, a Damascus Area Design Workshop was held that was intended to shape the concept-planning discourse that would begin shortly thereafter (Condon 2002). Participants in the Damascus Area Design Workshop, many of whom would also be involved in the Damascus/Boring concept-planning process, articulated a set of principles that directly influenced the latter effort. Among these principles was the importance of designing a complete community that would be clean, green, and fair (ibid.). The ideas set forth during the workshop evolved into a framework for the concept plan, landscape-based place making, which aimed to integrate urban and landscape features. The urban areas planned within such a context, including residential neighborhoods, commercial centers, and employment districts, would be walkable and bikeable. There would also be conservation areas, which would include zones set aside for natural-resource protection and restoration.

Advocates for design ideas that supported active living were involved early in, even prior to, the concept-planning process and enjoyed the support of allies.

The Limits of Concept Planning

Before exploring the extent to which those principles and ideas were manifest in the adopted plan and analyzing cases in which threats to their full incorporation surfaced, we elaborate the status of a concept plan and its possibilities and limits. Metro requires the production of a concept plan; however, after such a plan is adopted, it remains for the local governments who will serve the area brought inside the urban-growth boundary to produce and adopt their own comprehensive land-use plans and implement

ordinances. Land is allocated to different uses — residential, commercial, industrial, institutional, and natural-resource protection — on a concept-plan map, and major transport facilities are shown; however, the lines and shapes drawn on the map are not intended to refer to specific locations or to specific parcels of property. Locally produced plans and ordinances will be much more specific than was the concept plan that was adopted by the advisory committee. The level of abstraction at which the plan was created presented challenges, in some cases, to the advocates.

It is important to note that the city of Damascus was just incorporated in 2004 and contains 80 percent of the area. The remaining 20 percent of land will be annexed by Damascus or nearby cities. The concept plan is intended by Metro to guide these local plan-making and implementation efforts; however, many decisions remain to be made regarding, for example, the precise configuration of the transport network, the specific locations of other public facilities, and the zoning of individual parcels of property. These and the resultant choices made by private developers, in turn, will determine the actual extent to which a community that facilitates active living emerges. Metro does have the authority to challenge aspects of proposed local-government comprehensive plans that differ significantly from the recommended concept plan.

The concept-planning process involves a different set of actors and addresses issues somewhat differently than does local-level planning. Eight of the twenty-six people appointed to DAC were current residents of the area being planned. The rest of the members represented included government agencies that would be responsible for delivering services, such as water, roads, and schools; adjacent cities; nongovernmental environmental and land-use advocacy organizations that were active in the region; private-sector residential, commercial, and industrial developers who did business in the region and beyond; and Metro itself. The membership of the four technical teams, which made and analyzed the substantive proposals, was heavily weighted toward the governmental, advocate, and private-consultant sectors. Many of the public- and private-sector professionals had participated with each other on the preparation of another concept plan in the same part of the metropolitan region just a few years earlier. While the Damascus area was larger than the previously planned area, many of the issues were similar. The local residents appointed to DAC were people who had accepted the fact that their part of the region would be changing dramatically; they were interested in managing the transition so as to conserve as many of the environmental resources they cherished as possible, while developing the rest in a sustainable manner.

Given the dynamics discussed above, certain stakeholders, especially those involved in various kinds of land development, are less likely to participate actively at the concept-planning stage. They are more likely to focus their attention on the later stage, when the city government creates its more specific plan and implements ordinances, during which time they negotiate with local officials about specific development projects they are contemplating. Given also the conceptual nature of the plan, while area resident members of DAC are likely to pay close attention to shaping the future character of their community, other residents are more likely to wait to expend their political energies until the time when planning and zoning decisions at the level of particular properties are on the agenda. Because it is their opportunity to articulate the ways in which this new community should embody state and regional aspirations, state and regional government representatives are likely to be very attentive.

Overall, in comparison with the local-level planning process to follow, concept planning is a less intense affair. The politics associated with who wins and loses regarding future land development is deferred to a later time. In addition, politically sophisticated professionals who generally agree with one another about active-living–related design and development principles and the area residents who share their objectives will significantly shape the discourse about the future of the area.

This case study is limited to an analysis of the concept plan. At the time of writing, it was all that had been completed. It will likely take three to four years before the newly created City of Damascus finishes its own comprehensive plan and prepares its own set of implementing ordinances.

Analysis of the Concept Plan

Much of the research in the field of built environment–behavior interactions is based on the conceptual model presented by Frank, Engelke, and Schmid (2003). Their model characterizes the components of the built environment as land-use patterns, urban-design characteristics, and transportation systems and proposes that the "causality flows from the built environment through physical activity patterns to public health outcomes" (ibid.: 6). Researchers are concluding that people are more likely to engage in and maintain physical activity that can be incorporated into daily life, such as walking or bicycling to work or school, rather than programmed activities.

Land Use

Land-use patterns represent the arrangement of elements of the built environment and determine the proximity between uses or destinations and origins (Frank, Engelke, and Schmid 2003). Frank et al. (2005) say that there are now sufficient studies that have found clear associations between land-use patterns and walking. The land-use patterns cited most often as supporting walking include higher density, a mix of land uses, and a short distance between residential and nonresidential uses (Frank, Engelke, and Schmid 2003).

Density provides an objective measure of the compactness of a place and is considered important to walking because higher densities have the "effect of reducing distances" (ibid.: 139). The mixing of uses defines the travel distance between destinations, such as work, shopping, or schools; a mix of uses would shorten travel distances by increasing proximity.

Transportation Systems

The street system is an important part of the urban fabric that plays a critical role for all modes of travel, because it connects destinations and influences decisions about trip route and travel choice (Frank, Engelke, and Schmid 2003). Distance is a feature of both land use and the transportation system. In transportation terms, distance is determined by the extent of street and intersection connectivity, which influences the ease of moving between places (Saelens, Sallis, and Frank 2003). Density may create proximity of uses, and a mix of land uses may create proximity of different types of uses, but either without connectivity may result in a long route, reducing the ease of moving between destinations. Street connectivity provides direct, rather than circuitous, routes that shorten distances between destinations. Street connectivity is often measured by average block length; typically, shorter blocks provide more options for direct travel lines.

Intersection density, measured by the number of intersections within a defined area, is also a significant predictor of walking (Frank et al. 2005). Intersection density can be considered another way to measure street connectivity, because it enables pedestrians to cross and access more places directly, thus shortening the route distance.

Urban-Design Characteristics

Urban-design features can influence a person's decision to walk and his or her perception of walking as a desirable and safe activity (Frank, Engelke, and Schmid 2003). These features can include all of the immediate surroundings of the street, including parks, buildings, lawns, bus stops, trash bins, planting strips, and vegetation. They can also refer to the aesthetics of a place: the design of buildings, size and orientation of windows, location of doors relative to the sidewalk, decoration and ornamentation, landscaping, trees and the shade they provide, and the availability of amenities such as benches and lighting (Handy et al. 2002).

In summary, research is accumulating that links land use, transportation, and urban design with travel choices. Frank and Engelke (2001) found that automobile-oriented design discourages walking. Cervero and Duncan (2003) found that pedestrian-oriented design — such as sidewalk features, street lighting, and planting strips — encourage nonautomobile travel and that residents of "traditional" neighborhoods walk to the store more frequently than those in "late modern" neighborhoods (ibid.). Finally, Frank et al. (2005) weighted scores of land-use-mix, residential-density, and intersection-density measures to create a walkability index for neighborhoods that could be used to rate the built environment and correlate that rating with perceived or actual levels of walking. They concluded that when "people have many destinations near their homes and can get there in a direct pathway, they are more likely to engage in moderate physical activity for more than 30 minutes" (122). They go on to argue that people "living in better connected, more compact, mixed use neighborhoods are more likely to be active enough to achieve health benefits" (123) and advocate for policy changes that make neighborhoods activity friendly.

Active-Living Elements in the Damascus/ Boring Concept Plan

Based on the literature discussed above, we identify a list of built-environment elements that have the potential to support or encourage physical activity. We then examine the concept plan to determine whether or not those elements were present in it. The fact that the object of our analysis is a concept plan, rather than a comprehensive land-use plan and a set of implementing ordinances, sets certain limits on our ability to evaluate the outputs of the planning process. Table 1 presents a summary of our assessment, using the Frank, Engelke, and Schmid (2003) categories of

Table 1 Active Living Elements in the Damascus/Boring Concept Plan

Model Components	Elements Identified in the Literature	Presence in the Concept Plan
Land use	Density	Moderately present for residential density. The plan meets Metro's minimum regional standard of ten dwelling units/acre overall.
	Mix of uses	Encouragement of a mix of uses in town-center and neighborhood-center design types is present, but acceptance of large-format retail in the town center could compromise the outcome.
	Distance	Location of schools and parks within walking distance of residential areas was supported as a concept, but these facilities were not mapped at the concept-planning stage. The proximity of residential areas to employment areas, centers, and natural areas is presented and mapped.
Transportation	Infrastructure	Plan includes recommendations for bicycle and pedestrian infrastructure, sidewalks on all streets, continuous bicycle corridors, bicycle lanes, and an off-street bicycle and pedestrian system.
	Distance and routes	Distance was addressed in the land-use element regarding proximity of residential areas to schools, parks, employment, and centers. Major routes were addressed primarily through urban design.
	Street and intersection connectivity	The concept plan mandates the creation of a grid pattern and a master connectivity plan. However, concept-level scale of planning precluded identification of local streets and an interconnected network.
Urban design	Design and setback of adjacent buildings	Building siting and design will be considered at a later stage as strategies to create walkable human-scaled communities. Pedestrian-oriented design types are promoted in the town center, but large-format retail is also allowed in town center and neighborhood centers.

Table 1 (*continued*)

Model Components	Elements Identified in the Literature	Presence in the Concept Plan
	Street/sidewalk design and amenities	Pedestrian-oriented environments are included in descriptions of town-center characteristics. Livable streets principles are included, as are standards for a pedestrian-friendly retail environment.
	Street lighting	Lighting is included as part of the recommendations for an attractive pedestrian environment, but it is mostly beyond the scope of a concept plan.

land use, transportation, and urban design as an organizing framework. These three components of the concept plan support active living to varying degrees.

Land Use. Given the topography of the planning area, and the extensive amount of natural areas to be preserved, planning for an average density of ten dwelling units per acre overall was an accomplishment. However, some advocates feel that may still not create sufficient density to establish the proximity to commercial and public services that would encourage walking or cycling to those destinations on a regular basis. The mix of uses in the neighborhood centers, the town center, and other design types was present in the concept plan, and the strategy enjoyed a high level of support. The decision to allow large-format retail in the town center may decrease the impact of the mix of uses there, however. Typical "big box" approaches could impact the urban-design characteristics of the centers, making them less pedestrian friendly than advocates would have liked. The issue of distance was primarily addressed by the proximity of different design types on the concept plan map and in the discussions about the location of schools and parks being within one-quarter-mile walking distance of residences. As will be discussed later, political and financial feasibility concerns produced a concept plan that did not specifically map the location of those facilities.

Transportation. The concept plan calls for an interconnected on- and off-street network that supports walking, bicycling, and access to transit. The major arterial and collector roads that are mapped set an adequate frame-

work for a future local system. However, at the concept-planning level, the route characteristics and local streets are not mapped, nor are the design characteristics specified.

Urban Design. Finally, the urban-design components of active living, while generally supported in the concept plan, were, for the most part, too detailed to be included at this stage. Language supporting pedestrian-friendly right-of-way, trails, building design, and street and sidewalk amenities is present in the concept plan, but the details will be determined in the subsequent planning phases.

Overall, the Damascus/Boring Concept Plan, given the limits imposed by its being a concept plan, positions the Damascus/Boring area well to promote active living. The combination of state and regional mandates and the efforts of nonprofit advocates and community residents produced choices that will likely engender a compact, mixed-use, fairly dense small city on the edge of the region. However, there were some setbacks for active living, which mostly occurred when active-living objectives competed with other priorities and because many crucial decisions about local comprehensive plans and ordinances have not yet been made. We turn now to mini–case studies of four planning questions that presented challenges to the incorporation of active-living elements: the character of the transportation network, the location of the Damascus Town Center, the acceptability of large-format retail in the town and neighborhood centers, and the locations of school and parks. These are issues that planners and advocates around the country will encounter as the urban core of cities expands into relatively undeveloped, rural areas. The lack of existing development presents great opportunity for thoughtful integration of land uses, transportation networks, public facilities, and natural resources. However, the broad-scale, long-term nature of this type of planning can also present challenges with regard to a lack of specificity, the uncertainty of future funding mechanisms, and the ability of proposed future urban-design approaches to mitigate potential negative outcomes. In addition to studying the conflicts that arose during the process, the case studies presented here highlight the role of advocates and their allies in the policy deliberations about these issues and the outcomes they helped to produce.

Controversial Issues

The Transportation Network

Three major active-living–related transportation challenges surfaced during the concept-planning process. One issue was to decide which type of primary east-west arterial would be selected to serve through traffic and freight and to provide regional access. Active-living advocates and their allies wanted to design a transportation system that would reduce reliance on automobiles and provide a safe, convenient route for pedestrians and bicyclists to travel throughout the city. However, travel projections indicated a substantial increase in the amount of car and freight traffic that would move through the area, and transportation discussions were often dominated by concerns about traffic congestion and freight traffic on residential streets. Other major issues included determining to what degree the street network would be interconnected and to what degree the bicycle and pedestrian network would be interconnected given the hilly topography and extensive natural resources of the area. Although many stakeholders generally supported an interconnected multiuse transportation system, there was conflict about how an extensive on- and off-road bicycle and pedestrian network would impact the area's buttes, watersheds, and wildlife populations.

Parkway versus Freeway. At the outset, Clackamas County planners wanted to focus discussion exclusively on a new freeway to serve as the primary through-traffic and freight connection from I-205 to U.S. 26. For these planners, a freeway would be the answer to the long-standing traffic congestion, including heavy truck traffic, along the existing east-west arterial, Highway 212. Improving this existing arterial was another option. For a group composed of local residents and active-living, environmental, and multimodal transportation advocates, a new parkway would be a more attractive, innovative, and context-sensitive approach to addressing the congestion problem. A parkway, while designed for a lower speed than a freeway, would include sidewalks and bike lanes and would permit more direct connections to the local street network than would a limited-access freeway.

First introduced to the Damascus area in the 2002 Damascus Area Design Workshop, a parkway offered the following advantages: an aesthetically pleasing design that would blend with the natural scenic surroundings, a design compatible with a new urban-type town center and surrounding community, a green transition from the urban area to open

space throughout the corridor, local access to a natural park dubbed the "Big Park along the Clackamas River," and wildlife crossings. The prior design workshop broadened the discussion of transportation choices, putting the parkway option on the table early and keeping it there during the concept-planning process. The primary questions explored during the ongoing debate concerned which of the options would most successfully provide the desired mobility (serving through traffic and connecting major activity centers within the region), which was most compatible with the community and its unique landscape, and whether and how to limit access.

Advocates of the parkway argued that it could move more traffic than a freeway and was more compatible with the surrounding natural areas. The parkway facility was envisioned as four lanes, with posted speeds of forty-five to fifty-five miles per hour, a landscaped median, significant green buffering from the urban area, and open space to the south that included a multiuse trail. A freeway would use more land, would not have the landscape elements, and would not connect to the corridor as well as a parkway would. Traffic analysis work done by Metro transportation planners and by a nongovernmental traffic expert generally supported these arguments. The transportation technical team facilitator, a Metro planner, used her position to ensure that all reasonable transportation choices were considered. "I made sure legitimate alternatives were on the table," she said. "I was able to provide a counterargument to a freeway that was based in Oregon's and Metro's planning regulations" (K. Ellis, interview, April 10, 2006). The Metro planner took a broader view of the role of the major transport facility than did Clackamas County planners, who were primarily concerned to design a facility to support industrial development in the area.

In addition, advocates and community residents promoted a landscape-based approach to the overall design of the community. The design of the parkway was to include a multiuse trail; showcase natural areas and panoramic views of the mountains, streams, and forests; and provide green, "park-like" transitions throughout the corridor. Stakeholders debated the issue of separation of local traffic from through traffic, particularly for freight and regional uses. Ultimately, the decision was to include a new limited-access parkway, because it achieved both the mobility and aesthetic goals of the community. Parkway advocates may have ultimately won the debate due more to their arguments about its design compatibility with the planned community than to a compelling mobility analysis. Cost

was not a significant factor, as the freeway and parkway were anticipated to have similar price tags.

Interconnected Street Network and Degree of Potential Connectivity. Active-living and land-use advocates, along with Metro planners and community residents, sought to plan an interconnected system that provided transportation choices for pedestrians, bicyclists, transit riders, and automobile users. Health experts, too, wanted to maximize transportation choice, particularly to facilitate residents incorporating more physical activity into their daily lives. Ultimately, their objective was a future Damascus that would provide an interconnected system that offered safe and convenient bicycle, pedestrian, and transit options to a variety of community destinations. Arguments in support of these goals were put forward strongly in order to take the transportation discussion beyond the focus on the primary arterial analyzed earlier.

Active Living by Design, 1000 Friends, and allies argued that a connected street network — not a freeway — was needed to support transportation choice and active-living opportunities. At early community forums, active-living advocates, including the state chair of the Oregon Coalition for Promoting Physical Activity, spoke with residents about the importance of a connected local system and the impact that an extensive bicycle, pedestrian, and transit network could have on health and community residents' levels of physical activity. They surveyed residents, asking questions such as, "Does your community make it easy or hard to walk or bike around Damascus?" and "How would you like to see change in Damascus promote more walking and biking?" Residents supported more sidewalks and bicycle paths that would make it easier to walk or bicycle to community destinations such as grocery stores. Advocates also discovered strong resident support to integrate an extensive off-street and trail component to the bicycle and pedestrian network.

Community members on DAC also supported an interconnected street network and did not allow the transportation conversation to be dominated by discussion of one major facility. "We don't want to become a freeway town," noted a city councilor and DAC member (D. Wescott, interview, April 19, 2006). They appealed strongly to other members of the committee to support a well-developed local transportation network instead of a freeway. Because of these combined efforts, advocates at multiple levels were successful in influencing DAC, which, in turn, gave clear mandates to the project staff and designers to map north-south and east-west arteri-

als and collectors that served the entire project area. The concept map identifies a widely distributed system of arterials and collectors that sets the framework for a connected local transportation network.

Topography and Natural Resources. Another focus of the transportation planning discussion was an off-street path and trail system that could enhance the street network and increase connectivity for walking and bicycling. The natural resources and transportation technical teams worked throughout the process to balance their efforts to achieve connectivity where feasible and to reduce, at the same time, impacts on natural resources.

As this dimension of the planning process progressed, some challenges surfaced around specific details, in particular, the potential impact that a well-connected network might have on the area's substantial natural resources. Discussion centered on roads and trails crossing streams and penetration into natural areas by off-street bicycle and pedestrian facilities. "The question is whether to cross streams or run alongside them. Each has its own constraints," noted the 1000 Friends member of DAC (M. K. McCurdy, interview, April 17, 2006). Hikers and cyclists often want to meander along streams, but natural-resource advocates prefer stream crossings to reduce impact. These competing interests were discussed by the natural-resources team. Reflecting this conflict, one community resident said, "There are a lot of natural resources in this area, but they are not pristine. We have to be able to accept some impact, there is impact already" (Dean Apostol, interview, May 11, 2006). Natural-resource planners used their expertise to identify alternatives to address these potential conflicts in the future, such as strategies to mitigate stream-crossing impact and manage storm water.

Retail Format

Right from the start, Damascus residents and many other stakeholders wanted something different from the suburban subdivisions with all-too-familiar big-box retail and traffic congestion. Instead, they envisioned a community designed to respect the buttes, wildlife habitat, intricate tributary system, and rural character. Such a city, by its very nature, called out for an alternative to the big-box design style, which usually involves very large one-story buildings, set far back from the street and surrounded by large areas devoted to parking. As a result, the idea of urban-style large-format retail emerged early on. Urban-style large-format retail usu-

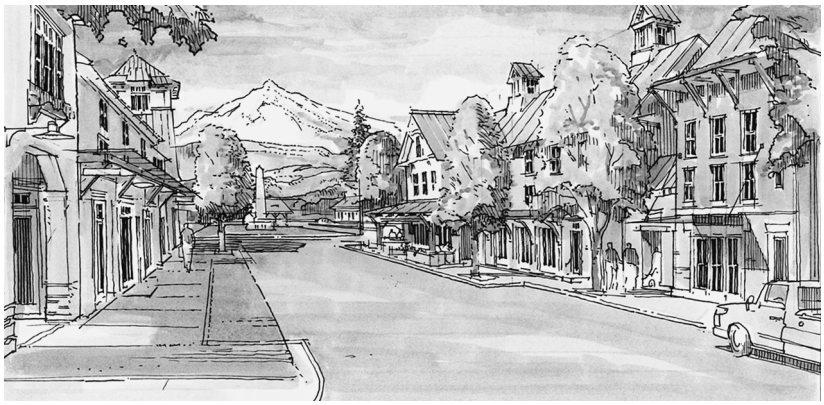

Figure 3 Future Damascus Main Street with Mount Hood on the Horizon. *Source*: James Wassell

ally involves a multiple-story building with a smaller footprint, designed to integrate well with surrounding commercial and residential buildings and supported by parking structures rather than by surface parking lots. Storefronts are oriented to the street, rather than to parking lots. There was a great deal of discussion early on about the negative impact that automobile-oriented large-format retail would have if allowed to dominate the landscape. Going beyond aesthetic concerns, active-living advocates argued that such a typically suburban mode of development would produce a landscape inhospitable to walking and bicycling and pointed out the positive attraction for pedestrians of the urban-style environment. Figure 3 shows an artist's rendering of a future Damascus Main Street with Mount Hood on the horizon.

There was some skepticism, though, about whether an alternative to traditional large-format retail would be financially feasible. Clackamas County planners, their eyes on employment growth and future tax revenues, supported the automobile-oriented large-format approach. Moreover, the county staff wanted to encourage such stores to locate in the town center because they wanted to discourage their location on land they hoped would be designated as industrial. An economics consultant hired by Clackamas County produced early design-type documents that included large-format retail as its own design type. The land-use technical team and DAC resisted. In response, the project-management team added an urban-style retail design type.

Later during the concept-planning process, the discussion shifted as a

result of a new report by the project's economic consultant. It concluded that traditional large-format retail — big box — was necessary because experience showed that these large-format stores generated the largest amount of retail revenue for an area. The consultant report and local planning staff arguments related to it gave the presence of the big-box form in the town center an air of inevitability. Skepticism resurfaced about the financial viability of urban-format retail.

Active-living advocates continued to argue in favor of using urban style, particularly in the town center, and limiting big boxes. As a result, a strategy of limiting big boxes to the town center and neighborhood centers (where only a large-format grocery store would be permitted) emerged from the land-use technical team and DAC. This strategy included design standards in the recommended implementation strategies that might mitigate potential negative impacts on the pedestrian environment. Examples of such standards are adoption by the City of Damascus of a maximum size for blocks; a requirement that buildings orient their entrances to the street; encouragement of multistory construction; and incentives for high architectural standards.

Advocates did not, however, provide information on the market potential of urban-style large-format retail to DAC members, which might have shifted perceptions of feasibility. In addition, experience-based arguments from members of the development community about feasibility and market potential of urban-format retail were not articulated during DAC meetings. Two of the three private developers who had been appointed to DAC, one with experience in commercial development and one with experience in multifamily residential development, stopped coming to DAC meetings after attending just the first couple. Those stakeholders had likely chosen to defer their active participation to the more detailed city-government stage of the planning process. Ultimately, advocates were disappointed by the outcome of the retail-format discussion, which was to limit big boxes to the town center and neighborhood centers. They were skeptical about the capacity of design standards to compensate for negative impacts on the pedestrian environment caused by large format and about whether the Damascus City Council would adopt such standards.

The resistance to urban-style large-format retail highlighted several key challenges confronting advocates. A great deal of planning and deciding still had to take place in a context in which a brand-new city would have to be concerned about its property-tax base and in which private developers would make most of the decisions about what to build, where, and when. These structural dimensions of the urban planning and development pro-

cess — local government's dependence on local property-tax resources and investment choices made by private-sector investors — underlie the challenges that surfaced during the concept-planning process generally, but especially with regard to the location and format of retail.

Parks and Schools

As the Damascus/Boring region grows to its projected population of 68,000, it is estimated that local school and park districts will need to provide seventeen additional schools and thousands of acres of parkland. Conflict arose at the Public Facilities Technical Team (PFTT) when members discussed the size and location of these school and park facilities and whether to site facilities on the final concept map. Health, land-use, transportation, and education advocates wanted to achieve an equitable distribution of schools and parks in all-residential neighborhoods, in part to facilitate more pedestrian and bicycle access to these facilities. Advocates also wanted to depict site-facility locations on the map, at least illustratively, to ensure a degree of commitment to the distribution of schools and types and scales of parks throughout the area. However, funding and land-acquisition issues surfaced as major obstacles to achieving smaller residential-area schools and parks throughout the area.

School Facility Size and Location. Ideas about school size and location within neighborhoods were presented to PFTT early in the concept-planning process. Constance Beaumont, author of "Why Johnny Can't Walk to School," spoke to a group of school-district representatives, local planning staff, Active Living by Design partners, and other members of the PFTT. "Why Johnny Can't Walk to School" is a report by the National Trust for Historic Preservation that highlights how existing school policies encourage consolidation on the urban fringe rather than the maintenance and development of smaller neighborhood schools (Beaumont and Pianca 2002). In particular, the report advocates that schools can be designed and function well on parcels of land smaller than is the current practice.

Beaumont's arguments resonated with a Centennial school-district representative. "Her presentation gave us an interesting perspective and got us thinking out of the box," said a representative from a local district. "I think more school stakeholders should hear what she has to say" (R. Larson, interview, April 20, 2006). He did acknowledge, however, that to achieve some of the objectives presented in the report, schools would have to ignore some development rules that generally exist in cities.

"Some of the designs Ms. Beaumont showed were right up to the sidewalk. This isn't allowed by current permitting," he pointed out. "Development patterns are shifting, but this concept has not yet been built into construction for new schools" (ibid.).

Although much of the advocacy for school and park location happened at PFTT meetings, members of the Land Use Technical Team also played a role in advocating for neighborhood schools and parks. Land-use, urban-design, and health advocates built support for locating schools and parks within neighborhoods by linking the issue to a broader context and discussing the creation of walkable communities in general. After the design charrette and the creation of several design alternatives, lead designers and planners began promoting the concept of developing Damascus into a series of walkable communities. Designers illustrated how a network of one-quarter-mile-radius neighborhoods would fit within the study area and spent a great deal of time at DAC and community forums articulating what elements were needed to create these environments. This strategy allowed advocates to place the issue of schools and parks within the context of a complete, livable community. It pulled the discussion down from what was often described as a "thirty-thousand-foot concept plan" to the community level, at which people could visualize what was being presented.

Ultimately, there were both successes and failures of school-related advocacy efforts. Stakeholders across the board agreed on the principle of locating schools within neighborhoods, particularly because having more students able to walk and bike could reduce traffic congestion at schools and busing costs for the district. Strong location criteria included in the implementation strategies provide guidance on locating facilities to maximize pedestrian and bike access and safety in traveling from residential neighborhoods. However, in the end, DAC approved fairly traditional larger acreages for schools, which might be more difficult to integrate within residential areas. Although district representatives were sympathetic to the idea of smaller neighborhood schools, they did not want to be required by new development codes to reduce school acreages. As one school representative said, "No one disagrees with these principles. The trick is moving from planning to reality." The reality for most school and park officials is that feasibility concerns such as funding and safety set major roadblocks to achieving some of the concept-plan objectives.

To be able to afford land in highly desirable future neighborhoods, schools would need to purchase land early, before prices rose significantly. "Our concern is that we won't get taxpayer approval for bonds to purchase

the land before it is gone," said the Centennial school-district representative (R. Larson, interview, April 20, 2006). "We're trying to be creative, but how do we reserve and set aside land for needs ten to twenty years down the road?" (ibid.). Advocates did not respond directly to these feasibility concerns or initiate discussion on alternative strategies to preserve land for schools. This was partly because school funding issues were not being decided in the conceptual-planning stage and partly because of a lack of expertise in that area. Ultimately, funding concerns dominated the decisions about school size and location.

Student safety while walking and biking to and from school and while on school grounds was a significant concern to both district representatives and community residents. Indeed, as recent articles in *Journal of Planning Literature* document (McMillan 2005; Loukaitou-Sideris 2006), these are concerns across the country. Districts in the Damascus area currently experience safety problems with schools adjacent to parks and trails and in the middle of neighborhoods. In addition, safety issues were almost always raised when advocates discussed walking and biking to school. District representatives argued that, even though students may live close enough to walk or bike, safety concerns motivated parents to drive students to school. "This has been the biggest challenge and change in the last ten years," said one district representative (R. Larson, interview, April 20, 2006). "Now parents are afraid of kid snatching, kids being offered drugs, gangs, etc. Safety is a bigger issue than transportation" (ibid.).

Although general safety concerns were raised, the conceptual level of the process did not allow for detailed discussion of the real versus perceived dangers of students walking and biking to school. In the next planning stages, it will be critical for those advocating on behalf of neighborhood schools to initiate more discussion about safety concerns and provide information on strategies to create safe routes to schools.

Siting Facilities on the Concept-Plan Map. After the design charrette, PFTT began the process of siting school and park facilities on the concept-plan map. The siting process became somewhat contentious among technical team members; they spent a great deal of time discussing alternatives. Advocates felt that depicting facilities on the map, at least illustratively, was important because it showed the general intention to achieve an equitable distribution of schools and parks throughout the neighborhoods and provided some guidance going forward to the next level of planning.

School and park districts, however, advocated strongly that facilities not be sited on the map. They felt that siting schools and parks was pre-

mature and would confuse property owners who might think their land was definitely designated as a future school or park site. There was also concern that property owners might increase the cost of land if school and park sites were identified. Two land-use planners noted, "Schools don't want you to put blue or green on a map because it's inverse condemnation for existing property owners, or they can hold you hostage for land costs" (R. Valone, interview, April 10, 2006).

Advocates sketched a type of bubble diagram—a set of circular or oblong shapes—that illustrated the relationships between the different neighborhood land uses that all together comprised a complete community, including schools and parks, without being site specific. This type of mapping was a successful compromise to the opposing views of advocates and school and park district officials engaged in the facility siting debate.

Interestingly, there were varying perceptions about the dynamics of school-district participation in the concept-planning process; the differences highlight the difficulties of integrating school-district choices into land-use planning. School-district officials were generally pleased with the nature and extent of their participation and said they had learned a great deal of value. Other stakeholders, particularly regional and local government planners, were disappointed; the school people seemed aloof and appeared unwilling to try to do things differently. Even though they are governmental agencies, participating in a public planning process with other government entities that are attempting to coordinate future public-sector actions, with regard to their size, location, and design choices, school districts are even more autonomous than private developers. Coordinating with them will continue to be a major challenge for active-living advocates.

Town-Center Location

Early in the planning process, a visionary concept arose to locate a new town center in the southeast quadrant of the study area. This new location was two miles east of the existing town center; it was proposed for that location in order to take advantage of the sweeping views of Mount Hood and the largely undeveloped acreage near the site of the present-day Damascus Elementary School. Curiously, there seemed to be no great love for the existing old town center of rural Damascus that was located at the confluence of two congested roads (Highway 212 and Foster Road). Perhaps the lack of any real sentiment for the existing town center was because it was already developed with a less-than-desirable small collec-

tion of fast-food and grocery-anchor uses with a sea of parking around each. "The only way to get a town center is to start fresh, overlaying on something partially constructed would be difficult," declared developer Ernie Platt (interview, April 18, 2006). In addition, residents associated the existing town center with traffic congestion and a frustrating commute in and out of town.

Instead, local residents envisioned a new town center that took advantage of the magnificent views of hills, mountains, and rivers. This vision arose and took hold despite the fact that getting the necessary infrastructure (sewer, in particular) to this location would likely delay development for several years and would be extremely costly. Another reason local residents preferred this new location was because they were concerned that this prime location, situated close to the Clackamas River, might otherwise be zoned for industrial uses because sites there would have good access to the proposed parkway or freeway. Land with great views and the best potential access, in the eyes of community residents, would be wasted if it were zoned industrial; industry was seen as being more appropriately located elsewhere.

Because there was no significant opposition to developing a new town center, most of the debate over the location of the town center focused on where exactly to position the town center in relation to Highway 212—a major arterial traveling east-west throughout the study area. Three options were debated: (1) placing the town center entirely to the north of the major arterial; (2) placing the town center entirely to the south of the major arterial; or (3) bisecting the town center with the major arterial, essentially creating north and south sections of the central business district. The advantages and disadvantages were discussed at length at the land-use technical team and DAC. The primary advantages of the northern location were greater connectivity with the rest of the new city and the coherence of a consolidated urban town center. The disadvantage was that it did not utilize the undeveloped land to the south with the best views of the mountain. The primary advantages of the southern option were that it maximized the magnificent mountain views and utilized undeveloped acreage for the town center. The disadvantages were that the majority of the land was outside the current urban-growth boundary (and thus could not be developed as urban land at that time) and was less proximate to the rest of the city. The third option represented a compromise between options one and two. It had the advantages of partially connecting the center to the rest of the city, partially taking advantage of mountain views, and having about one-half of the land already inside the urban-growth boundary.

Active-living advocates at the technical-team levels, especially 1000 Friends, fought vigorously to prevent the third option. They argued strongly in favor of locating the town center north of the arterial. This option had the most potential for connectivity to neighborhoods, the land was already inside the urban-growth boundary, there would be more opportunity for transit-supportive development, and it would not impact viable agricultural production on the south side.

Ultimately, however, the third option was selected for the town center location by DAC, even though the project-coordinating technical team had recommended the first option. DAC members, led by community residents, thought that bisecting the town center would both provide connectivity to the rest of the city and take advantage of views. Support for the straddling approach was linked, as in the case of large-format retail in the town center, to the use of design standards to ensure that the arterial in question would not be a barrier to connecting the two halves. As the 1000 Friends representative on DAC noted, "Certain elements have to be in place to make it work. This means having both a physical and visual connection across Highway 212 and making sure the area doesn't shut down at 5:00 p.m." (M. K. McCurdy, interview, April 17, 2006). She and other advocates stressed that future decisions would need to ensure that there are uses and attractions in addition to civic buildings and that designs should address safety and security at all hours.

There was not detailed discussion by DAC, though, of the capacity of design approaches to prevent the arterial from being a barrier to an integrated town center. Active-living advocates were skeptical; they anticipated several negative consequences for active living, among them (1) a bisected town center might make it significantly more difficult to achieve a close-knit mix of uses and a dense urban form to support active living; (2) the arterial might be a barrier to laying out a complete interconnected street network; (3) automobile trips will likely increase, and pedestrian and bicycle trips will likely decrease as a result of the physical barrier; (4) safety hazards for pedestrian and bicyclers will increase; and (5) environmental-health issues will increase due to increased air pollution resulting from increased automobile trips. Given the support among community residents for the option chosen, the presence of a bisected town center on the concept-plan map raises strategic questions for active-living advocates regarding their approach to the issue during the next planning phases.

Lessons for Advocates

In this section, we draw together lessons that emerged from the experience of concept planning in the Damascus area. Advocates here encountered several issues that we think would surface in similar planning contexts — urbanizing the rural-urban fringe — throughout the United States. These include local economic development and related tax-base concerns; school-district planning autonomy; the need for advocates to have the capacity to present alternatives to the usual financial and design approaches taken by private- and public-sector investors; and the need for advocates to intervene early and often throughout all stages of planning and implementation processes. Preparing a concept plan as a prelude to producing detailed, specific local plans and ordinances, however, is an unusual aspect of the fringe-urbanization dynamic. Metro and local jurisdictions in the Portland area have done it a few times. As growth-management techniques like the urban-growth boundaries that are required in Oregon are adopted by other states, metropolitan regions, and local governments, concept plans might be mandated elsewhere as well.

Since local governments across the country depend on local sources of tax revenue and compete with one another to attract and retain revenue-generating land uses, the tendency to stick with the usual approaches assumed to succeed in this competition is deeply rooted. It surfaced here in the case of large-format retail. Advocates need to position themselves to offer evidence, both visual and financial, that an alternative to traditional large-format retail, especially in otherwise pedestrian-oriented town centers, is available and feasible. We suggest that advocates enlist the involvement of private developers and business owners and present information from the growing body of evidence that urban-style large format can compete financially. Had advocates done so in this case, the concept plan might have incorporated elements that enhanced the likelihood that the pedestrian character of the proposed town center and neighborhood centers would be strengthened.

Similarly, in the case of schools and parks, active-living advocates need to anticipate the land-use, design, safety, and, especially, financial concerns that representatives of those agencies will bring to planning processes. Providers of those services and facilities face the same pressures in growing metropolitan regions throughout the country. By placing the discussion of schools and parks within the broader context of a complete community — a community that includes not only housing, but also job-generating commercial and industrial land uses and the services

and facilities necessary to support the people living and working in the community — advocates can significantly strengthen the case for locating facilities within walking and biking distance of residential neighborhoods. However, advocates need to go beyond establishing those linkages to provide information about implementation approaches, addressing the issues raised by the providers. In addition, when safety concerns dominate discussions about walkable, bikeable school sites, advocates must be prepared to provide accurate local and national data to distinguish between perceived and actual safety statistics.

Two other issues in this planning process — town-center location and transportation-network design — reflect tensions between land use and transportation choices that are occurring in growing communities throughout the United States. In the case of transportation-system design, advocates need to present visual and data-based arguments to illustrate how poorly connected street networks negatively impact pedestrian and bicycle travel. In addition, the potential conflicts between well-connected transportation facilities and natural features such as streams need to be identified early in the planning process. In the case of the town-center location and the bisecting transportation route, advocates need to be prepared with case studies of business districts split by arterials to inform participants of real-world examples of where such location decisions succeeded or failed and, more important, why.

Much detailed work remains for state and local planners; elected officials will make decisions about comprehensive plans and implementation ordinances. As we concluded in the section that analyzed its land-use, transportation, and design aspects, the concept plan creates a context that will be conducive to the emergence of a community built for active living. The transport-network–related conflict resolutions should also contribute to such a community. Partly because of the advocates' efforts, state and local planners will attempt to find design solutions to challenges identified by them in the other conflict situations. State and local transportation planners will try to design the arterial that is proposed to bisect the town center in order to minimize its impact on pedestrian and bicycle travel. Local land-use planners will attempt to write ordinances that will minimize the negative impacts of large-format retail on the attractiveness of the pedestrian environment. State and local planners will try to protect water quality while providing connected street and trail networks. Because so much detailed work remains to be done as the concept plan is superseded by local comprehensive plans and implementing ordinances, the major challenge that advocates face is to maintain the momentum

they have helped to create, to continue to push the envelope. Some DAC members are now elected officials in the new City of Damascus, and other community residents participated actively in the concept-planning process. Many residents were energized by their engagement and are committed to implementing the plan. Advocates should work with these residents, especially as they deal with land developers, who will play a much more active role in the process of transformation.

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