amount of taxes paid on new development during that period could total \$6 million at the end of the decade. The years after 'build-out' would each generate approximately \$1.5 million in taxes, amounting to \$15 million over the following 10 years, adding up to a total of \$21 million in tax revenues to cover the original \$10 million public investment.

Additional funds to help cover the initial outlay could also be sought from TEA-21 and TEA-3 federal funds (the successors to the ISTEA legislation described in Chapter 5) for pedestrian-friendly transportation improvements.

Affordable Housing

The primary concern expressed during the entire charrette process by the existing residents was the issue of housing affordability and their fears of being displaced by gentrifying newcomers and upscale development. This was not the premise of the proposed master plan. While demolition and redevelopment would occur in several areas, it was our strong intention that affordable housing should remain a primary component of the neighborhood. To assist this objective we offered the following three observations.

First, good quality design should not be sacrificed for affordability. Our dwellings are a mirror of ourselves and are therefore linked to our individual selfesteem and community pride. We can build less expensively, but not at the cost of good architecture and craftsmanship. If housing is poorly designed it will always remain 'affordable' because it is unloved and unlovely. Such was the case with the substandard housing present in the neighborhood at the time of the charrette. This is not the kind of affordability that nurtures community, and simply to build new homes that are cheap because they are badly designed and badly built is a short-term, shortsighted approach. By contrast, affordable housing should be spread throughout the neighborhood and should be indistinguishable from market-rate housing (see Figure 6.35 Affordable Housing in Davidson, NC).

Second, long-term affordability can be assured only through direct intervention in the marketplace by governments and nonprofit agencies, often in partnership. We urged the city of Greenville to make a commitment to build housing efficiently, and to participate in maintaining long-term affordability. This would ensure that the city's service workers, teachers, and police officers have the opportunity to live in the neighborhoods they serve, along with senior citizens who can 'age in place'. Using a variety of techniques, including tax credits, housing vouchers and land trusts, new moderately priced homes can be made affordable to people whose need is urgent. Communities can also leverage federal and state dollars to provide the infrastructure of streets, utilities, trees and sidewalks, thus reducing the direct cost of the home because these costs don't have to be passed on to the purchaser.

Third, in addition to the usual sources of funds and action for affordable housing such as Community Development Block Grants and HOME funds (both from the US Department of Housing and Urban Development) along with volunteer organizations like Habitat for Humanity, we specifically recommended that the city and its partners investigate Community Land Trusts (CLTs).

A land trust is a mechanism for balancing community equity and individual ownership by separating the cost of land from the resale value of a privately owned home. A separate entity, typically a nonprofit housing organization, owns title to the land underneath a house, similar to an American condominium arrangement or a British leasehold. In this instance, the land is not included in the original sale or resale cost of the home, thereby reducing the overall housing costs by 20 to 25 percent. CLTs help communities to:

- Gain local control over land and reduce absentee ownership;
- Promote resident ownership and control of housing;
- Keep housing affordable for future residents;
- Capture the value of public investment in land for long-term community benefit; and
- Build a strong base for community action.

Community Land Trusts can acquire vacant land and develop housing or other structures on it; at other times, CLTs may acquire land and buildings together. In both cases, CLTs treat land and buildings differently. The land is held permanently by the land trust so that it will benefit the community: buildings (known as improvements) can be owned by those who use them. When a CLT sells homes, it leases the underlying land to the homeowners through a longterm (usually 99-year) renewable lease, which gives the residents and their descendants the right to use the land for as long as they wish to live there. When a CLT homeowner decides to move out of his or her home, he or she can sell it. However, the land lease requires that the home be sold either back to the CLT or to another low-income household for an affordable price. As the land value is not part of the house price, this means that the home remains affordable for the next homeowner. The affordable housing illustrated in Figure 6.35 was developed by this kind of organization.

Implementation Project Schedule

As part of the charrette report, we created a detailed schedule for implementing projects in priority over a period of 10-20 years, the anticipated build-out of the whole neighborhood. The charrette was completed in August 2001, just a few days before the traumatic events of September 11, 2001, which displaced all our estimates. Like most of America, the city of Greenville and the local community were thrown into a state of shock, and in the economic slump exacerbated by the attack on the World Trade Center, little work was done on neighborhood revitalization projects for several months. During that time, the developer of the Ramada Inn project pulled out, putting the Neighborhood Center on hold and dealing a blow to the heart of the scheme. Without this impetus, negotiations between city officials and highway engineers on the redesign of Church Street continued slowly.

However, the master plan was adopted by the city council in January 2003, and the zoning code implemented on a case-by-case basis. In the spring of 2003, the city authorities decided on a bold demonstration project to reinforce their commitment to the neighborhood and to the master plan. For this illustration, city officials chose the refurbishment of the Springer Street Tunnel, illustrated in its former dark and dank state in Figure 10.3. Plate 49 illustrates our redesign, with a new stairway and rearranged traffic flow.

We recommended improving bicycle and pedestrian access through the tunnel by converting one side to one-way traffic that would yield to oncoming vehicles as befits a slow-speed neighborhood street. This left the other side exclusively for cyclists and pedestrians. We suggested that a light well be formed in the median of Church Street to allow natural light to flood into the tunnel midway along its length. Combined with new lighting inside and around the tunnel entrances, this would go a long way to offsetting the forbidding character of the space. Springer Street would be further enhanced by new wide stairways leading up to Church Street on either side. This improves accessibility, opens up the space and provides an opportunity for civic design and public art to enhance the neighborhood.

Design-based Zoning Ordinance Tailored to the Master Plan

Because the master plan is a realistic build-out study rather than a firm development proposal, it is necessary to enact a new zoning code tied to the specific design principles of the plan in order to guide actual development projects as they are prepared. Our Neighborhood Code was written to provide for the development of property as shown in the master plan, but it has the inherent flexibility to adapt to future market conditions and more site-specific studies. In addition, the code provides predictability and assurance to potential investors that any future development will be consistent with the master plan.

The Code is implemented by a new Zoning District entitled 'Haynie-Sirrine Neighborhood' with four sub-zones that regulate the form and intensity of development. These four categories are defined as Neighborhood Edge (NE), Neighborhood General (NG), Neighborhood Center (NC) and University Ridge Village Center (URVC). These are geographic areas defined according to their urban character rather than their use, and are mapped directly over the urban design master plan which forms the basic frame of reference for design and functional criteria (see Plate 50). This type of zoning plan is often referred to as a 'regulating plan', so-called because it regulates development in accordance with the urban design master plan. Our zoning areas that classify urban character are similar in concept to the urban zones of the 'transect', an environmental ordering system conceptualized as a long section through an idealized landscape from rural edge to city center (DPZ, 2002: page A.4.1). Derived in the late 1990s by Duany and Plater-Zyberk, this transect in turn owes a debt to the classic valley section of Scottish geographer Patrick Geddes (1854-1932), which set the various sectors of urbanization in their regional geographic context.

The principles of design-based zoning are very simple. The concept is based on a series of typologies classifying the urban variables as follows:

- 1. Type of urban area (e.g. Neighborhood Center, Neighborhood Edge, etc.) This urban typology dealing with overall character becomes the defining zoning classification.
- 2. Building type (e.g. Detached House, Civic Building, etc.)
- 3. Open space types (e.g. Greenway, Park, Square, etc.)
- 4. Street types (e.g. Boulevard, Local Street, Parkside Drive, etc.)