HIGHWAY DESIGN IN THE NEW MILLENNIUM

Throughout the twentieth century, we have entertained visions of the new millenium. Many of those visions have included glittering cities of glass and steel with aerodynamic cars and monorails that move to and from their destinations efficiently, effortlessly, and above all, stylishly. Although these visions have varied greatly over the decades, they have shared a common theme: The built environment would be radically different by the turn of the millennium. Highway design would be based on the latest technology, and this technology would strive to make any community a better place to live. Now, at the beginning of the millenium, we have some idea of how things will look in the early decades of 2000. Although much work is being done to develop fuel sources that are more environmentally responsible, currently the use of these alternative fuels is not widespread. It is clear that despite the extraordinary advances in technology, our preferred method of getting about is still the rubber-tired, ground-hugging, gasoline-burning automobile. Today, revolutionary technology in transportation refers not to hover packs, but to on-board Global Positioning Systems, transponder readers, and Internet sites with views of traffic in real time.

There is a certain comfort in continuing to prefer the conventional automobile. From a design standpoint, we can use the experience gained in half a century of postwar growth and expansion. Without the pressure to create a system for an entirely new mode of transportation, we can now refine the design of existing highways. This means that we can look for ways to improve our highways and make them a more attractive version of our predecessors' vision. We can institute the refinements necessary to make a highway a better neighbor, a more efficient transportation system, and a more positive element in the community.

There is a clear trend across the country toward the maximum use of landscaping in highway design. Examples include the Downtown Toll Road in Richmond, Virginia, IH-95 in south Florida, and in North Texas,

the North Central Expressway. In the North Central Expressway project, special planter boxes were built into the expressway walls to provide for vegetation in an otherwise vertical wall. The Dallas North Tollway features vines planted along the edge of the frontage road walls to create a wall of greenery. As our cities continue to expand into previously undeveloped areas, it becomes increasingly important to replace the greenery that is being lost. This "greening" of the roadways has finally become a broad based concern for the welfare of the general public. The new LBJ Corridor will be an appropriate project for creating a refined highway that requires a minimum of physical resources and encourages environmentally responsible maintenance, thus mitigating the highway's environmental impact.

With a thoughtful approach, highways can become an integral part of a community and not merely a division between districts. Highways are created to provide an efficient means of traveling from place to place with minimal disruption to neighborhood streets. But we would like the LBJ Corridor to go beyond that and be a positive part of the community. This can be accomplished with pedestrian links across the roadway, noise walls that protect residents from excessive freeway noise, and land-scaping that softens the hard edges of the highway.

The rebuilding of the LBJ Corridor will constitute the first monumental highway project of the new century in North Texas. The now completed North Central Expressway raised the bar in highway refinement. In North Texas, the public now has higher expectations--an attractively designed highway has become the norm.   It is important to TxDOT, concerning the LBJ Corridor, to respond to this new level of design awareness, and to create a refined highway for the new millennium that will be built with a corresponding level of environmental responsibility in addition to faster, safer, and more efficient ribbons of attractive concrete.