

restaurants. Large, car-dependent shopping centers would be counterproductive to the transit efficiencies gained by walk-up ridership from offices and housing and we recommended firmly that nothing larger than a neighborhood grocery store should be permitted in this location.

Within 1/4-mile radius of the train station, an area of 125 acres (50 hectares), we planned 635 residential units, workspace for over 1000 employees and a park-and-ride lot with 1000 parking spaces. Within 1/2-mile of the train station, an area of 400 acres (160 hectares) these figures increased to 887 residential units and workspace for nearly 3000 new employees, not counting the existing hospital. For this kind of hybrid development to work, it's important that connections between the uses are convenient and attractive. In this particular example, a strong pedestrian and bicycle connection needed to be made between the station, the urban village and the medical center. To achieve this, we redesigned the east–west connecting street (Fairview Road) as an urban boulevard with four travel lanes, two outside parallel parking lanes, kerb and gutter, street trees and wide sidewalks. The plan illustrated how other street connections could be established as a loose grid as development expands.

Rail crossings are an important issue with the kind of high-speed commuter rail service envisaged on this line. In principle, at-grade crossings have to be kept to a minimum, and we limited them to three within the plan area plus one grade-separated crossing where an important east–west street and a creek could pass underneath the rail tracks and Highway 115. Two of the three at-grade crossings occur within the 1/2 mile radius of the transit village, and support easy pedestrian and bicycle access between the new village and the existing nucleus of Mount Mourne.

Focusing the development of the urban village around one of these at-grade crossings, the intersection of Fairview Road and Highway 115, the natural junction of north–south and east–west traffic, enabled us to build on the rich heritage of the Mount Mourne historic settlement. The prominence of the existing churches, school, post office and fire station served to anchor this village and gave it the civic elements necessary to produce a viable mixed-use center for the southern areas of Mooresville. To support this evolution, we found a suitable site for a local grocery store on Highway 115, just on the edge of the five-minute walking radius from the train station.

One of the factors that makes this plan unique is the presence of a large medical facility in its core, and



Figure 9.2 Morehead Street, Charlotte, NC. This street served as a model for the new and upgraded streets in the areas around the hospital. Offices, apartments, churches, shops and medical facilities all line the street to create a well-balanced and attractive public realm. Parking is screened behind buildings.

we wanted the hospital to integrate itself into the community and not remain an island unto itself. For this to happen it was critical that new buildings engage the streets; not only must they provide convenient services for hospital staff, they must also create spaces along the streets that are attractive places to walk in their own right. Our model for this kind of environment was a street in Charlotte near a major hospital that featured disciplined street tree plantings, wide sidewalks and a mixture of buildings with different uses, all facing the street (see Figure 9.2).

The Hospital District (See Plate 34)

We wrote the following two paragraphs in the 2000 project report:

Currently, the hospital provides a large amount of leasable office space to its physicians and the building was designed with the ability to rise an additional story. Still, there is clearly a demand for off-site medical practices and a number of other complimentary professional services associated with a hospital. In short, areas surrounding hospitals have the greatest potential in most markets to be viable Class A office locations. With the added premium of its proximity to the proposed commuter transit station, this area has the potential to be the largest employment centre in the North Transit Corridor.

(However) the propensity to overbuild this area must be tempered with other long-term needs including convenience retail (banks, restaurants, dry cleaners, convenience goods) and more importantly, residential development. The failure of most office parks in today's marketplace is their disconnection from these quality-of-life enhancements. The requirement that every employee own a car and commute to work serves only as an impediment to attracting employees, particularly in this low unemployment market. The suburban office market, particularly in the Charlotte Region, is now taking steps to offer transit service to . . . buildings, simply to attract new employees who either do not own a car or are disillusioned with the commuting traffic.

In 2001, the Lowes corporation recognized these same locational advantages, and with our master plan in place, Mooresville was able to forge agreements quickly for the relocation of this company's national headquarters. As a result of this major economic boost to the town, we and other consultants revisited the master plan in 2001, to integrate the very large facility (more extensive than we had imagined in our original work) into the area. Plate 35 illustrates the revised master plan.

Although the architecture of the new offices was attractive (see Figure 9.3) the new corporate site layout was not a particularly urban-friendly form. However, we were able to avoid some of the issues of segregated campus design that were so problematic in the CORE study discussed in Chapter 7. We relocated the train station a block south of its original location to bring it within half-a-mile of the center of the new office complex, and redesigned the streets and block pattern between the campus and the hospital on a more formal, urban layout, especially to provide a new north-south street that linked the campus with the hospital and areas to the north. We relocated the convenience retail stores onto the new streets that linked the corporate headquarters with the hospital, and we reduced the amount of parking at the station. With 8000 new employees working at the Lowes headquarters, we felt this area would increasingly become a destination as much as a point of departure, and the master plan for the corporate campus also included extensive car parking.

While the emphasis of property within the 1/2-mile radius of the train station was still primarily office, we increased the residential presence in the redesigned village center in the form of apartments, townhomes,



Figure 9.3 The new Lowes Corporate Headquarters under construction, 2003, Calloway Johnson Moore and West, architects. This refreshingly contemporary design is free from the needless neoclassical ornamentation so beloved by other North Carolina architects.

and mixed-use buildings with flats above the shops. Residential development in these locations will help to boost transit ridership and provide places for employees to live near their workplace. We recommended that Mooresville be proactive in ensuring adequate affordable housing, and in this location we recommended that the town require developers to build a certain number of units affordable to citizens earning the equivalent of the (relatively low) median income for the Mooresville area. We did not specify a number, but in practice 10–15 percent of the total units is usually a workable minimum.

Within this hospital and employment district, two churches inside the half-mile radius from the train station serve both as sanctuaries of tranquility and connections to the natural environment. One of the most significant undisturbed woodlands in this master plan area surrounds a stream that runs behind the churches and the hospital on their north side. We included this as part of a continuous greenway traversing the site from east to northwest, connecting the neighborhoods to the north while at the same time serving as a natural transition from the transit village to new lower density neighborhoods on the northern acreage of the site. We noted that to comply with watershed protection requirements, this existing vegetation should be vigorously preserved.

The Interstate and 'Hospital West' (see Plate 36)

Part of the traffic study that preceded the charrette proposed the innovative idea of converting the