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Pigeon Forge Pedestrian Study

Dawn M. Foster

University of Tennessee - Knoxville

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To the Graduate Council:

I am submitting herewith a thesis written by Dawn M. Foster entitled "Pigeon Forge Pedestrian Study." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Architecture.

James A. Spencer, Major Professor

We have read this thesis and recommend its acceptance:

Fred Wegmann, David Patterson

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

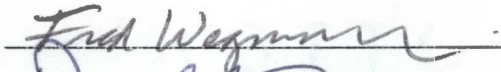
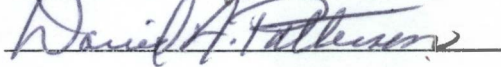
(Original signatures are on file with official student records.)

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James A. Spencer, Major Professor

We have read this thesis
and recommend its acceptance:

Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

PIGEON FORGE PEDESTRIAN STUDY

**A Thesis
Presented for the Master of Science
Degree
The University of Tennessee, Knoxville**

**Dawn-Michelle Foster
August 1999**

DEDICATION

**I would like to dedicate this thesis to my husband,
Dr. James W. Foster and our children, Jason, Allyson, Alexis, and Camera.**

**Thanks for your support and encouragement
during my graduate school years.**

ACKNOWLEDGMENTS

I would like to recognize a few people that made my experiences at the University of Tennessee so rewarding. First of all, I would like to thank three gentlemen whom I considered as mentors and who were able to serve as my thesis committee: Professor James A. Spencer, Dr. Fred Wegmann and Dr. David Patterson. With their guidance and professional expertise I was able to produce a thesis of the highest quality.

I would also like to thank my colleagues at Wilbur Smith Associates, especially Hollis Loveday, who provided his assistance and gave me the opportunity to further my career while working.

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CHAPTER 1

INTRODUCTION

Since the development of the National Park Service in 1916, communities near national parks have experienced more than just their share of tourists in the area. Overtime, these gateway communities have taken on their share of economic development to meet the growing needs of vacationers. Tourism has since become a major industry that promotes economic growth and vitality to particular communities connected with nearby attractions. Many communities have become successful tourism sites, although continuing success depends on more economic development and improvement in areas where the city needs enhancement.

Located in East Tennessee's Sevier County, Pigeon Forge, Tennessee is a popular gateway into The Great Smoky Mountains National Park. The influx of visitors to the area has changed the once ordinary homespun community into a shopping mecca as well as the home of many country music theaters and the Dollywood Theme Park.

Pigeon Forge is ideally situated between the Great Smoky Mountains National Park and Interstate 40, a major east-west route. State Route 66 is the principal route that brings motorists from Interstate 40 into Pigeon Forge. The location of these major routes allows for quick access into the city. Although, motorists will

drive through neighboring Sevierville before reaching Pigeon Forge's city limits, most tourists treat both communities as one.

Pigeon Forge's locale, in addition to its cultural setting, adds greatly to its overall development as a gateway community and a major tourist destination center. Yearly Pigeon Forge attracts millions of visitors anxious to tour the attractions of the city as well as witness the picturesque views of the National Park.

Bringing tourism into the area has created some changes to this small-town life. Hundreds of retail shops and amusement/recreational facilities line Pigeon Forge's main corridor, U.S. 441, popularly known as "The Parkway". The city tackles the burdens of continuous traffic congestion, in addition to, crowds of pedestrians confronting busy intersections everyday. Moreover, the city has a resident population of approximately 3,300 but it has to provide for additional 70,000 visitors on peak tourists day (1). City leaders see the negative impacts created with the overcrowding of tourists visits that sometimes overtakes the capacity of local facilities and infrastructure. Visitors see the problems only while visiting, but local residents cope with the stress of overcrowding all the time. These residents have characterized Pigeon Forge as a tourist attraction with massive traffic congestion on top of a large number of pedestrians that consistently roam the area. Therefore, local leaders along with transportation engineers and planners must provide additional services to promote an effective transportation system that will safely accommodate the needs of the pedestrians.

In the past, early cities were structured upon the convenience and comfort of the pedestrian (2). Open spaces designed with plazas equipped with gallerias, market places and wide sidewalks were early evidence of early planners' concepts for human interaction and communication of people. Since, the introduction of the automobile has caused a drastic restructuring of urban form. The conflict of man and automobile has created an unbalanced competition for urban space. Areas where the two are forced to intermingle pose some problems to a once efficient transportation system. The characteristics of these travel modes influence the operating conditions and safety aspects of roadways, particularly intersections, a mutual area where both pedestrians and motorist are apt to meet.

Pigeon Forge continues to grow (physically and economically) as a tourist destination. Main attractions including commercial, retail, music theaters, hotel/motel, camping and recreational areas, and amusement facilities line the Parkway. The intensity and diversity of these neighboring attractions result in significant pedestrian activity along the city's main corridor.

Local officials continually strive for solutions to their transportation woes. Since tourism has become a big market industry for the city, most city affairs address the types of attractions that keep visitors coming back. Moreover, the transportation system in Pigeon Forge has substantial impact on the marketability of the city. Many visitors utilizing the Parkway to the Great Smoky

Mountains National Park succumb to long traffic delays before reaching their final destination when commingled with the city's tourist traffic. Providing more pedestrian amenities along the Parkway may attract people to walk or use an alternate source other than their private automobile. More pedestrian features may initiate a whole new concept in alleviating some traffic problems. The design and implementation of safe and efficient pedestrian facilities may be the advantage that may keep tourists coming back.

Amidst the tourism boom, Pigeon Forge has enhanced its infrastructure, including widened roadways and additional entertainment attractions to accommodate the thousands of tourists that it receives annually. Among these improvements, city officials must also devise a plan to create more pedestrian facilities in the area. The accumulation of traffic at many major intersections impedes pedestrian movements resulting in a lack of continuity of pedestrian linkages. It is understood that the burden of the city's traffic congestion cannot be relieved until alternate modes of transportation are enforced. Earlier practices of transportation engineering always addressed the combination of automobiles and pedestrians on city streets in preference of motorists. Today, transportation engineers and planners are focusing on the needs of the pedestrian, as part of the design process, to formulate recommendations for improving the city's pedestrian circulation system. Issues identifying the interaction between pedestrians and motorists will be addressed to define those characteristics that influence the efficiency of these travel modes at Pigeon

Forge's busiest intersections. However, this study will not provide design specifications of pedestrian facilities. It addresses only planning and functional concepts.

Study Area

Figure 1 shows a layout of the procedures that will be followed throughout the report. The flow chart identifies several steps taken to formulate a thorough report.

Figure 2 identifies the Study Area. Pigeon Forge has a wide array of pedestrian generators including retail shopping malls, motel/hotels, restaurants, live-theater entertainment, and recreational facilities resulting in steady pedestrian activity, particularly during peak tourist seasons. Many businesses are located along major traffic corridors that provide accessibility to these pedestrian generators. However, the continuing curb cuts providing automobile access into these establishments have hindered the continuity of pedestrian flow along the city's sidewalks.

In 1993, the city of Pigeon Forge, in conjunction with adjoining cities of Sevierville, Gatlinburg, Pittman Center, Sevier County and the National Park Service had formed the Sevier County Transportation Board consisting of a panel of local governments to discuss, develop, and coordinate plans for efficient transportation services. The forum's main objective was to develop a ten year

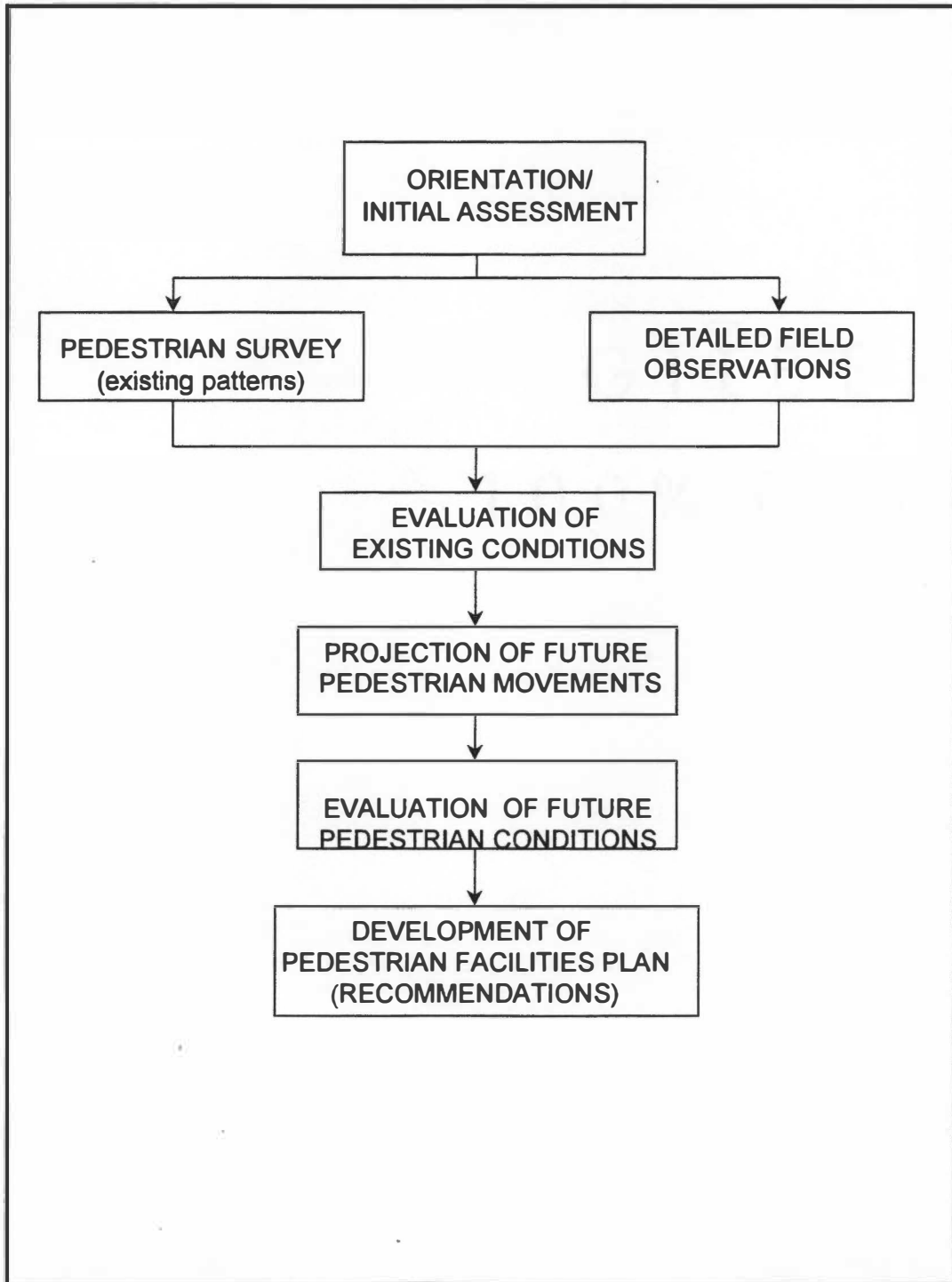


Figure 1. Study Design

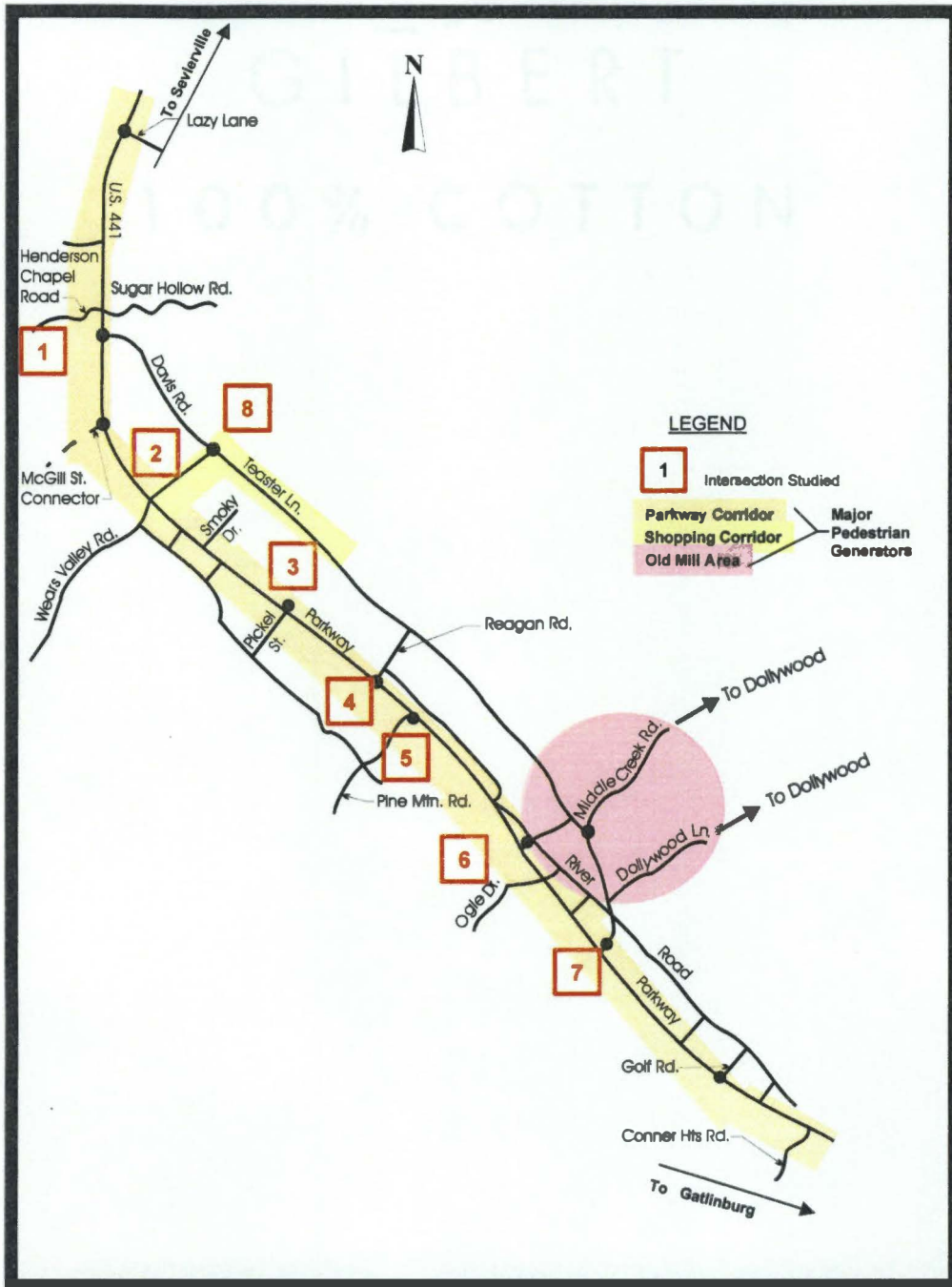


Figure 2. Study Area

plan emphasizing transportation concerns on a countywide basis and to ensure that transportation services are provided in a coordinated and consistent manner between all jurisdictions involved (3). Coordinated efforts between these government entities help to prioritize issues when establishing an efficient transportation system.

Five years later, Pigeon Forge officials, including its city manager, traffic engineer, police department, and public work officials continue to target goals and objectives to improve the city's transportation system (4). The increase of tourist activity has produced extensive growth and development of new businesses indicating significant demands on Pigeon Forge's existing transportation infrastructure.

Comments from Pigeon Forge's public officials stressed traffic congestion as the most significant transportation issue followed by inadequate street network, inadequate parking, poor pedestrian facilities, and poor signal timing. Officials conceded that pedestrian and transit facilities could be the essential tool to help mitigate existing and future traffic congestion.

CHAPTER 2

EXISTING PEDESTRIAN ENVIRONMENT

In order to make decisions about changing the balance of space to improve pedestrian flow, it is important to evaluate Pigeon Forge's existing street system and the setting in which it is located. A thorough field survey was performed to demonstrate the importance of clearly identifying pedestrian problems within the existing street network and delineating clear objectives for making balanced improvements.

Roadway Geometry and Traffic Signals

U.S. 441, nicknamed the Parkway, is the principal route for visitors when in Pigeon Forge. During peak tourist season, traffic flows sluggishly along the six lane divided facility, despite the 35 mph speed limit. A 78 foot grass median divides the northbound and southbound lanes of the Parkway, and sometimes serves as a refuge for pedestrians while crossing such a wide facility. A multitudinous assortment of land uses is lined in succession along both sides of this busy arterial. The combination of hotels/motels, restaurants, amusement facilities, retail shopping outlets, dinner theaters, businesses, and views of The Great Smoky Mountains National Park are main attractions that identify Pigeon Forge as a major tourist destination. A total of sixteen locations were analyzed to determine the amount of pedestrian activity existing in the area. Eight of these intersections consist of signalized and unsignalized intersections along the

Parkway including Davis Road, Wears Valley Road/ Davis Road, Red Roof Mall Entrance, Reagan Road, Pine Mountain Road, Lower Middle Creek Road, Dollywood Lane and Golf Drive. The intersection of Teaster Lane at Davis Road runs parallel to the Parkway and is a major access to the Belz Factory Outlet Mall. Off the Parkway, along Lower Middle Creek Road is the Old Mill Area, a historic area that is frequently visited by tourists. This report will investigate two unsignalized intersections on Lower Middle Creek Road, Old Mill Street and River Road. One crosswalk location on Lower Middle Creek Road is also included in the study. Another location studied was the crossing between the Tanger Factory Outlet and the Belz Factory Outlet Annex on Davis Road.

The locations of traffic signals in the study area are depicted in Figure 3. The average distance between the signals on the Parkway is 2270 feet, approximately one-half mile. The distance between Dollywood Lane and Middle Creek Road is approximately 3,168 feet, nearly two thousand feet more than the $\frac{1}{4}$ mile distance recommended for a comfortable walk (5). The spacing between four pairs of traffic signals is over one-half mile. However, two pairs of traffic signals are only 800 feet apart. While the existing traffic signals are certainly a help to pedestrians crossing the street, they cannot realistically be located frequently enough to accommodate pedestrians everywhere they want to cross.

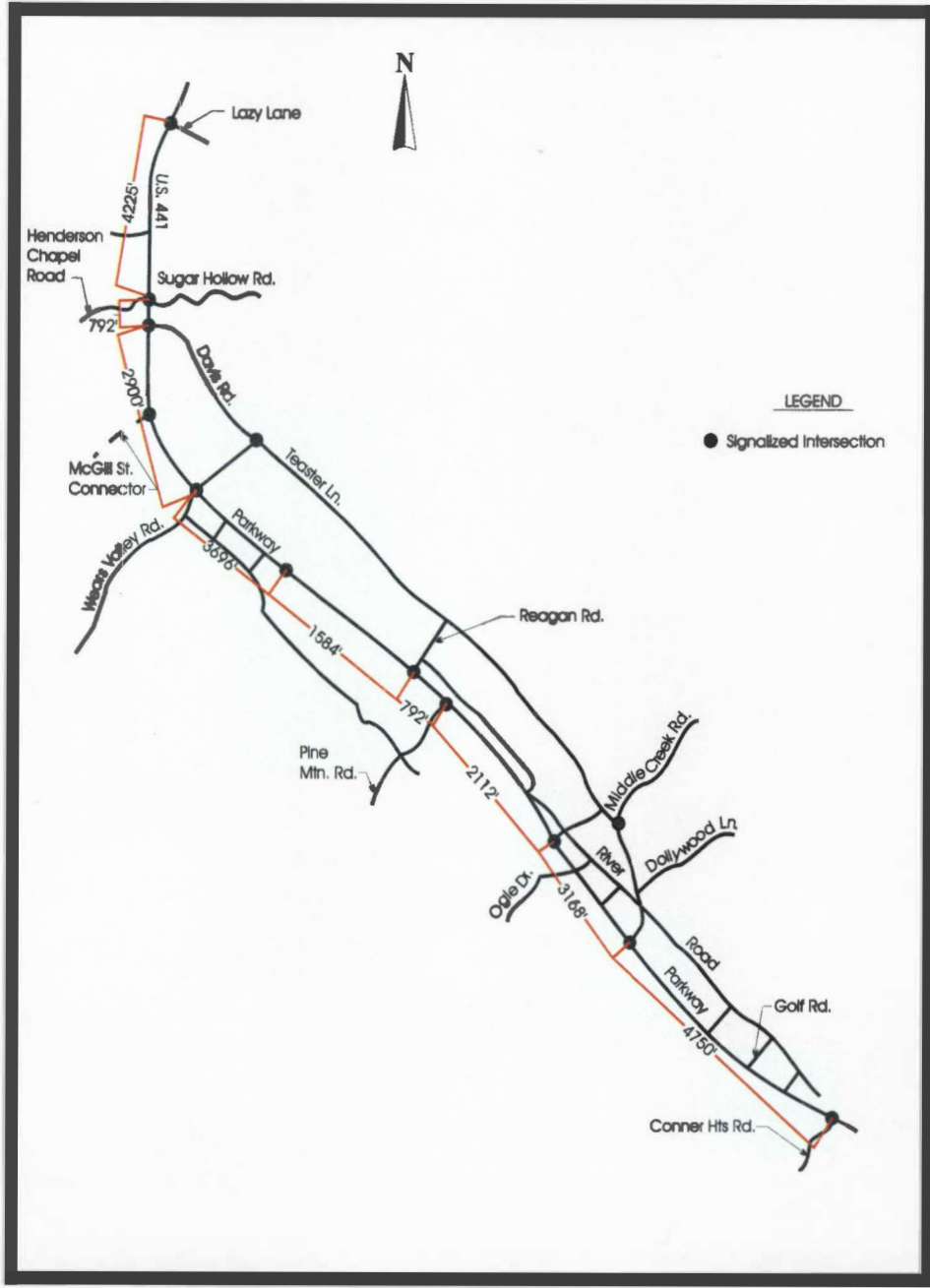


Figure 3. Traffic Signal Spacing U.S. 441 (Parkway)

Peak Hours of Pedestrian Activity

Eight hours of pedestrian counts were collected at the twelve locations for the Pigeon Forge Pedestrian Study. Total intersection crossings were used to determine morning, midday and afternoon peak hours. The morning peak hour occurs from 8:00 to 9:00 AM, the midday peak hour from 12:00 to 1:00 PM, and the afternoon peak hour from 4:15 to 5:15 PM.

Daily Vehicular Volumes

Figure 4 depicts the daily traffic volumes within the Study Area. The Parkway, on average, accommodates 43,000 to 68,000 vehicles per day (vpd). The dominance of vehicles in this area signifies the hazards pedestrians encounter when in contact with traffic.

Pedestrian Volumes

Figures 5 through Figure 7 display the AM, Midday and PM pedestrian peak hour periods. Morning pedestrian movements are low, but volumes increase in the midday and afternoon peak hours due to the opening of area businesses, particularly within the mall area. Shopping centers like Red Roof Mall, Tanger Factory Mall and Belz Factory Outlet Mall, as well as the Old Mill Area generate a substantial number of pedestrians.

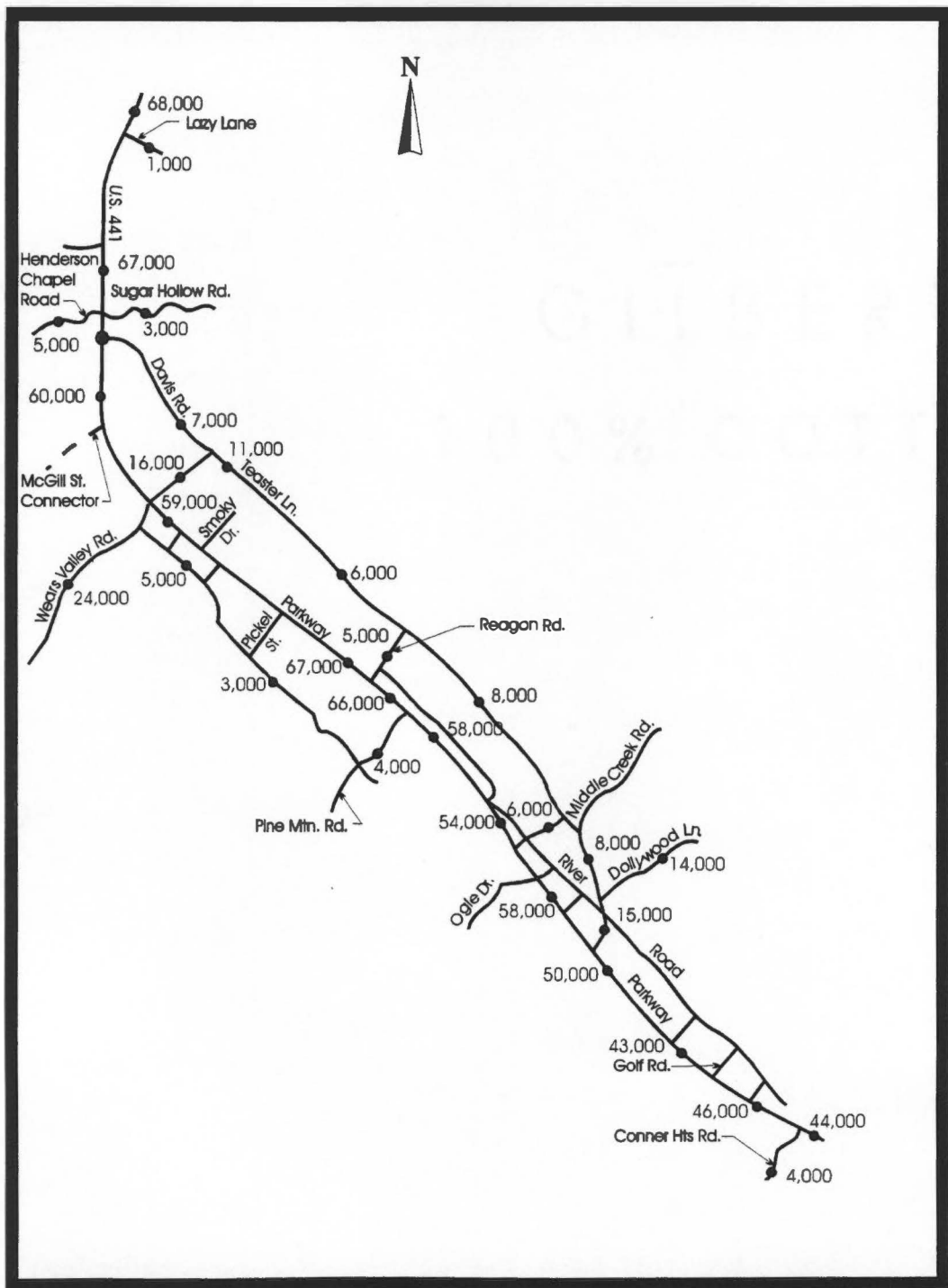


Figure 4. 1998 Summer Peak Daily Traffic

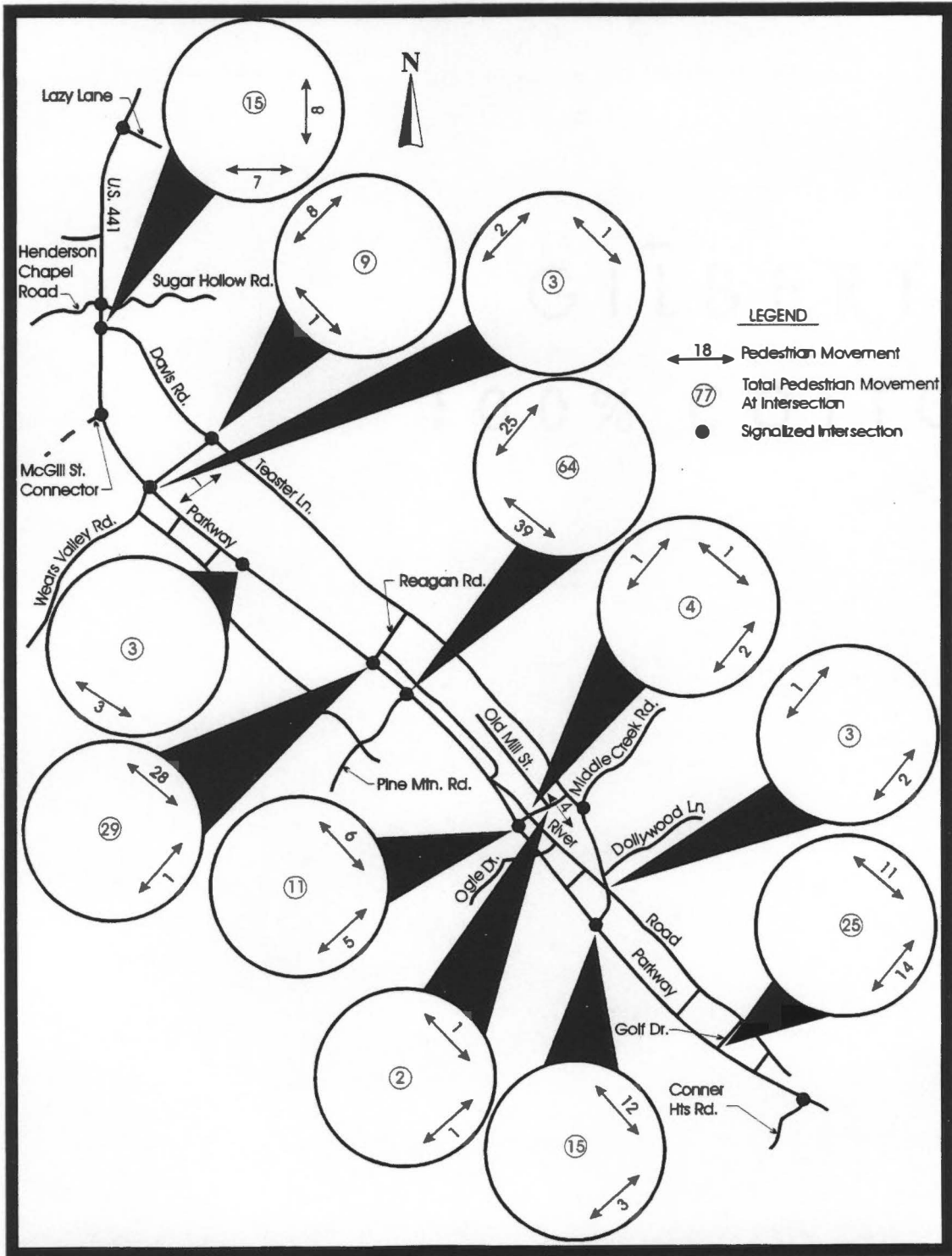


Figure 5. 1997 and 1998 AM Peak Hour Pedestrian Movement

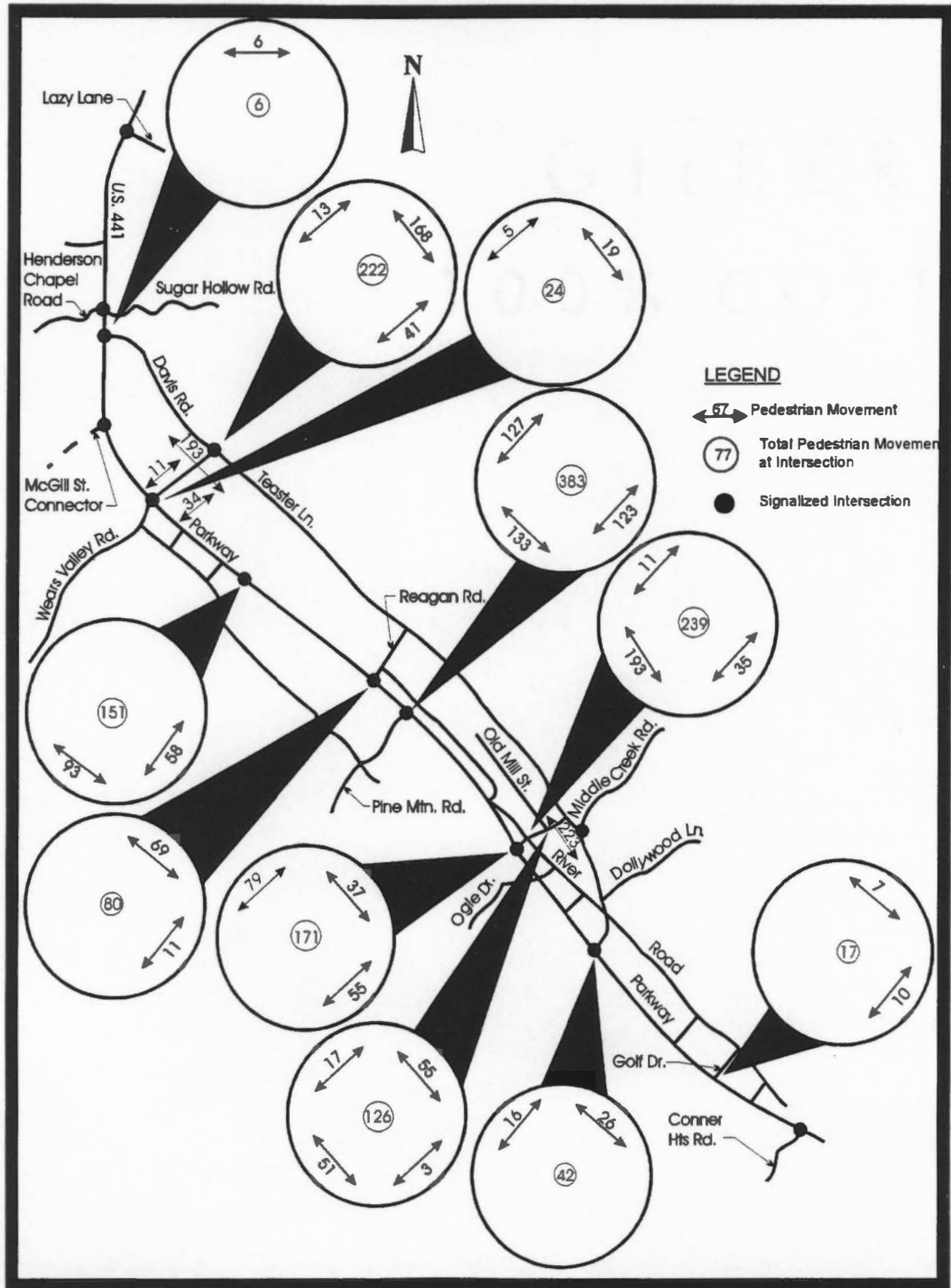


Figure 6. 1997 and 1998 Midday Peak Hour Pedestrian Movement

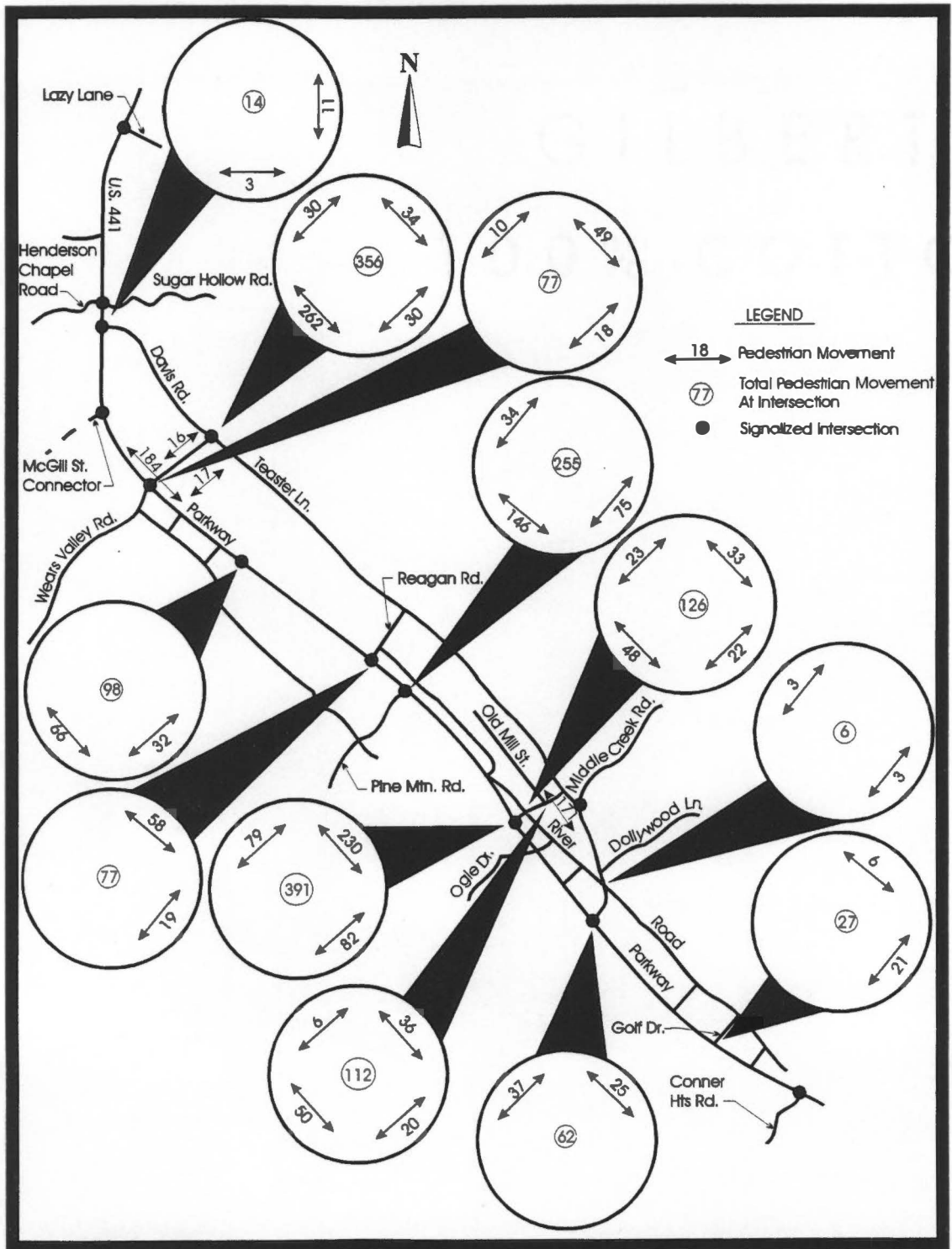


Figure 7. 1997 and 1998 PM Peak Hour Pedestrian Movement

AM Peak Hour

More pedestrians were recorded at the intersection of the Parkway and Pine Mountain Road than any other location. Several hotels, motels and restaurants are located in vicinity that may attribute to the number of pedestrians in the area in the morning.

Midday Peak Hour

The midday peak hour of 12:00 noon to 1:00 PM seems to be the busiest time among tourists and area business people in Pigeon Forge. Many pedestrians can be seen walking in groups to a favorite restaurant or walking between shopping malls. The highest volume of pedestrians during the midday peak hour along the Parkway is at Pine Mountain Road (383), primarily due to the location of many hotels and restaurants. The Old Mill Area also generates a substantial number of walkers. Between River Road and Old Mill Street, 588 pedestrians were counted crossing Middle Creek Road or its side streets while viewing crafts, art galleries and other attractions at the neighborhood shops. This particular area has become a favorite to many tourists due to its historic character. The Davis Road /Teaster Lane area also has a high volume of pedestrians (460) during the midday peak hour due, in large degree, to the movement of mall shoppers.

PM Peak Hour

During the PM Peak Hour, a large number (391) of pedestrians were counted at the intersection of Lower Middle Creek Road and the Parkway. This pedestrian activity seems to spill over into the Lower Middle Creek Road corridor and the historic Old Mill Area. The Teaster Lane/Davis Road area also has a high volume of pedestrians during the PM Peak Hour. Over 355 pedestrians were counted crossing the intersection of Teaster Lane and Davis Road. In the entire area, 573 pedestrians were counted. Three large outlet malls are located near the intersection of Teaster Lane and Davis Road and they generate a substantial number of pedestrians that walk from mall to mall. This high concentration of pedestrian activity can be attributed to a lack of vehicular mobility along Davis Road and Teaster Lane. Because of the proximity of the malls and severe traffic congestion, most mall patrons are inclined to stay parked in their initial space and walk back and forth among the malls. One other intersection, Pine Mountain Road and US 441 had 255 pedestrian recorded in the PM peak hour.

8-Hour Total

Figure 8 presents the 8-Hour pedestrian count values, which includes 7:00 to 9:00 AM, 11:00 to 1:00 PM and 2:00 to 6:00 PM. The shopping corridor which includes the Parkway between Wears Valley Road and

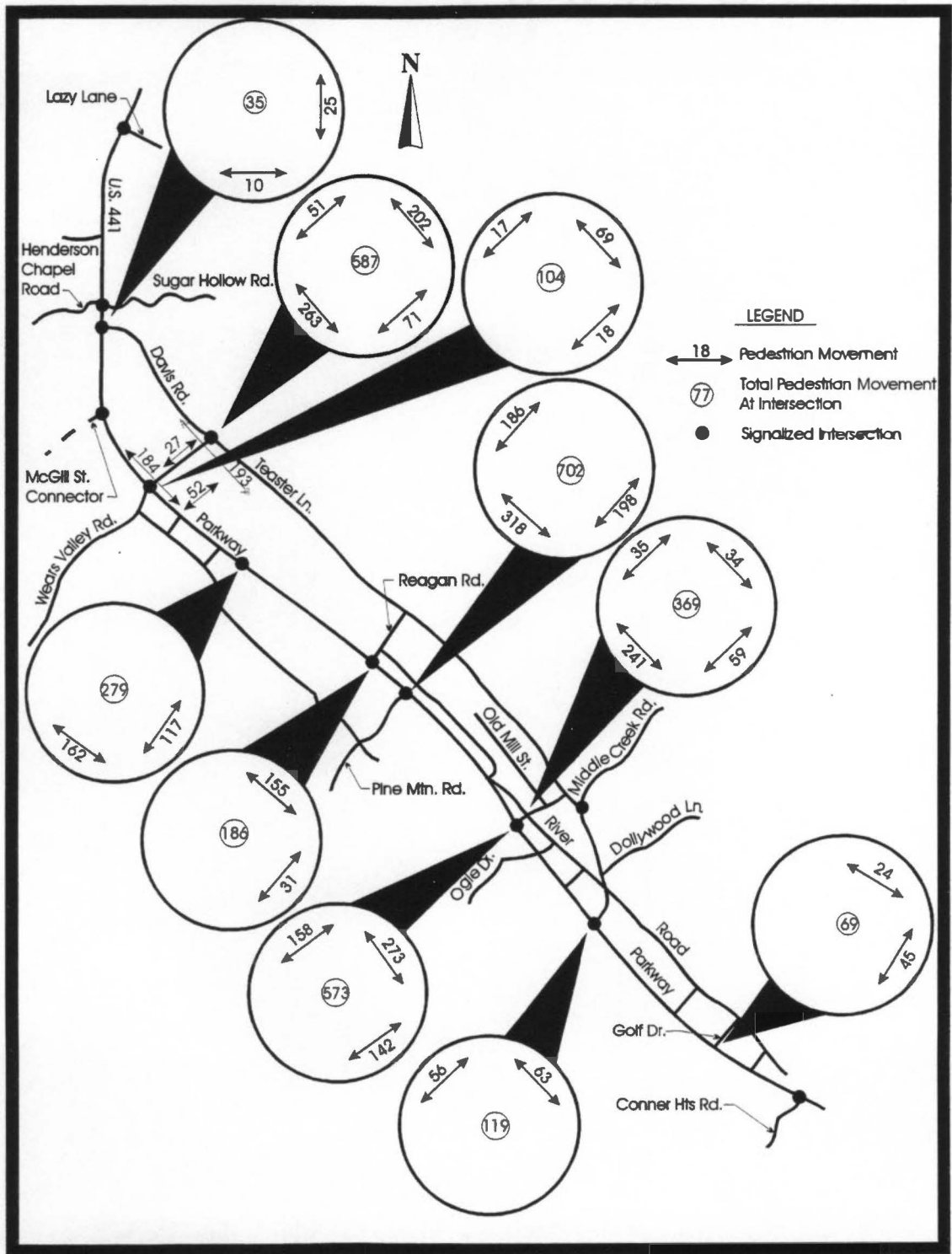


Figure 8. 1997 and 1998 8-Hour Pedestrian Movement

Dollywood Lane, and the Teaster Lane/Davis Road area experiences a lot of pedestrian activity. The Old Mill Area has a large amount of pedestrian activity; 369 pedestrians were counted at the intersection of Lower Middle Creek Road and River Road over the 8-hour period with the vast majority crossing west of River Road. Over the 8-hour period, the busiest intersection is the Parkway at Pine Mountain Road where 702 pedestrians were counted.

Pedestrian Inventory

As part of the field review, an inventory of pedestrian traffic control devices was conducted. The following sections describe that inventory.

Signals with Walk/Don't Walk Indications

Of the seven signalized intersections in the Study Area, only six are equipped with pedestrian signals with standard "Walk/Don't Walk" indications activated by push button. Figure 9 displays pedestrian signals located at Dollywood Lane, Lower Middle Creek Road, Red Roof Mall Entrance, Reagan Road and Pine Mountain Road intersections along U.S. 441. Additionally, the intersection of Davis Road and Teaster Lane is equipped with a pedestrian signal with "Walk/Don't Walk" indication.

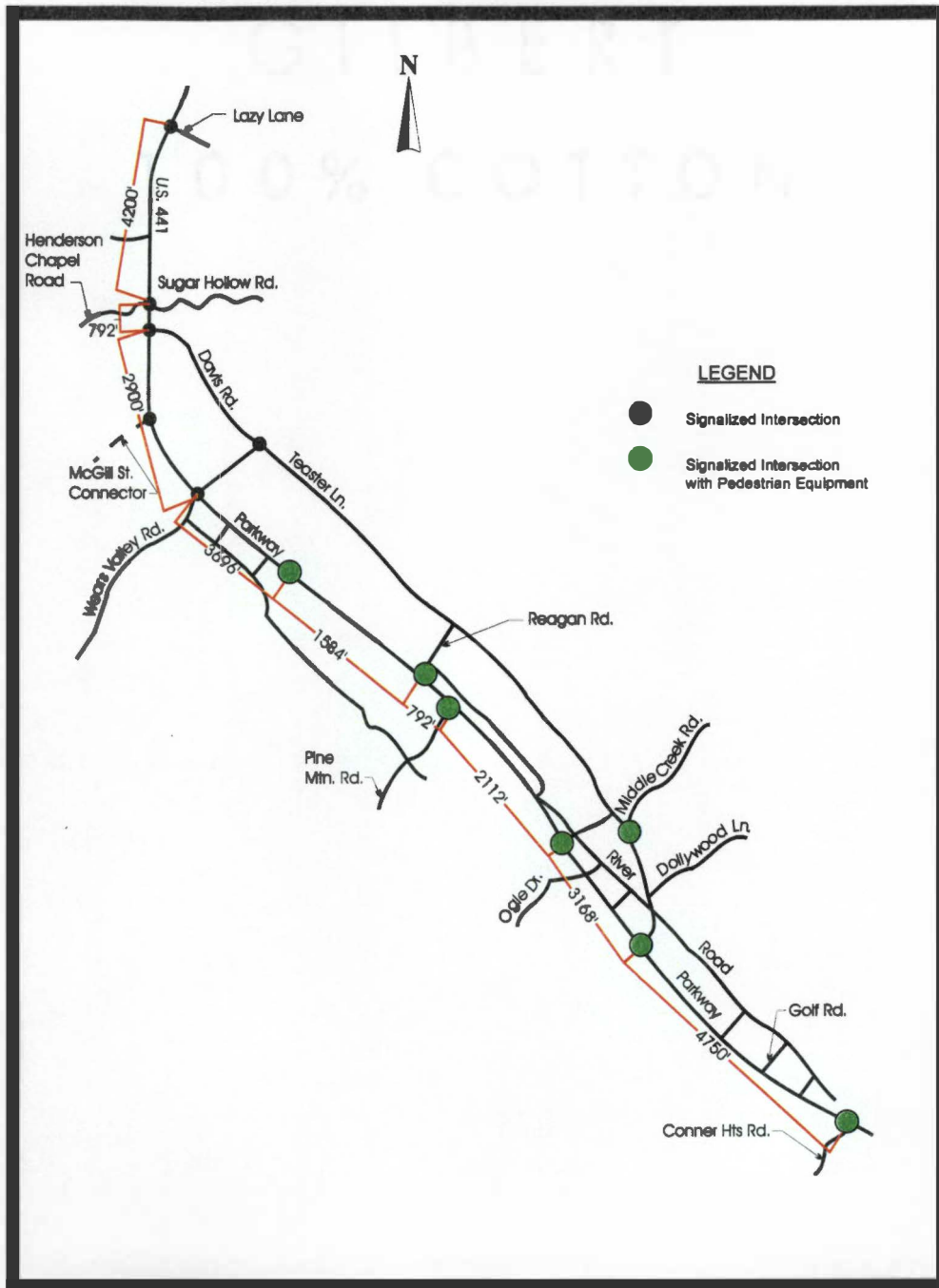


Figure 9. Traffic Signals With Pedestrian Equipment

Sidewalks

Figure 10a-10b displays locations in the Study Area with sidewalk. Sidewalks of five to eight feet are provided on both sides of the Parkway. A wider width is capable of accommodating more people. Sidewalk is at a minimum along the city's side streets, indicating the Parkway as the main corridor for pedestrian activity. Current roadway projects have included the construction of sidewalk as part of its improvement plans. The personal safety of pedestrians is jeopardized when having to cross a vehicle's pathway, especially in areas with no sidewalk. Yet, sidewalks too close to traffic may still discourage pedestrians because of traffic noise and hazards. Pedestrian accidents are about twice as likely to occur on road sections without sidewalks than on sections with sidewalks due to conflicting movements between pedestrians and motorists when sharing street space (6).

Most of the arterial roadways including US 441, the five-lane section of US 321 (Wears Valley Road) and Teaster Lane contain sidewalk on both sides. Sidewalks on collector streets such as Davis Road, Reagan Road, and Middle Creek Road connect the Parkway with Teaster Lane, thereby encouraging walking trips in a safe pedestrian environment. Sidewalks are located on both sides of Music Road to allow visitors better accessibility by walking to the theaters and restaurants located in the vicinity. A sidewalk is located on the east side of River Road from Dollywood Lane to Lower Middle Creek Road to serve

Figure 10. Sidewalk Inventory

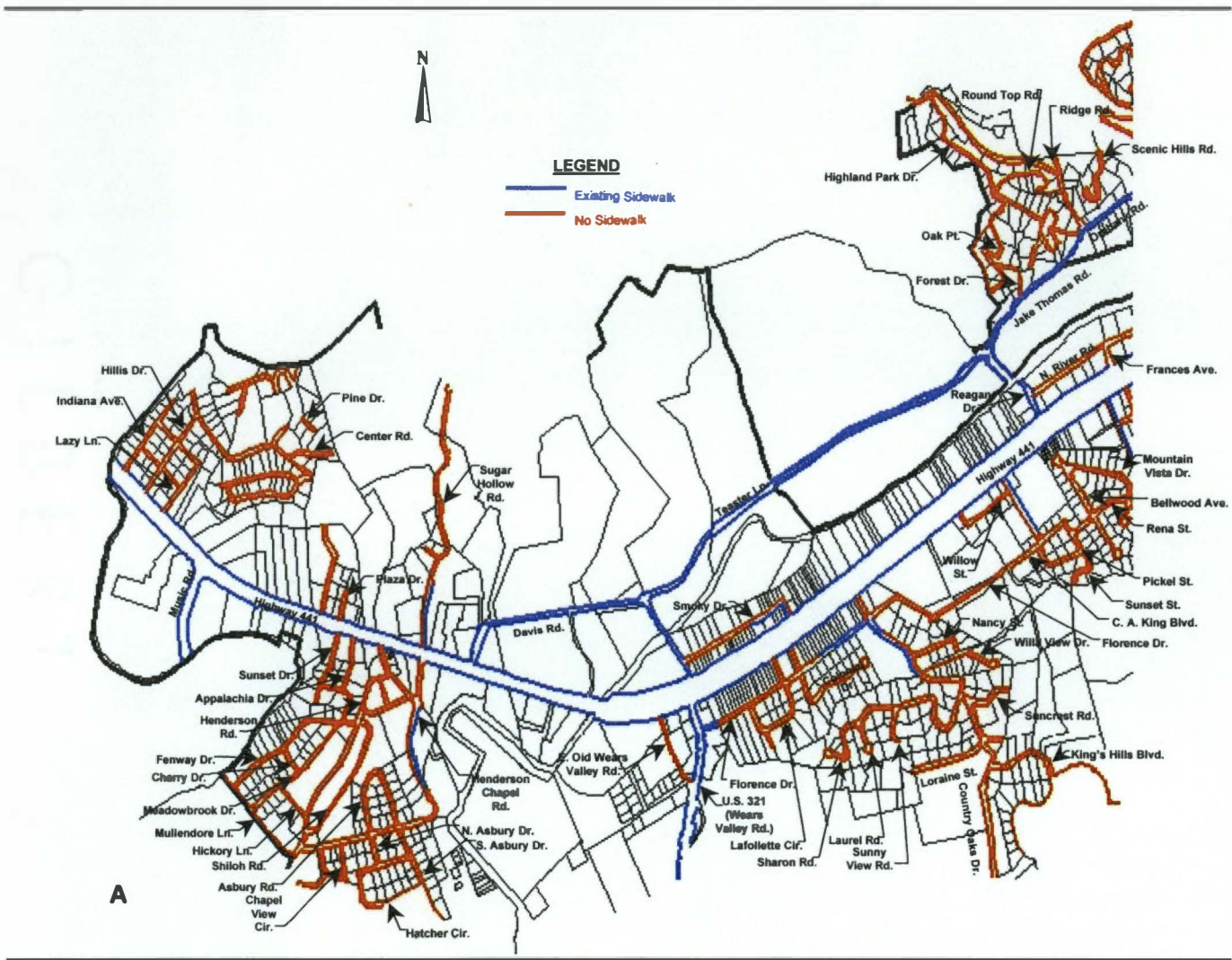
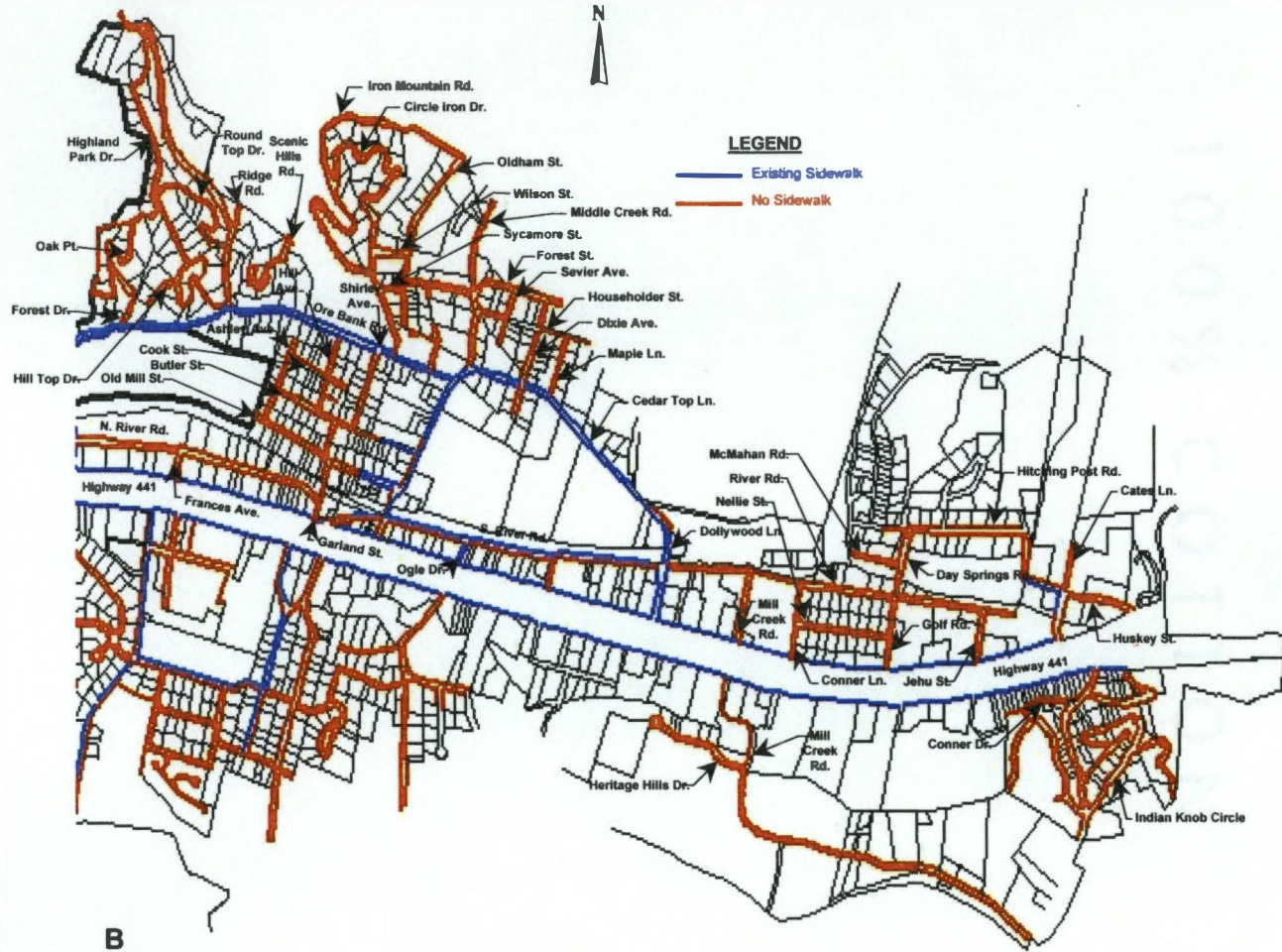


Figure 10. (continued)



those visitors in the Old Mill Area. Throughout the study area, sidewalk is located sporadically along some Pigeon Forge side streets. West of the Parkway and generally between Sharon Road and Valley Drive, sidewalks have been added to some streets as a result of specific land development.

Crosswalks and Signs

As part of the standard design, those intersections with pedestrian signals are also indicated with crosswalks. All the crosswalks are of the standard two line markings that provide a delineated path for pedestrians to cross the street. Marked crosswalks usually indicate areas where pedestrians are apt to cross. Crosswalks also encourage pedestrians to cross at signalized intersections rather than mid-block locations. Stop lines at signalized intersections are provided to keep motorists from encroaching into crosswalks.

Two unsignalized intersections along Middle Creek Road, River Road and Old Mill Street are marked with crosswalks. These intersections are located within the Old Mill Area and are equipped with stop signs. Between Butler Street and Old Mill Street, a mid-block crosswalk is provided on Middle Creek Road. The mid-block cross includes markings on the street and Pedestrian Crossing signs (W11-2) in both directions. Crosswalks placed at mid-block locations usually denote a substantial crossing volume of pedestrians. Both pedestrians and motorists should use extreme caution when approaching mid-block crossings. By Tennessee law, pedestrians are granted the right-of-way at intersections

marked by crosswalks. However, the pedestrian must always watch for motorists upon entering any area where traffic exists.

On eastbound Conner Lane, a pedestrian sign (Pedestrian Crossing Sign: W11-2) was noted near the Dixie Stampede parking lot. It appears that its purpose is to warn motorists of pedestrian activity between the theater's overflow parking lot and its main parking lot.

On eastbound US 441, a Pedestrian Crossing sign (W11-2) is located at the signalized intersection of Lower Middle Creek Road. Signs do not always indicate other intersections with pedestrian signals.

On northbound River Road near the River Lodge South Motel, a non-standard pedestrian warning sign exists. The purpose of the sign at this location serves no function.

Many regulatory signs including "STOP" signs, and "YIELD" signs, turn restrictions, and speed limit signs, have a direct or indirect impact on pedestrians. The No Turn On Red (NTOR) sign is often used to facilitate pedestrian movements at signalized intersections. Although, this particular restriction can increase vehicular delays, it is often used to improve safety because it minimizes the direct conflict pedestrians have with vehicles.

Access Points

Driveways are, in effect, intersections. Serious deficiencies exist among driveway entrances that service businesses along the Parkway. The abutting strip commercial type businesses creates a lack of sidewalk continuity causing the pedestrian to walk in the parking area or street.

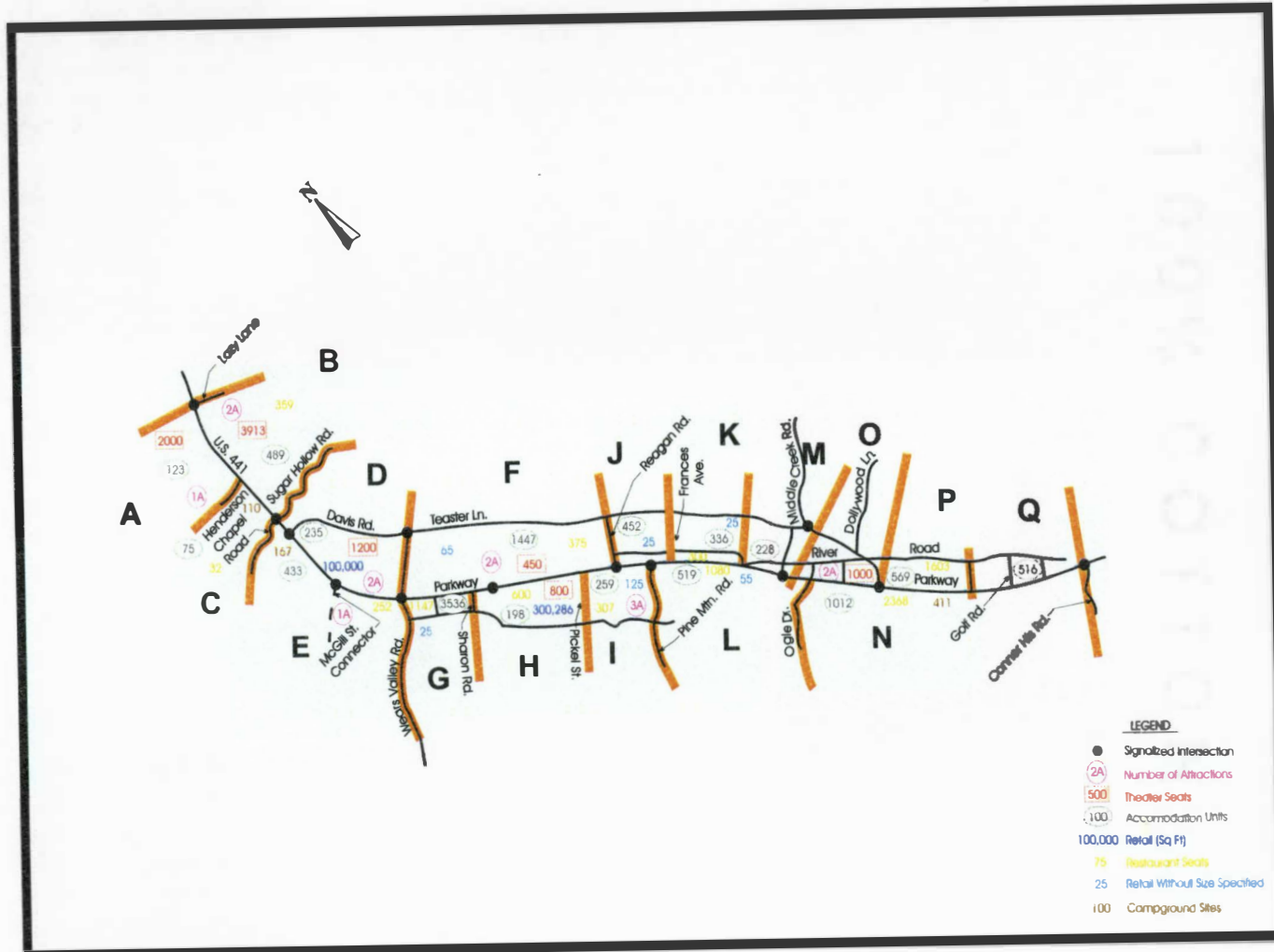
The Parkway Corridor has 238 access points or “curb cuts”; the approximate equivalent of one curb cut per 211 linear feet of Parkway (7). The block by block analysis reveals particularly excessive concentrations of curb cuts in several areas, such as the western side of the Parkway at Lower Middle Creek Road. The excessive curb cuts disrupt traffic circulation and diminish public safety.

The goal of access control is to provide improved traffic flow and increased safety on the Parkway. While sidewalks may have a consistent surface material across driveways, there is little else to warn, direct or control the flow of vehicular pedestrian traffic. Access control measures should be considered in the design of Pigeon Forge streets for the benefit of both vehicular and pedestrian traffic.

Pedestrian Productions and Attractions

Land use is a major factor that determines the number of pedestrian trips that is generated. Figure 11 depicts the various types of land uses along the Parkway.

Figure 11. Land Use Summary



The road is lined with a wide assortment of businesses including restaurants, hotels, motels, theaters, specialty shops, amusement/recreational attractions, retail malls, and campground. The size, type and location of the business is vital to the number of trips attracted or produced. For example, the Red Roof Mall consists of 300,000 s.f. of retail space. It generates a high volume of pedestrian activity. Many of the pedestrian trips to the mall may come from nearby hotels both across the Parkway and on adjacent side streets.

During field observations, three key locations within the Study Area were identified as prime pedestrian generators: The Parkway Corridor (US 441), The Old Mill Area, and Teaster Lane/ Davis Road Area.

The Parkway Corridor (US 441)- The city's major arterial consists of retail, entertainment, recreational/amusement, hotel/motel establishments and restaurants. The success of the regional shopping malls, in addition to other area attractions including the National Park has resulted in an abundant number of trips by pedestrians and vehicles along the Parkway.

Figure 11 has divided the Parkway Corridor into 17 zones (denoted by a letter) and lists the land uses for each zone. For example, Zone F contains 24 attractions, 65 small retail shop, 1,447 hotel rooms, 375 restaurant seats, and 450 theater seats. Zone H, across the Parkway from Zone C contains the Red Roof Mall with just over 300,000 s.f. of retail space. The mall probably attracts a

significant number of pedestrian trips from the 1,447 hotel rooms across the parkway.

In the Parkway Corridor, there are two basic types of pedestrian trips: those originating from hotels or the campgrounds to a tourists' primary destination and secondary trips from one destination to a next. As such, it is important to identify the location and number of hotel/motel rooms in the corridor since they produce pedestrian trips. The largest concentration of hotel rooms is in Zone G where 3,536 room exists. The Tanger and Belz Factory Outlet Malls probably attract a substantial number of pedestrian trips from Zone G, so there is probably a strong desire to cross the Parkway at Wears Valley Road. This desire is currently being met at some other crossing, or not at all, since pedestrian equipment is not provided at this location.

Every zone in the Parkway Corridor contains some hotel/motel rooms. Campground sites, which produce a large number of pedestrian trips, are limited to Zones N, O, and P. The second and third highest concentrations of hotel/motel rooms are in Zone H and Zone F. Motels producing restaurant trips should also result in a great deal of pedestrian trips. In Zone N there are 2,368 restaurant seats and across the Parkway in Zones P and Q, a total of 1,085 hotel/motel rooms have been recorded. Zone P and Q contain 1, 603 restaurant seats and Zone N has 1,012 hotel/motel rooms.

In summary, Zones P, F, N, and Q probably produce a lot of pedestrian trips given the amount of hotel/motel rooms that exists. Zone E contains 433 hotel rooms and Zones D and H have a total of 2,000 theater seats. The Glasgow Comedy Theater was recently opened and is not included in this inventory. Zone H attracts numerous pedestrian trips with the Red Roof Mall, 800 theater seats, and 600 restaurant seats. A strong desire to cross the Parkway, relative to pedestrian productions and attractions, probably exists near Wears Valley Road, Pickel Street, Ogle Drive and Dollywood Lane.

Old Mill Area- This major pedestrian dominated area acquaints visitors with the historic setting of Pigeon Forge. Many small art galleries and specialty shops reside in a "village-type" setting accessed by Lower Middle Creek Road. The area is named for a locally known restaurant, "The Old Mill Restaurant", which has been in existence for many years. In addition to dining, the restaurant offers daily tours portraying its historic mill operation.

Once a tourist parks in the Old Mill Area, they usually walk to other areas instead of moving their vehicles. Several factors may take the blame for this including slow traffic movement and congestion, high concentration of pedestrians, lack of convenient parking, and the close proximity of shops. This pattern of pedestrians result in a significant number of trips across Lower Middle Creek Road, River Road, Butler Street and Old Mill Street.

Teaster Lane/Davis Road Area- This is a prime destination of many tourists in Pigeon Forge. This area is the location for two of the City's regional shopping malls, the Tanger Factory Outlet Mall and the Belz Factory Outlet World. Although additional malls are being developed along this corridor, these two seem to generate a substantial number of pedestrian trips. Teaster Lane is a newly complete four-lane divided roadway that provides access to the Belz Factory Outlet World and an annex of the Belz Factory Outlet directly across the street. The Belz Factory Outlet and its annex have a considerable amount of movement between each other. Teaster Lane runs parallel to US 441 (Parkway) providing some relief to the regularly congested Parkway traffic. Since it accommodates a significant amount of vehicular traffic, pedestrian crossings may need to be addressed.

Pedestrian Accident History

Figure 12 shows the location of pedestrian accidents. The accident reports, which were retrieved from the City of Pigeon Forge Police Department, spanned a seven-year period from 1990 to 1997. A total of 43 accidents were reported with 25 accidents occurring along US 441 (Parkway). A majority of the accidents were non-fatal with the exception being an elderly person crossing the Parkway mid-block between Reagan Road and Pickel Street. Of the 43 total accidents, six were injury accidents at the Wears Valley Road/ Davis Road and US 441 (Parkway) intersection, an intersection with no pedestrian signals or crosswalks. Some accidents occurred when motorists were making right turns on red (RTOR)

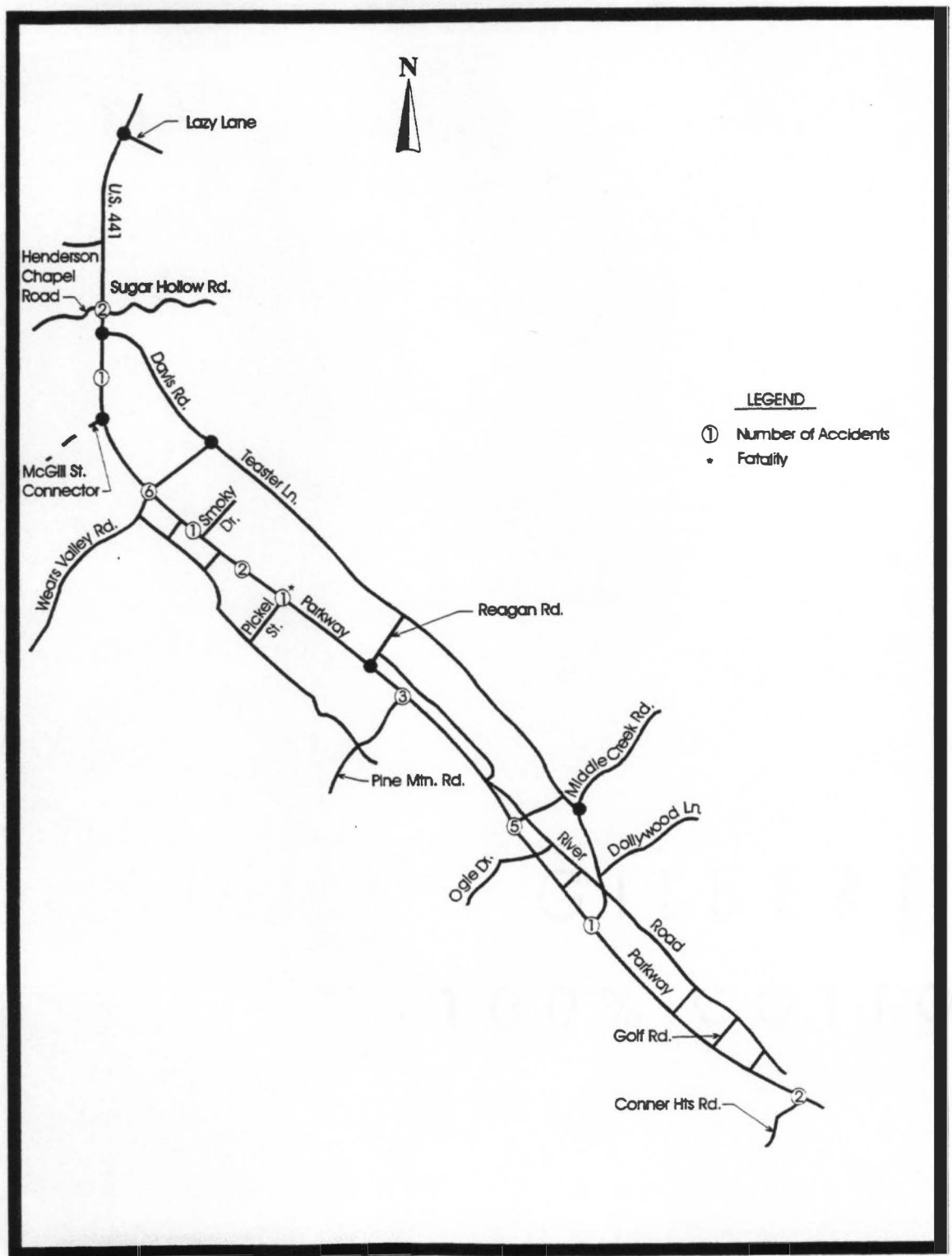


Figure 12. Traffic Accidents on U.S. 441 Involving Pedestrians (1991-1997)

while pedestrians were trying to proceed across the intersection. Eighteen of the 43 pedestrian related accidents occurred in parking areas of malls, restaurants, hotels, or campgrounds (8). Further observation reveal that other than most parking areas, no accidents occurred on Pigeon Forge streets other than the Parkway.

CHAPTER 3

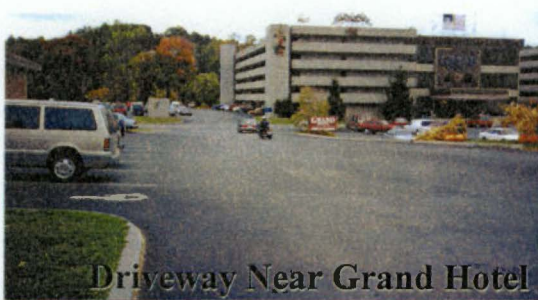
SPECIFIC PEDESTRIAN DEFICIENCIES

Several field observations took place to identify key locations in Pigeon Forge where improvements for pedestrians could be made.

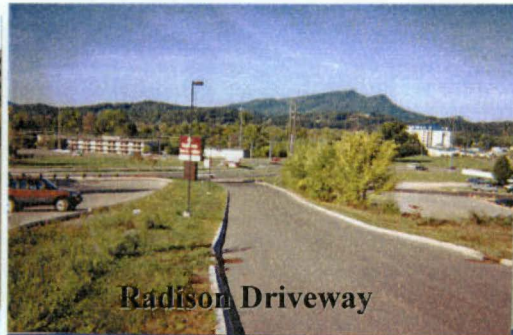
Private Developments

High demands from the tourism industry make it possible for developers to continue to build in the area. Private development continues in Pigeon Forge with the construction of additional music theaters, restaurants, and hotels. Since building sites along the Parkway are scarce, new development is spreading off the Parkway to adjacent side streets. However, many developments have not provided sidewalks along their driveways from the site to the public street. A lack of sidewalks along driveways creates conflict points between pedestrians and vehicles, and may increase the amount of time and walking distance incurred.

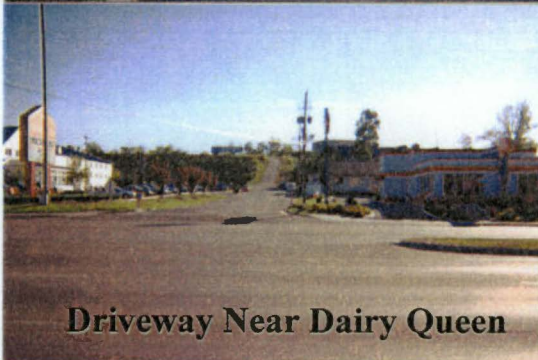
Several locations were photographed to identify where sidewalks were not provided along the development driveway leading to the city street. Figure 13 and Figure 14 show examples where a lack of sidewalk exists between private developments and public streets. Depending on the location and type of development, some sites can generate or produce a significant amount of pedestrian traffic.



Driveway Near Grand Hotel



Radison Driveway



Driveway Near Dairy Queen



Christmas Place Driveway



Red Roof Mall



Eagle Mountain Theater

Figure 13. Private Developments Without Driveway Sidewalks



Figure 14. Hotel Driveways Without Sidewalks

Figure 14 shows additional areas where sidewalk does not exist along the entrances to hotels and motels. Driveways to the Holiday Inn and The Grand Hotel and Resort are long but lacks a walkway to the Parkway. The Red Roof Mall, a major pedestrian generator, is also deficient of sidewalks along its entrance driveway.

Many businesses along the Parkway abut each other but rarely have pedestrian connections. For example, on the Parkway near Showplace Boulevard, an O'Charley's Restaurant lies below the Baymont Inn, a hotel establishment. Although the hotel is located on steep terrain, substantially above the restaurant, a lack of pedestrian facilities makes it difficult to walk to the restaurant or to the Parkway from the hotel. The problem may lie in the site plan review process because anticipated paths from adjacent or nearby parcels must be identified on the front end, moreover, for new developments, planners must be mindful of pedestrian facilities that already exist.

There are many other factors that may inhibit pedestrian-sensitive site planning of private developments. The reasons may vary, but generally include: limitations imposed by terrain, limitations based on environmental restrictions, site plan of the development, or the need for adequate parking. A lack of established policies or procedures for evaluating and encouraging planned pedestrian facilities during site plan review might exist. Unfortunately, it is always easier to provide pedestrian features to begin with than to add them later.

Changes to the site plan review process might need to be made so that ample pedestrian facilities are included in the development. Sidewalk connections between neighboring businesses would give tourists the option to leave their private automobile parked and walk. By including more pedestrian amenities in private developments, pedestrian mobility can be improved.

The Parkway Corridor

The commercial growth in this prime tourist community is evident, as Pigeon Forge's side streets become high target locations for more choice hotel, motels, and restaurants. Recently, new developments on side streets have resulted in the construction of public sidewalks. However, in the past, some new developments on side streets were built without adding sidewalks. An example is LaFollette Circle, which runs beside the Shular Inn. It does not have sidewalks despite the fact that a second Shular Inn was constructed on Florence Drive, directly behind the original building. In this case there is no easy walk between the two buildings, either on the sites or on public right-of-way. Figure 15 and Figure 16 depict examples of streets without sidewalks perpendicular to US 441. Another example is Sugar Hollow Road. Sidewalk is available on the south side of the road, probably due to the construction of the Alan Jackson's Showcar Café. However, sidewalk was not installed when the Cracker Barrel Restaurant was built on the north side of Sugar Hollow Road. Henderson Chapel Road is another location that contains many new private developments but lacks sidewalks in some key sections. Ruby Tuesday's restaurant on the southwest

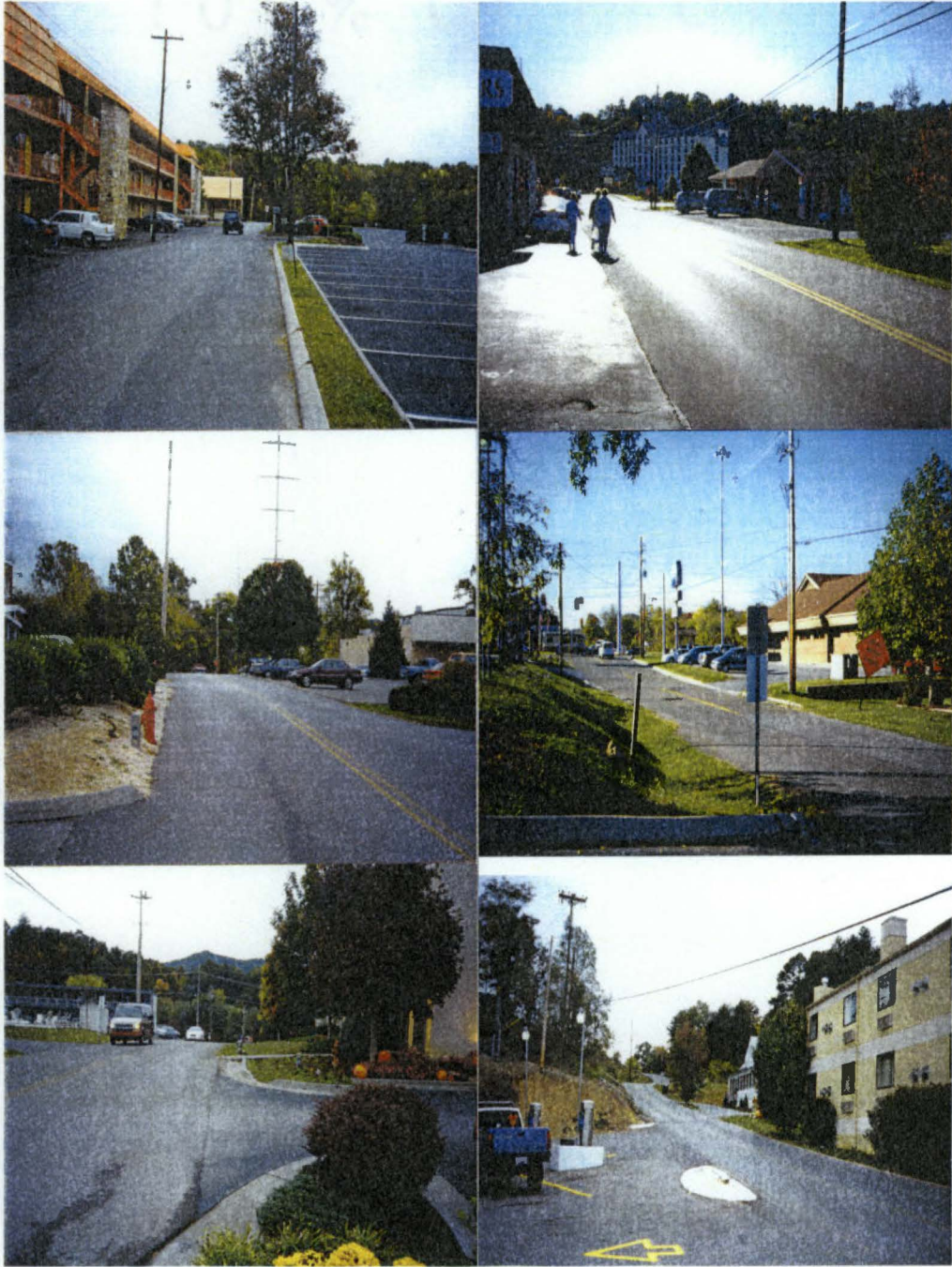


Figure 15. Streets Perpendicular to the Parkway Without Sidewalks

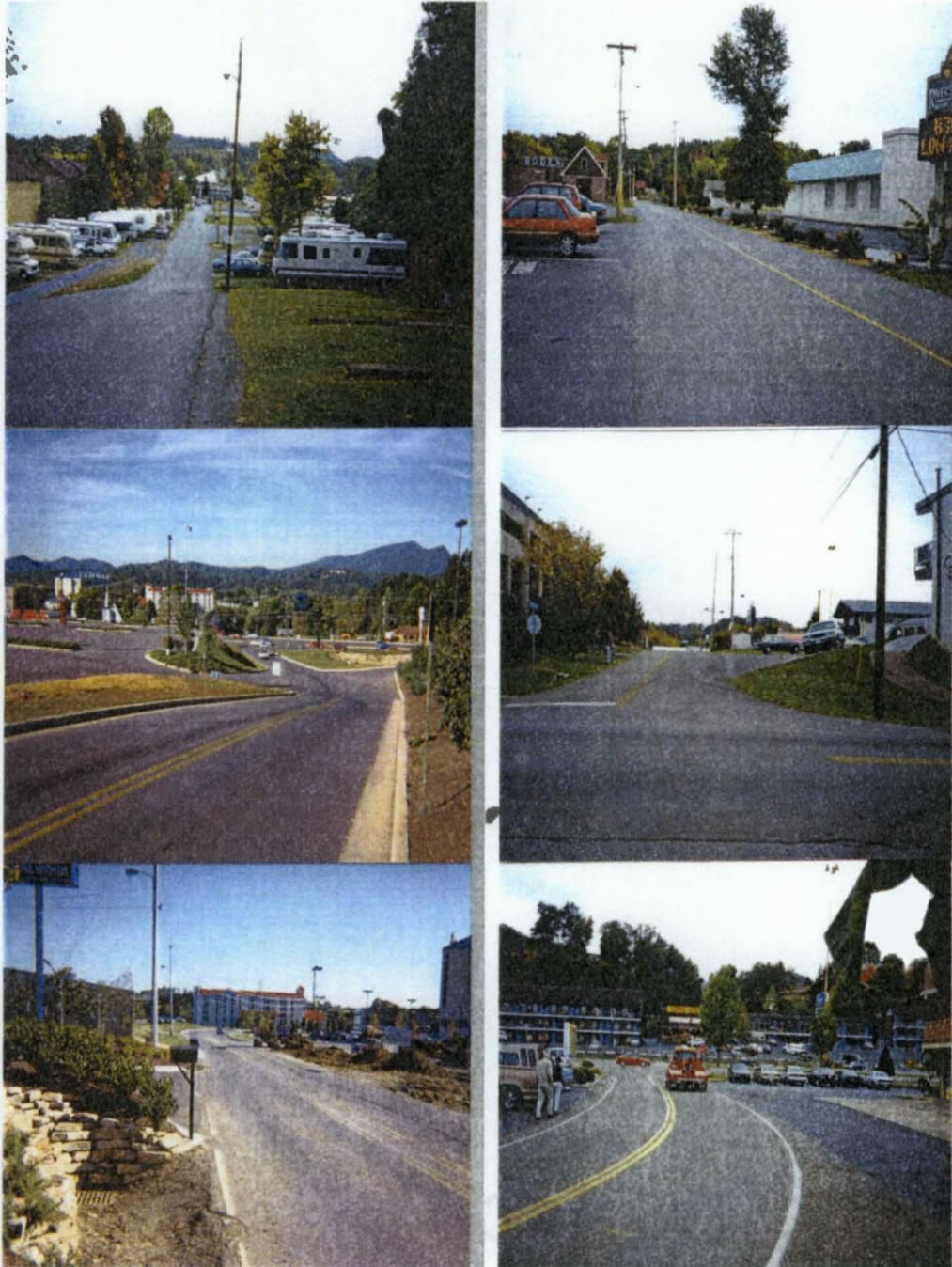


Figure 16. Additional Streets Perpendicular to the Parkway Without Sidewalks

comer of Henderson Chapel Road and the Parkway, fronts U.S. 441 giving pedestrians walking along the Parkway easy access into the restaurant. No sidewalk existed along Henderson Chapel Road when the restaurant first opened. This made it difficult for walking, especially for those visitors that were staying at the Music Road Hotel. Although years later, with the addition of a Holiday Inn Express and Super 8 Motel within a ¼ mile from the Parkway, new sidewalk has been constructed along Henderson Chapel Road to accommodate those that may walk from the hotels.

The Mill Creek Resort and Campground, Shady Oaks Campground and Z'Buda's Smoky Campground are within proximity of the Parkway. However, the absence of sidewalk along the side streets serving these facilities discourages walking from the campgrounds to the Parkway. Since many campers lack a personal vehicle during their stay in Pigeon Forge, sidewalks would be helpful to accommodate those that have to leave their campers parked at the campsite.

On some streets, right-of-way may be limited so there is not enough space for sidewalk. Some streets appear to have parking lots encroaching on the City's right-of-way. An example of this is Sharon Road. The City of Pigeon Forge has painted a white line parallel to Sharon Road indicated sidewalk space within the edge of the parking lot.

Streets parallel to and intersecting the Parkway lack sidewalks found from one end of Pigeon Forge to the other and are illustrated in Figure 17. On the north end of the City several primarily residential streets lack sidewalks. These neighborhoods include Indiana Avenue, Hillis Drive, Lazy Lane, Sunset Drive, Appalachia Drive, and Henderson Road. However, there does not seem to be a high pedestrian demand on these streets. On the west side of the Parkway between Wears Valley Road and Pine Mountain Road, two streets lack sidewalks. They are LaFollette Circle and Colonial Drive. Streets that have some sidewalks in this area are Sharon Road, Pickel Street, and Pine Mountain Road itself. Still on the west side of the Parkway but south of Pine Mountain Road, the following streets lack sidewalks: Two View Road, Ogle Drive, Mill Creek Road and Conner Heights Road. In that same area, Valley Drive has a sidewalk on its south side from the Parkway up to the first junction west of the considerations as a priority during the site plan review process, particularly when a new development produces a significant impact to traffic flow. There are fewer streets that intersect the Parkway, south of Wears Valley Road/Davis Road on the east side. Those that do, but lack sidewalks include Frances Road, Garland Street, Methodist Street, Mill Creek Road, Conner Lane, Golf Road, and Jehu Street.

Old Mill Area

The historic setting of the Old Mill area is a favorite spot among tourists. Figure 18 displays the small art galleries and specialty shops that characterize the



Figure 17. Other Secondary Roads Without Sidewalks

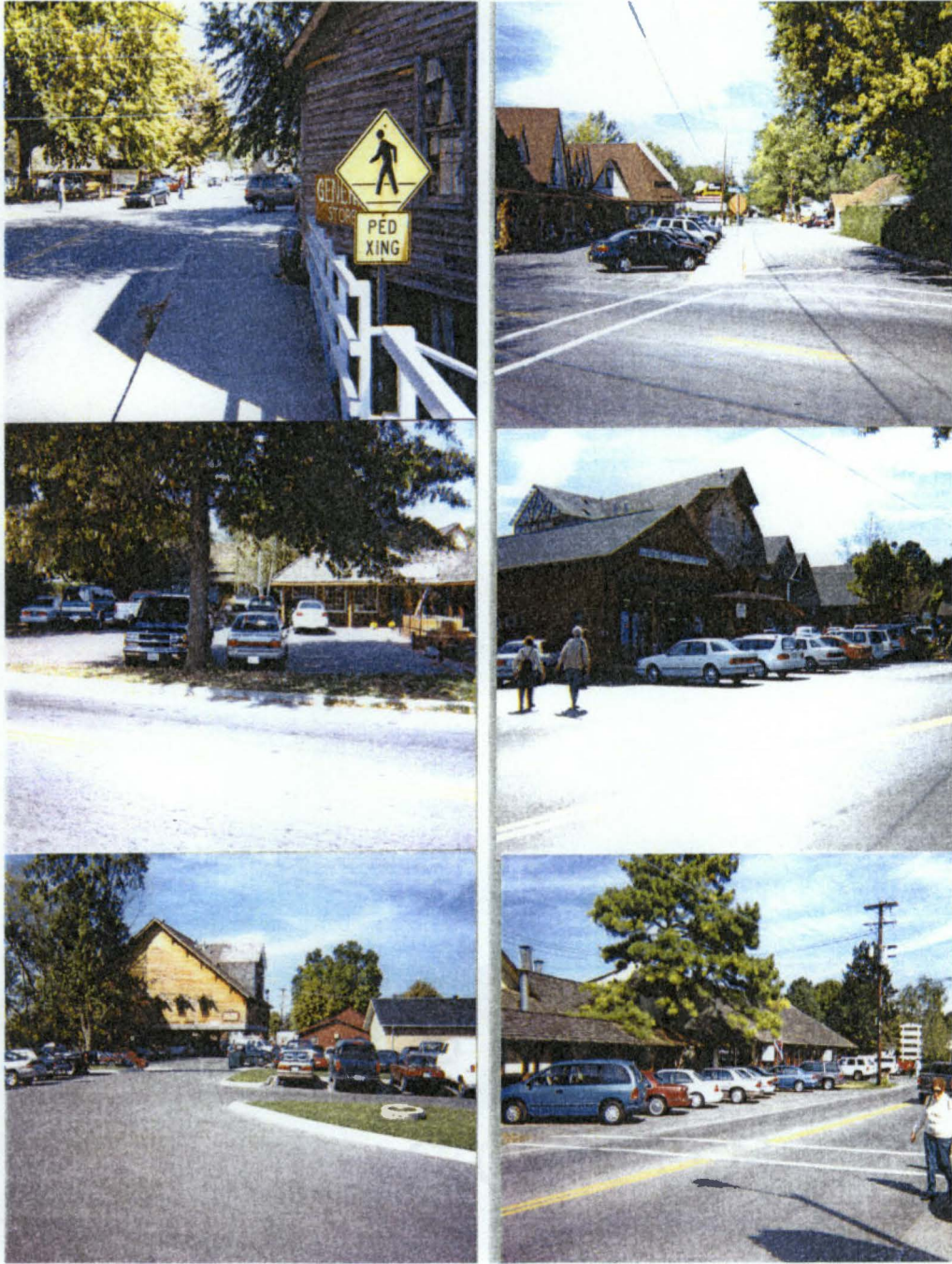


Figure 18. The Old Mill Area

pedestrian-oriented area. Some businesses offer parking at their storefronts, while others do not. The parking arrangement seems to encourage walking in this area which is good except vehicles and people are mixed together in a confined area. The area is accessed by Lower Middle Creek Road (a two-lane connector from the Parkway to Butler Street) which has a sidewalk on both sides except between Patriot Park and River Road where a sidewalk is missing on the north side. Within the Old Mill area, Butler Street has a sidewalk on the west side of the street only, and Old Mill Street has a sidewalk on both sides of it. Areas without sidewalk result in friction between walkers and motorists. Pedestrian access from the Parkway to the Old Mill area is limited to the Lower Middle Creek Road Bridge. In effect, the Little Pigeon River creates a pedestrian barrier between the Parkway and the Old Mill area. As such, pedestrians share the bridge with vehicles. Additionally, sidewalks provided on either side of the bridge are not ideal.

The city's public transit system (Fun Time Trolley) utilizes Middle Creek Road to access its trolley station office and transfer area, which is near Patriot Park. A parking lot, which services the Old Mill area, has spaces available for free parking. The trolley system also offers free park and ride services for the public at the Patriot Park site. Another concern with the Old Mill area is the poor pedestrian connection between the shopping area and Patriot Park. Pedestrians must walk through several driveways and parking lots from the Old Mill area to the Park.

Other Secondary Roads

Florence Drive, a two-lane minor collector street runs parallel to and is on the west side of US 441. This road has little or no sidewalk connections to accommodate visitors that stay in the nearby hotels but a portion of sidewalk is available near Sharon Drive for hotel guests. Florence Drive is continued to the south as C.A. King Boulevard, a collector road along the rear of the Red Roof Mall. Continuous sidewalk along Florence Drive/ C.A. King Boulevard could give nearby hotel guests the option to leave their vehicles parked at the hotel and walk to the mall or other locations along the Parkway. Figure 19 illustrates the views along Florence Drive.

River Road also runs parallel to the Parkway but is on the east side. A photograph of the River Road area is in Figure 20. The northern section of River Road is located near the historic Old Mill area. A sidewalk runs parallel along the Little Pigeon River from Dollywood Lane to Lower Middle Creek Road. The southern section of River Road begins at Dollywood Lane and terminates into several campground areas. Pedestrians are usually seen walking along the road's edge from the campground until sidewalk is available.

Two other streets that lack sidewalks include Emert Street and Willow Street. Emert Street is south of Ogle Drive and leads up to a motel. Willow Street is south of the Red Roof Mall and could provide a pedestrian connection between it and several hotels.

GILBERT
100% COTTON

FLORENCE ROAD AREA

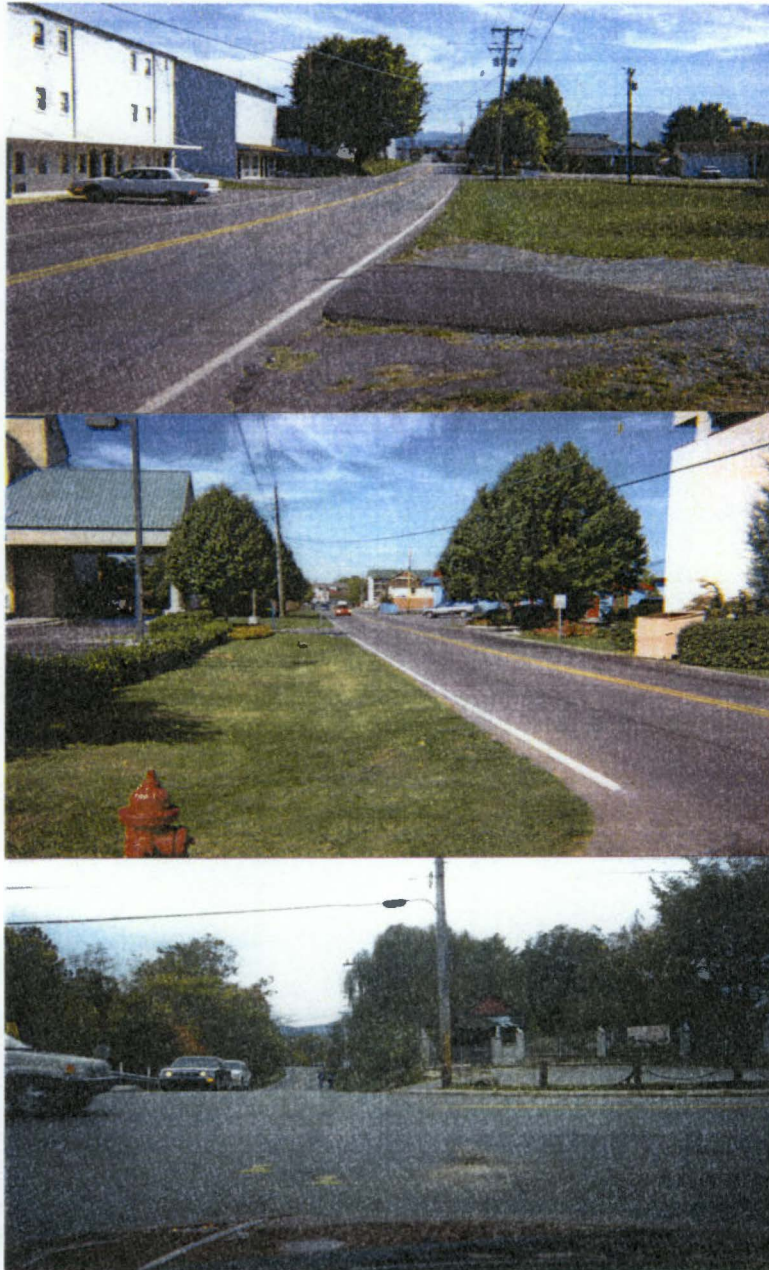


Figure 19. Florence Road Area

POTENTIAL RIVER PEDESTRIAN CORRIDOR

Pigeon Forge, Tennessee

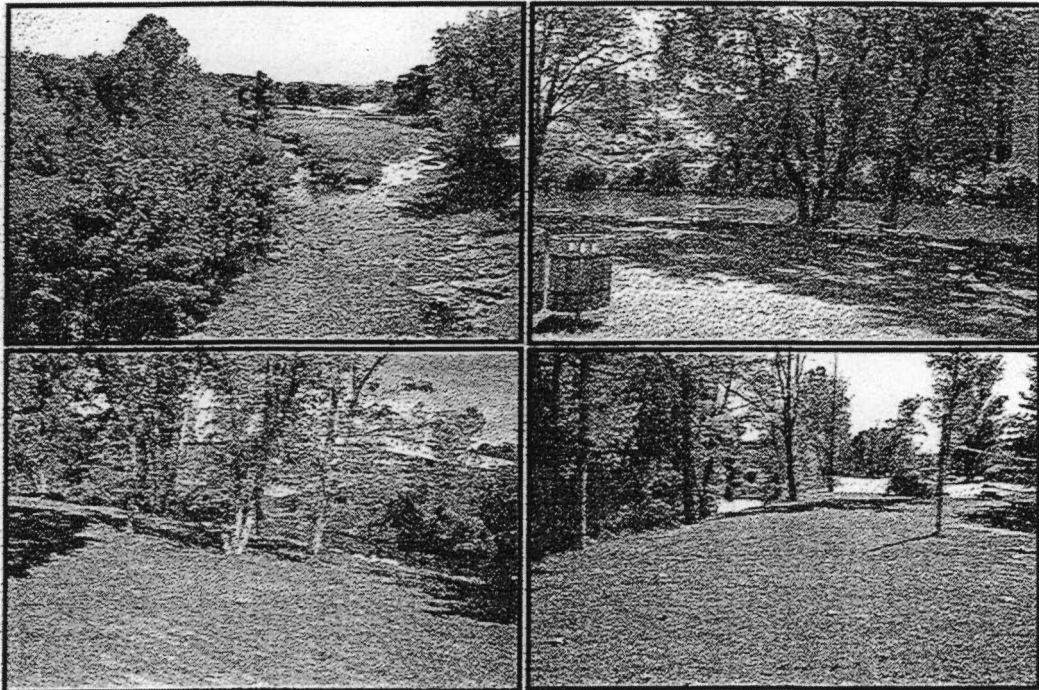


Figure 20. Potential River Pedestrian Corridor

Discontinuous Sidewalks on Davis Road

On Davis Road, between Teaster Lane and the Parkway, there are several locations on the north side of the street that either lack sidewalks or have deficient sidewalk sections. See Figure 21 for a picture of these locations. One section that lacks sidewalk is in front of the Tanger Outlet Mall. Adjacent to the Kids Country/Super Track Entertainment Park is a narrow sidewalk separated from the road by a grass strip. Closer to the Parkway, this sidewalk section and the street converge leaving a narrow sidewalk section abutting the road.

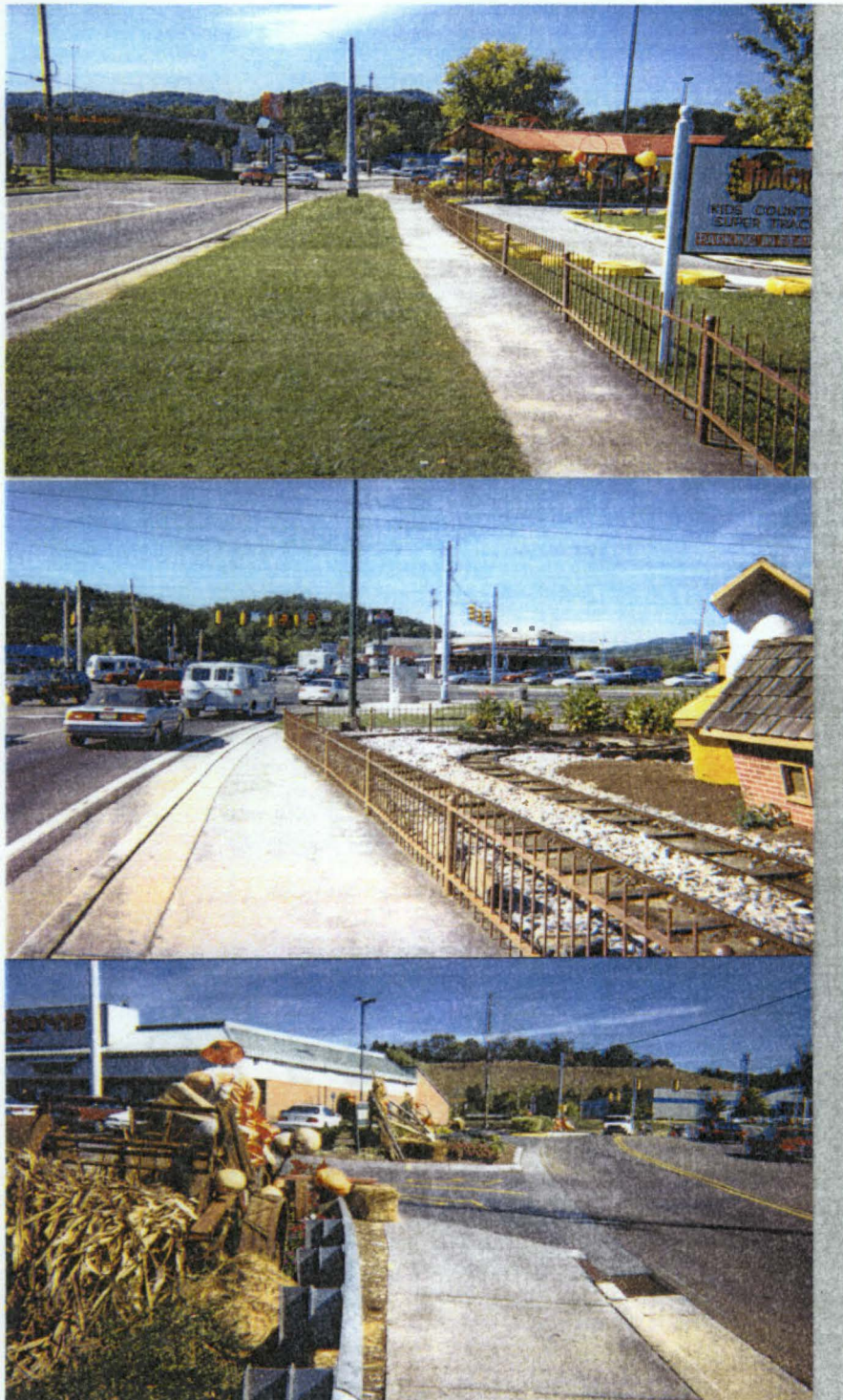


Figure 21. Discontinuous Sidewalks on Davis Road

CHAPTER 4

ANTICIPATED FUTURE PEDESTRIAN CONDITIONS

New Private Developments

The predictions of future pedestrian flows are based principally on anticipated changes among several land uses within the Study Area. Referring back to Figure 11, the assortment of entertainment attractions vary from amusement parks and miniature golf courses, to music and comedy theaters. Recurrent changes to existing businesses (whether through ownership or management) indicate that remaining, as a major attraction is the key for future existence. Essentially, there are a few new attractions located along the Parkway. The Glasgow Comedy Theater, located at the north end of the city at Music Road, has recently opened with breakfast, lunch, and dinner shows. On the south end, adjacent to the Red Roof Mall is the location for a new miniature golf park scheduled to open this spring. The Super Track and Kids Country Amusement Park is currently undergoing major renovations before the 1999 summer tourist season.

The trend of the tourism industry in Pigeon Forge has caused major improvements throughout Pigeon Forge. Numerous roadway projects have been implemented in addition to new entertainment attractions and construction of motel and hotels; apparent evidence of the city's goal in continuing to

accommodate the demands of tourists. However, more development will produce more tourism, in turn, more motorists.

Table 1 shows the Average Daily Traffic (ADT) along the Parkway during the 1997 and 1998 tourist seasons (9). The ADT is determined by the number of vehicles counted at various count locations in a 24-hour period. Location 1 at Sugar Hollow Road revealed 55,108 vehicles in 1997 and 68,000 vehicles in 1998. This 23 % increase indicates that more motorists are touring this area. Location 3, the Davis Road connector is a major collector from the Parkway to Teaster Lane. It has an increase of over 4,000 vehicles over the one-year period. Location 8 on the Parkway, near the Red Roof Mall shows little change in daily traffic volumes by maintaining a season high near 87,000 vehicles and a season low of approximately 23,000 vehicles.

Anticipated Pedestrian Development

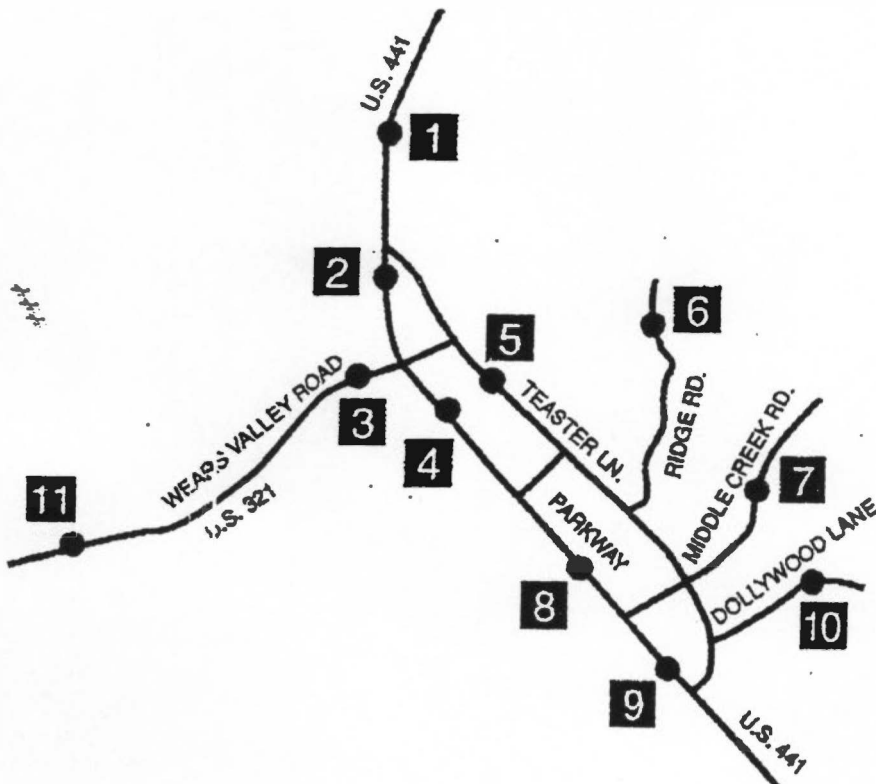
These characteristics of changes in traffic and land use patterns may result in changes in existing pedestrian flow. Generally pedestrian flow along U.S. 441 may increase due to a particular land use attraction. Development that has occurred off the Parkway has increased pedestrian travel on side streets triggering potential areas where improvements to intersections and roadway segments should take place. City ordinances should begin initiating pedestrian

Table 1

**1998 TRAFFIC COUNT DATA
AT COUNT STATION LOCATIONS ALONG U.S.441 (PARKWAY)**

| AVERAGE DAILY TRAFFIC (ADT) | | | |
|-----------------------------|--------|---------------|--------------|
| Station Number | ADT | Seasonal High | Seasonal Low |
| 1 | 68,000 | 89,300 | 24,700 |
| 2 | 60,000 | 97,000 | 26,600 |
| 3 | 24,000 | 32,100 | 8,900 |
| 4 | 59,000 | 84,300 | 23,000 |
| 5 | 6,000 | 11,000 | 3,000 |
| 6 | 6,300 | 10,100 | 2,800 |
| 7 | 8,300 | 15,500 | 4,200 |
| 8 | 54,000 | 87,000 | 23,500 |
| 9 | 58,000 | 75,000 | 21,000 |
| 10 | 13,900 | 16,200 | 4,500 |
| 11 | 11,200 | 16,000 | 4,400 |

Source: Tennessee Department of Transportation



considerations as a priority during the site plan review process, particularly when a new development produces a significant impact to traffic flow.

Table 2 shows the results of a survey performed during Pigeon Forge's 1995 and 1998 tourism season. The Pigeon Forge Department of Tourism compared tourist's attitudes toward the city's attractions during the two seasons. Numerous respondents took advantage of the open-ended questions to express their "likes and dislikes" of the area. While there is a good deal of similarity between the two lists, there are some interesting shifts. Entertainment/theaters made the biggest move from 5th place to 1st place, validating the city's support of the Music Road project and its commitment to the entertainment industry in general. Restaurants and lodging also moved up during the period, reflecting the fact that new and upscale facilities have been added in both categories over the past three years. It naturally follows that if some categories moved up the list, others had to come down. Shopping/outlets still received a significant number of positive comments, but did drop from 1st to 3rd in the rankings. Trolley service was not mentioned as a "like" probably due to traffic congestion-related concerns.

The results from the survey can be beneficial to the city's tourism efforts by providing evidence of any deficiencies in the area. Of course, omitting the trolley

Table 2

SURVEY OF TOURIST'S ATTITUDES TOWARD ATTRACTIONS

Pigeon Forge Pedestrian Study

Pigeon Forge, Tennessee

| 1998 | | 1995 | |
|------------------------|-----|------------------------|-----|
| Entertainment/Theaters | 17% | Shopping/Outlets | 19% |
| Atmosphere* | 16% | Atmosphere | 17% |
| Shopping/Outlets | 14% | Dollywood | 11% |
| Scenic Beauty/Parks | 13% | Scenic Beauty/Parks | 11% |
| Restaurants | 10% | Entertainment/Theaters | 10% |
| Variety of Activities | 9% | Variety of Activities | 9% |
| Dollywood | 8% | Miscellaneous | 8% |
| Lodging | 6% | Attractions | |
| Miscellaneous | 4% | Restaurants | 7% |
| Attractions | | Lodging | 4% |
| Arts and Crafts | 3% | Arts and Crafts | 3% |
| | | Trolley | 1% |

Source: Pigeon Forge Department of Tourism- Tourism Development Agency

service from the survey, because of its known concern, is evident that an efficient transportation corridor is needed.

Looking back to Figure 4, high traffic volumes that are present south of the intersection of U.S. 321 (Wears Valley Road) could be lessened if an alternate mode (other than the private automobile) was offered. Most trips, consisting of primarily short distances along U.S. 441, resulted in a large volume of vehicular traffic and heavy traffic congestion along the Parkway.

Potential Greenway Corridor

Pedestrian mobility can be further enhanced while creating recreational opportunities by developing walking corridors throughout areas in Pigeon Forge. The city is currently in the preliminary stages of developing a greenway system as part of Tennessee's Governor Don Sundquist's commitment for greenways and bikeways. Although, greenways involve corridors important for water quality and wildlife enhancement, conservation of historic structures and places, it can also provide the alternative to driving by promoting walking along naturally landscaped corridors. Greenways and trails would make the most of parks and public lands by providing greater access to more people. The Greenways and Trails project in Tennessee has created more partnerships between local, state and federal agencies, private citizens, businesses and the non-profit sector.

The City should study the feasibility of creating pedestrian corridors that can connect to the proposed greenway system. Because greenways are typically

long and narrow, they could provide more access and more connections and could increase tourism by increasing adjacent property values and encourage more tourism to two nearby Tennessee Parks; the Great Smoky Mountains National Park and Cherokee National Forest. The Little Pigeon River may have some physical constraints due to terrain that prevents sidewalk construction, but it is an area to be considered for construction of greenways or trails. Particularly in areas where there are no sidewalks, a pathway running parallel to the river could encourage many pedestrians to utilize the path as a designated walkway.

The City had its initial meeting to establish a greenways system on Thursday, March 4, 1999. Public input from the community, as well as, comments from public officials were on hand to see if the discussions of a greenway was needed. Many residents were concerned about the impact such a project would have on their personal property, public officials stressed the meaning of the greenways system, and the potential economic growth it could create.

With a pedestrian study in place, both plans could complement each other. A greenway system could create more corridors accessing hotels and trails. Easements along the rear side of hotels could be purchased. A system of trails from residential areas and hotel and motel establishment could link to the major pedestrian generators, specifically the malls and U.S. 441.

Old Mill Historic District

Along with other projects, the City plans to create a Historic District. This area is located in the Old Mill Area, a prime location since it already attracts thousands of tourists daily. With the designation of a historic district more visitors will become attracted to the historic area including Patriot Park. Planned events and activities depicted the history and legend of the City would be the new attraction in the Old Mill Area.

CHAPTER 5

RECOMMENDED PEDESTRIAN IMPROVEMENTS

The previous chapters presented an inventory of pedestrian infrastructure and addressed the interrelationships between pedestrians and motorists. Recommendations for increased pedestrian mobility within the Study Area vary in scope. Many solutions will involve changes in the physical characteristics of the City to influence people to walk to areas where they had previously traveled by automobile. Other solutions will require revisions to building code and site review standards in order to support the continued growth of private development in the City.

Traffic Signal Equipment

Several years ago, the City selected those signalized intersections that would include pedestrian signal equipment. Now with the increase in development north of U.S. 321 (Wears Valley Road), the City should add pedestrian "Walk/Don't Walk" equipment to all traffic signals that do not have them. Along the Parkway, those intersections include:

- Wears Valley Road;
- Davis Road;
- Sugar Hollow Road;
- Lazy Lane

Furthermore, all new traffic signal installations should include pedestrian equipment. The McGill Street Connector (currently under construction) was designed with “Walk” and “Don’t /Walk” indications. Along with McGill Street, the previously mentioned four intersections should also have crosswalks added.

In order to implement pedestrian equipment at these four intersections, signal plan modifications will have to be made. Moreover, a Parkway signal system analysis will have to be conducted so that system-wide timing and progression can be optimized.

The Pedestrian Generators

Old Mill Area

The Old Mill area is a village-type retail and shopping area bisected by Lower Middle Creek Road. It generates a substantial amount of pedestrian activity because of its physical layout and because of parking availability and location. The area includes the Fun Time Trolley transfer area and Patriot Park. Pedestrians often cross and walk along Lower Middle Creek Road and utilized the parking lots to move from one shop to the next. The city has future plans to soon designate the Old Mill Area to the Historic District. The city plans to implement special design and building code criteria for the area.

With the realignment of Lower Middle Creek Road and Dollywood Lane, the section of Middle Creek Road through the Old Mill Area has realized a substantial drop in through traffic that normally had cut-through to access the Parkway. Given this, as well as the mix of pedestrians and vehicles that occur on Middle Creek Road, it is recommended that the City of Pigeon Forge consider converting Lower Middle Creek Road, from U.S.441 to Teaster Lane, to a pedestrian mall with pedestrian and trolley access only. The limits of the mall would likely extend from River Road to Patriot Park. Also included in the pedestrian mall area would be portions of Old Mill Street and Butler Street.

Of course, this is only a suggestion. In order for the City to address the issues of feasibility for a pedestrian mall in the Old Mill Area several considerations must be undertaken. Listed are a number of issues and concerns that would require analysis including but not limited to the following:

- Is it economically feasible to businesses?
- How would it effect trolley operation?
- How would Old Mill Area patrons access the parking lots?
- Would additional parking be needed, if so, where?
- How would the mall effect Patriot Park?
- How would a pedestrian mall effect Lower Middle Creek Road business to the north that would be on the pedestrian mall?

The conversion of Lower Middle Creek Road to a pedestrian mall and trolley mall might be compatible with the historical district designation, but would create a significant change, therefore careful planning and good communication are essential. To begin with, the City should conduct a preliminary feasibility study, including business-owner participation in several public meetings and workshops. After all, if business owners in the area will not support the idea, the plan may fail. Also, discussions with the management of the Fun Time Trolley should also be considered. At this time, expansion of the trolley system was not a factor, but the idea of a trolley only road system might create other opportunities to develop other trolley transfer points.

Davis Road and Teaster Lane Area

A significant amount of pedestrian activity occurs between the outlet malls in the Davis Road and Teaster Lane area. Due to traffic congestion, many mall patrons choose to walk instead of drive between shopping centers. The traffic signal at the intersection of Davis Road and Teaster Lane has facilitated pedestrian movement by allowing people to cross at the intersection and has created artificial gaps in traffic, allowing pedestrians to cross mid block, both on Davis Road and Teaster Lane. Mid-block crossings are a concern, however, due to safety. The City has several choices relative to mid-block crossing activity that occurs across Davis Road between the Tanger Factory Outlet Mall and the Belz Factory Outlet Annex II and across Teaster Lane between the Belz Factory Outlet World and its annexed facility.

The choices consist of the following:

- Install unsignalized mid-block crosswalks;
- Install additional traffic signals, and;
- Look for pedestrian footbridge overpass/underpass opportunities.

Unsignalized mid-block crosswalks encourage pedestrians to cross away from the safest crossing location, the traffic signal. This action would also cause further traffic congestion as motorists yield to those crossing mid-block. Pedestrian signals are possible on Teaster Lane, south of Davis Road, or the area should be evaluated for additional signalization as property develops east of the Belz Mall area. As property east of the Belz Mall develops, another traffic signal may be warranted on Teaster Lane at the mall's main entrance. If so, this location would serve as a good location for a pedestrian crossing.

Upgrading Crosswalks

The City of Pigeon Forge should begin converting their single line crosswalk markings to the Zebra-type design as illustrated in Figure 22. If implemented, the City could fund the new crosswalk as part of the maintenance costs. In other words, as the existing crosswalk markings become worn, replace them with the new markings. At the Parkway, crosswalks with a high-visibility design would warn motorists that they are entering an area known for heavy pedestrian traffic.

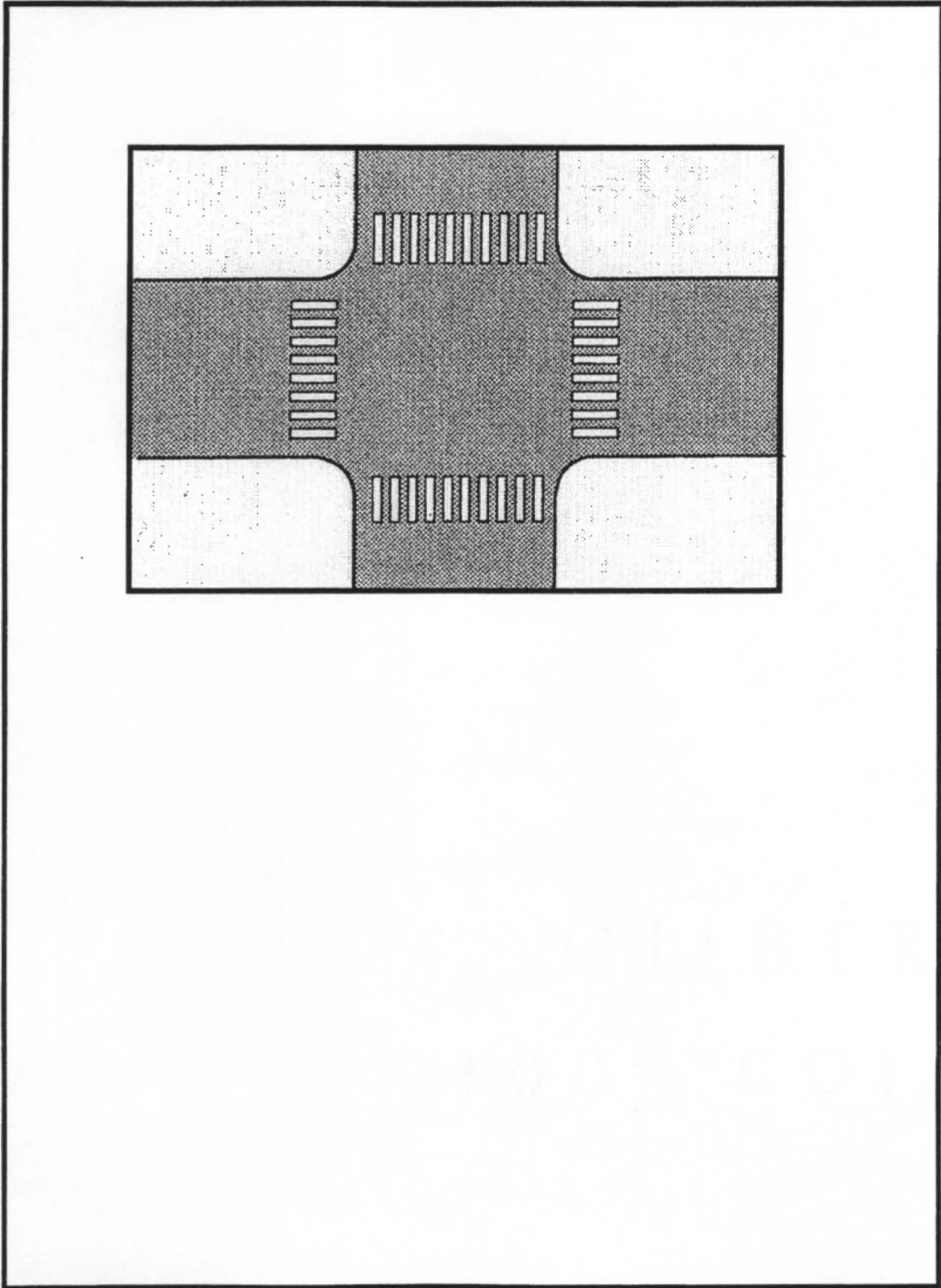


Figure 22. Zebra-type Crosswalk Design

Non-Standard and Other Pedestrian Sign Changes

On northbound River Road, the non-standard pedestrian crossing sign should be replaced with a standard sign. If the pedestrian crossing is no longer applicable, the sign should be removed. On eastbound Middle Creek Road near the Old Mill Restaurant, the pedestrian sign (W11A-2) should be replaced with an Advanced Pedestrian Crossing sign (W11-2).

Sidewalks on Private Roads

Figure 13 and 14 of Chapter 3 illustrate private developments that lack sidewalks on their driveways. The purpose of the photographs is to illustrate the problem, not to try to single out any particular development. It is recommended that the City of Pigeon Forge initiate discussions with its Tourism Bureau, local developers, the Pigeon Forge Lodging Association, the Theaters and Attractions Association and other similar organizations in an attempt to encourage private entities to add sidewalks. In fact, it would be appropriate to form a Pedestrian Task Force made up of local business owners, city staff members, elected officials, etc., as a means of improving the City's pedestrian infrastructure, both within the City and State's right-of-way, as well as within private developments.

Pedestrian Linkages Between Developments

In much the same way that private developments should have vehicular connections between each other, pedestrian connections should be provided as well. An example of two developments where a pedestrian connection is

provided is the Hampton Inn and Bob Evans Restaurant. The short sidewalk connection between the two buildings provided the access needed, preventing walkers from the hotels from contact with traffic. With the level terrain and proximity to each other, this was an inexpensive connection.

Given the steep terrain, it would be more expensive to provide a pedestrian connection between the Baymont Inn and the O'Charley's Restaurant, which was an example sighted in Chapter 3. Nevertheless, a pedestrian connection between a restaurant and hotel would probably be heavily utilized.

In the same general vicinity of the Baymont Inn exist the Ramada Inn Limited, the Country Tonite Theater, The J&S Cafeteria, and Eddie's Heart & Soul Café. These developments are on a ridge off of the Parkway and do not have pedestrian connections between them despite a natural production/attraction force. As stated earlier, this gives an example of some areas where more insight into the development should have been considered.

It is recommended that the City of Pigeon Forge encourage private developments to retrofit their site plans to incorporate pedestrian linkages. The appropriate mechanism might be through a Pedestrian Task Force or through the discussions regarding the driveway sidewalks.

Parkway Pedestrian Crossing

Many traffic signals are spaced too far apart to aid pedestrians crossing the Parkway (see Figure 3 for the distances between traffic signals). As such, pedestrians either cross mid-block without the assistance of a traffic signal or travel by automobile instead. Creating additional Parkway pedestrian crossings can be done three ways:

- An overpass;
- An underpass; or
- A pedestrian traffic signal

Studies have shown that pedestrians are reluctant to use an overpass unless they are already at a second floor level (for example, in the second level of a parking garage or building). People do not like to climb up, then cross on the bridge, then climb back down to street level just to cross the Parkway, making it difficult to deploy a second story foot bridge. Making provisions for the handicapped is also difficult with a pedestrian overpass. Assisting the walker with elevators and/or escalators would encourage usage of an overpass but would be expensive to build and maintain. In short, except for a possible redevelopment of property along the Parkway, construction of a pedestrian overpass will be expensive.

Some of the problems inherent in a pedestrian overpass do not exist with a pedestrian underpass. However, safety can be a concern, more important, its

feasibility is a concern because of the area's soil condition. Because of such safety and construction problems, a pedestrian underpass is not recommended.

Pedestrian Traffic Signals

Pedestrian traffic signals can only be installed once pedestrian volumes meet criteria specified in the Manual on Uniform Traffic Control Devices (MUTCD). Mid-block Parkway pedestrian volumes are no where near what is required to install a pedestrian traffic signal. Unfortunately, there is a certain amount of latent pedestrian activity that is not served due to difficulties incurred in crossing the Parkway. Consequently, pedestrian activity across the Parkway cannot be encouraged with pedestrian signals because the current walking traffic does not meet the MUTCD Pedestrian Warrant criteria.

Though pedestrian signals are not warranted along the Parkway, it might be possible to install some traffic signals at minor streets to satisfy the Signal Progression Warrant. The purpose of the Signal Progression Warrant is to have a traffic signal help maintain dense vehicle platoons between two other traffic signals that are spaced too far apart. Installing a traffic signal on this basis would serve a dual purpose of maintaining traffic platoons while facilitating the movement of pedestrians across the Parkway. The disbursements of platoons that were observed between widely spaced traffic signals on the Parkway determined potential locations where pedestrian signals might be beneficial. The location must serve a substantial amount of pedestrian movements because of

its proximity to pedestrian productions and attractions. Since U.S. 441, the Parkway is a major state roadway, a traffic signal permit must be obtained from TDOT (10).

Proposed Sidewalk Improvements

Figure 23A and 23B shows recommended locations for additional sidewalks. Improvements in these areas will give better linkages from residential, hotel and motel areas to shopping areas. For example, sidewalk improvements on Florence Drive from U.S. 321 (Wears Valley Road) to Pickel Street could increase safety for those that usually walk in the street to the Red Roof Mall. Sidewalk improvements to connect North River Road to South River Road would increase the safety for those that walk from the campground sites.

With the City's planned greenways system, a pedestrian corridor can be created to link sidewalks with the greenways system. A potential pedestrian corridor could link the Old Mill Area and River Road to the Music Road area. Once this major link is created, more attractions will be accessed by walking or by bicycle. The use of sidewalks and other separated paths for pedestrians could clearly provide the potential for increased pedestrian safety by separating pedestrians from automobiles. Figure 24 shows a preliminary diagram and location of a pedestrian corridor.

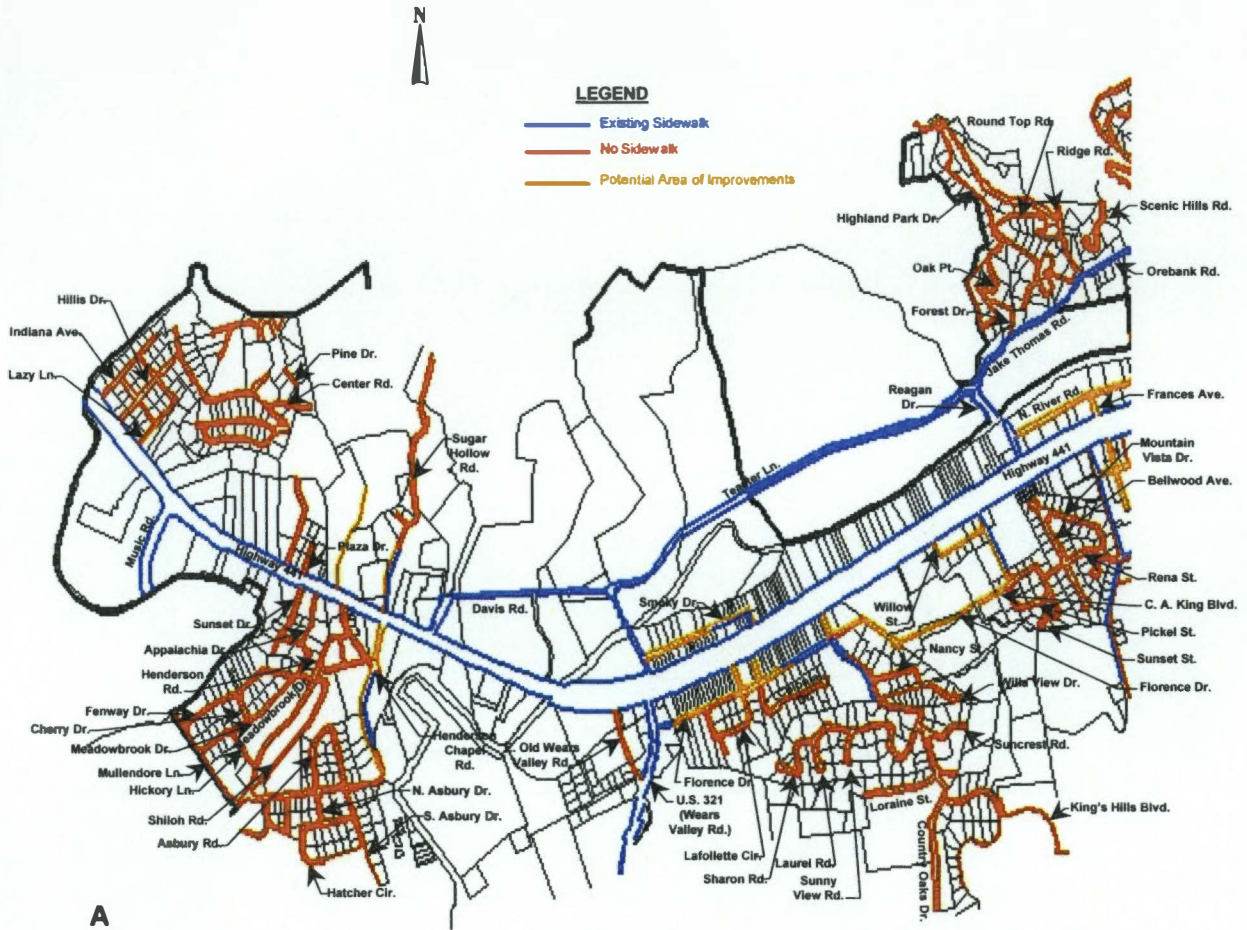
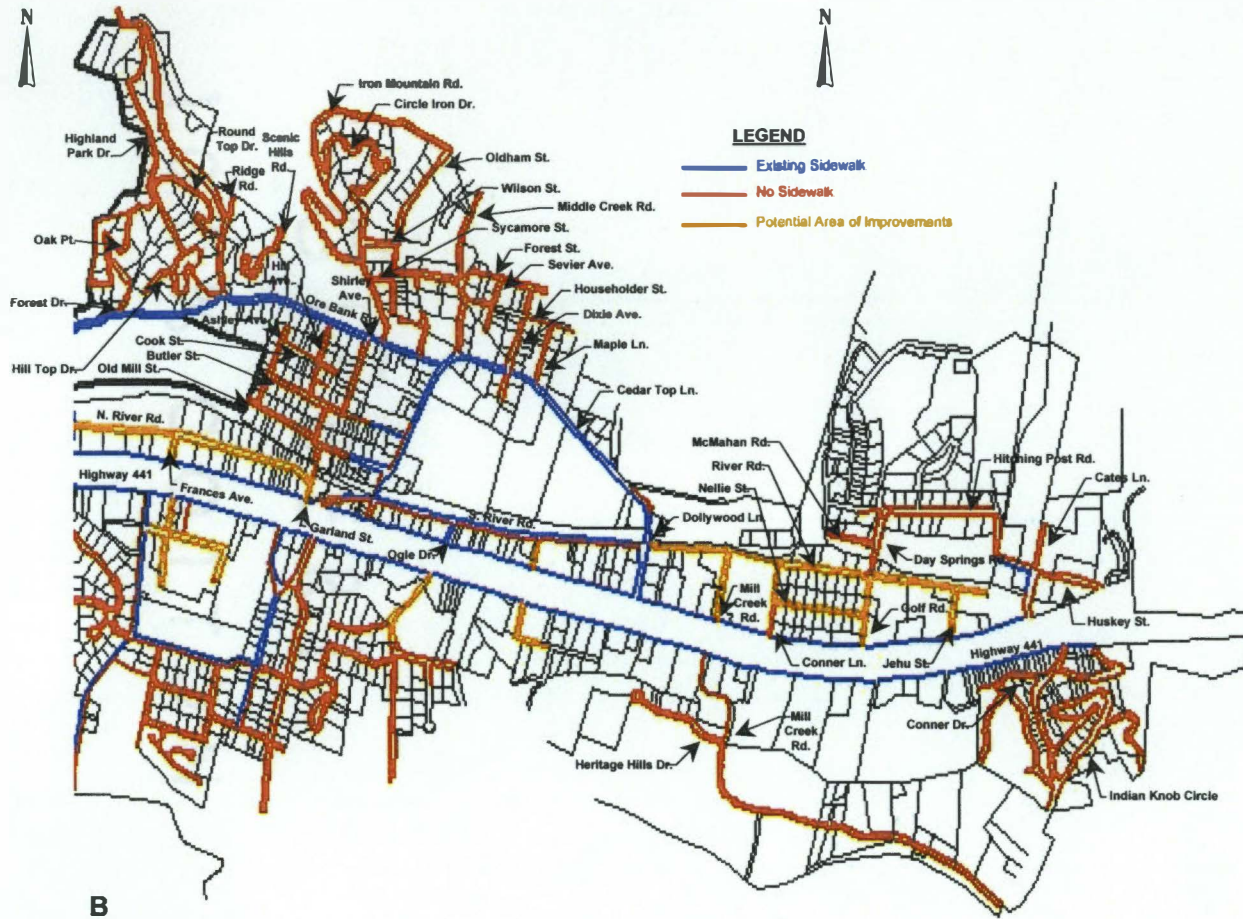


Figure 23. Recommended Locations for Additional Sidewalks

Figure 23. (continued)



LOCATION

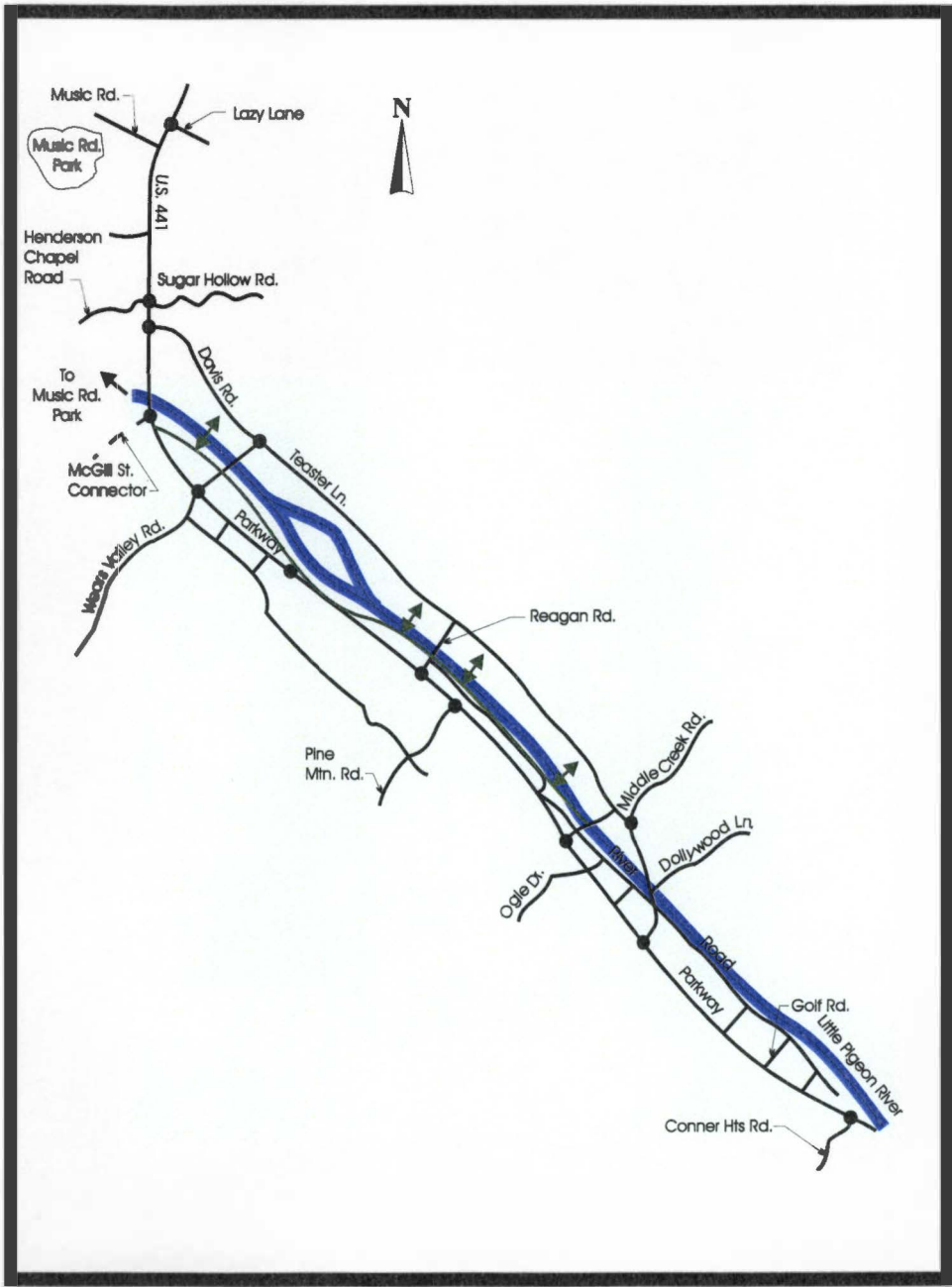


Figure 24. Potential Parkway Corridor

Parkway Driveway Frequency

Businesses do not like to have driveways taken away because good access is vitally important to economic success. However, along the Parkway, many businesses have an abundance of driveways that in effect are right-in/right-out because of restricted median access. It is recommended that the City explore the possibility of closing some of these driveways to minimize the pedestrian-vehicle conflicts, thereby improving pedestrian safety.

Site Plan Review

During the site plan review, city officials should be mindful of pedestrian needs. Connections between abutting sites should be provided and driveways should be equipped with sidewalks. Moreover, where the circumstances dictate, some developers should be required to build public sidewalks in conjunction with their site improvements.

Pedestrian Task Force

It is recommended that a Pedestrian Trolley Task Force be formed to encourage improvements to the City of Pigeon Forge's pedestrian infrastructure, both public and private. The Task Force could be made up of individuals representing the following entities:

- City of Pigeon Forge;
- Local State Planning Office; and
- Tennessee Department of Transportation.

The combination of these governments could make it possible for the city to receive the assistance that is need for improved pedestrian facilities.

Pigeon Forge officials seem confident of their present role in the City's transportation efforts. Future projects such as the greenways and trails system or a pedestrian corridor will need adequate funding in order for these programs to even be considered.

Funding and Grant Opportunities

The Federal Highway Administration (FHWA) has implemented the Transportation and Community and System Preservation Pilot Program (TCSP) as part of the Tennessee Equity Act for the 21st Century (Tea-21) (11). The TCSP provides funding for a planning and implementation grant so communities can investigate and address the relationship between transportation and community and system preservation. Funding for Fiscal Year 1999 (FY 1999) is \$ 20 million, with the FHWA expecting to award 20 to 30 grants (an average \$ 1 million per grant). The amount to be awarded in FY 2000-2003 is \$ 25 million.

The City of Pigeon Forge would be a good candidate for this type of funding program. There are very few communities like Pigeon Forge that have a small population, yet the traffic congestion experienced can be improved if such a grant was provided.

If the grant is obtained, Pigeon Forge could not only begin to address its trolley and pedestrian mobility needs, but in addition could:

- Improve the efficiency of its transportation system;
- Reduce the impacts of transportation on environment, (especially the impacts on the Great Smoky Mountains National Park);
- Reduce the need for costly future infrastructure;
- Ensure the efficient access to jobs, services, and centers of trade; and,
- Encourage private sector development patterns.

If Pigeon Forge received the planning grant in FY 1999, the City should continue efforts by applying for the implementation grants in the later fiscal years. However, matching funds, and incorporating non-traditional partners, including social service agencies and community groups could be favored.

CHAPTER 6

CONCLUSIONS AND OBSERVATIONS

Pigeon Forge is firmly established as a premier tourist destination. The abundance of people and cars that frequently visit the sites around the city could benefit from a complete transportation network. By updating the existing pedestrian facilities, walking could increase between neighboring businesses. Addressing those areas where improvements are needed could remedy a once ineffective pedestrian system.

Pigeon Forge's role as a gateway community can offer important lessons to other rural communities struggling with similar growth and change. Not only do gateway communities characterize a unique identity, but also they must find ways to safeguard what its residents value. Tourism has become the leading employer in most gateway communities. In 1970, about 172 million people visited the national parks; by 1995, that number had soared to 270 million (12). The steady increase of visitation to the national parks is a vital component to a neighboring community's economy. Although, great economic growth can occur, long time residents may be forced out due to rising property values and higher taxes as a result of such growth.

Most neighboring communities to a national park are apprehensive of becoming another "Pigeon Forge". In order for a community to enjoy the benefits of

tourism without sacrificing its character to commercial development, a leading force may have to spearhead the efforts to maintain a community's unique character and physical environment while commercial development is taken place.

Commercial development, especially in gateway communities should not only offer great economic gain, but should create a balance that is aesthetically pleasing and environmentally responsible.

Gateway communities interested in gaining economic vitality should seek out partners willing to support the community's goals and objectives. Citizens groups, local leaders, and non-profit organizations can offer assistance to those gateway communities that strive to preserve its character, scenic beauty while benefiting from a healthy economy.

Pigeon Forge has experienced both advantages and disadvantages as a result of what a multi-billion dollar tourism industry can bestow upon a small town. The heavy pedestrian and vehicle traffic particularly during many peak tourist seasons has jeopardized the efficiency of the city's existing infrastructure.

In order for other communities to avoid the same consequences like Pigeon Forge, standard transportation engineering and planning principles should be practiced. Fundamentally speaking, other gateway communities implementing

basic engineering and planning procedures could have an outcome that reaps the benefits for economic potential while focusing on such specialties including local aspirations and natural features that are typical of gateway communities.

Guidelines to review site plans should become policy and include special considerations for pedestrian features especially when a particular development is neighboring an existing attraction that may warrant a substantial number of pedestrians. The implementation of the site plan review process can offer control during development that could prevent the “piece-meal” process, which causes inconsistency and discontinuity in a city’s street network.

With the new millennium approaching, most cities are concerned with being compliant to an advance computer aided society, but the applications of advance techniques are not necessary. Basic transportation planning and engineering design practices are the essential tools needed to research the existing infrastructure and to gain insight to the changes future development would have on the community. Without these necessary steps, other gateway communities could become victims to the negative effects brought on by building and development, especially if there is no site plan review in place. Sensible transportation and land-use planning techniques could offer the most significant support a gateway community may need to preserve its character and integrity while benefiting from a healthy economy.

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APPENDIX

PEDESTRIAN COUNTS

| | | | |
|--|---------------------------|---------------------------|----------------------|
| WILBUR SMITH ASSOCIATES Int. # 2Pd INTERSECTION U.S. 441/321 w/ Dollywood Lane | SKETCH PEDESTRIANS | DATE: 8/12/98 | JOB NUMBER: |
| | | DAY OF WEEK: Wednesday | CITY: Sevierville |
| | | COUNTED BY: Dan | COUNTY: Sevier |

| TIME | PEDESTRIANS Dollywood Lane | | | | PEDESTRIANS U.S. 441 | | | | PEDESTRIANS U.S. 441 | | | | TOTALS | | |
|---------------|-------------------------------|------|-----------|-------|-------------------------|------|------------|-------|-------------------------|------|-----------|-------|--------|---|-----|
| | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | EASTBOUND | | WESTBOUND | | | | |
| | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | | | |
| 7:am - 7:15 | | 3 | | 3 | | | | 0 | | 0 | | 0 | | 0 | 3 |
| 7:15 - 7:30 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | 0 | 2 |
| 7:30 - 7:45 | | 3 | | 3 | | | | 0 | | 1 | | 1 | | 0 | 4 |
| 7:45 - 8:00 | | 5 | | 5 | | | | 0 | | 6 | | 6 | | 0 | 11 |
| SUBTOTALS | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 20 |
| 8:00 - 8:15 | | 6 | | 6 | | | | 0 | | 2 | | 2 | | 0 | 8 |
| 8:15 - 8:30 | | 6 | | 6 | | | | 0 | | 1 | | 1 | | 0 | 7 |
| 8:30 - 8:45 | | 0 | | 0 | | | | 0 | | 0 | | 0 | | 0 | 0 |
| 8:45 - 9:00 | | 0 | | 0 | | | | 0 | | 0 | | 0 | | 0 | 0 |
| SUBTOTALS | 0 | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 15 |
| 11:00 - 11:15 | | 0 | | 0 | | | | 0 | | 0 | | 0 | | 0 | 0 |
| 11:15 - 11:30 | | 0 | | 0 | | | | 0 | | 0 | | 0 | | 0 | 0 |
| 11:30 - 11:45 | | 4 | | 4 | | | | 0 | | 7 | | 7 | | 0 | 11 |
| 11:45 - 12:00 | | 2 | | 2 | | | | 0 | | 3 | | 3 | | 0 | 5 |
| SUBTOTALS | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 0 | 16 |
| 12:00 - 12:15 | | 8 | | 8 | | | | 0 | | 6 | | 6 | | 0 | 14 |
| 12:15 - 12:30 | | 2 | | 2 | | | | 0 | | 11 | | 11 | | 0 | 13 |
| 12:30 - 12:45 | | 6 | | 6 | | | | 0 | | 9 | | 9 | | 0 | 15 |
| 12:45 - 1:00 | | 0 | | 0 | | | | 0 | | 0 | | 0 | | 0 | 0 |
| SUBTOTALS | 0 | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 0 | 42 |
| 2:00 - 2:15 | | 2 | | 2 | | | | 0 | | 5 | | 5 | | 0 | 7 |
| 2:15 - 2:30 | | 2 | | 2 | | | | 0 | | 4 | | 4 | | 0 | 6 |
| 2:30 - 2:45 | | 0 | | 0 | | | | 0 | | 2 | | 2 | | 0 | 2 |
| 2:45 - 3:00 | | 4 | | 4 | | | | 0 | | 11 | | 11 | | 0 | 15 |
| SUBTOTALS | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 | 0 | 0 | 30 |
| 3:00 - 3:15 | | 0 | | 0 | | | | 0 | | 17 | | 17 | | 0 | 17 |
| 3:15 - 3:30 | | 0 | | 0 | | | | 0 | | 26 | | 26 | | 0 | 26 |
| 3:30 - 3:45 | | 4 | | 4 | | | | 0 | | 25 | | 25 | | 0 | 29 |
| 3:45 - 4:00 | | 2 | | 2 | | | | 0 | | 3 | | 3 | | 0 | 5 |
| SUBTOTALS | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 71 | 0 | 71 | 0 | 0 | 77 |
| 4:00 - 4:15 | | 7 | | 7 | | | | 0 | | 3 | | 3 | | 0 | 10 |
| 4:15 - 4:30 | | 10 | | 10 | | | | 0 | | 15 | | 15 | | 0 | 25 |
| 4:30 - 4:45 | | 5 | | 5 | | | | 0 | | 6 | | 6 | | 0 | 11 |
| 4:45 - 5:00 | | 5 | | 5 | | | | 0 | | 7 | | 7 | | 0 | 12 |
| SUBTOTALS | 0 | 27 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 31 | 0 | 0 | 58 |
| 5:00 - 5:15 | | 5 | | 5 | | | | 0 | | 9 | | 9 | | 0 | 14 |
| 5:15 - 5:30 | | 16 | | 16 | | | | 0 | | 10 | | 10 | | 0 | 25 |
| 5:30 - 5:45 | | 0 | | 0 | | | | 0 | | 20 | | 20 | | 0 | 20 |
| 5:45 - 6:00 | | 0 | | 0 | | | | 0 | | 11 | | 11 | | 0 | 11 |
| SUBTOTALS | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 50 | 0 | 0 | 71 |
| TOTALS | 0 | 109 | 0 | 109 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 220 | 0 | 0 | 329 |

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| | | | | | | | | | | | | | |
|---|------|-------------------|-------|-----------|------|---------------------------|-------|------------|------|-----------------------|-------|-------|--------|
| YL BUR SMITH ASSOCIATE Int. # 5 (Peds) INTERSECTION U.S. 441/321 w/ Lower Middlecreek Road (Pedestrians) | | SKETCH | | | | DATE: 7/23/98 | | | | JOB NUMBER: | | | |
| | | | | | | DAY OF WEEK: Wednesday | | | | CITY: Pigeon Forge | | | |
| | | | | | | COUNTED BY: | | | | COUNTY: Sevier | | | |
| | | Lower Middlecreek | | | | U.S. 441 | | | | U.S. 441 | | | |
| | | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | | | | |
| TIME | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | TOTALS |
| 7:am - 7:15 | | | | 0 | | | | 0 | | | | | 0 |
| 7:15 - 7:30 | | | | 0 | | | | 0 | | | | | 0 |
| 7:30 - 7:45 | | | | 0 | | 1 | | 1 | | 3 | | | 4 |
| 7:45 - 8:00 | | | | 0 | | 0 | | 0 | | 3 | | | 3 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 6 | 7 |
| 8:00 - 8:15 | | | | 0 | | 6 | | 6 | | 1 | | | 7 |
| 8:15 - 8:30 | | | | 0 | | 0 | | 0 | | 1 | | | 1 |
| 8:30 - 8:45 | | | | 0 | | 0 | | 0 | | 1 | | | 1 |
| 8:45 - 9:00 | | | | 0 | | 0 | | 0 | | 2 | | | 2 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 5 | 0 | 5 | 11 |
| 11:00 - 11:15 | | | | 0 | | 7 | | 7 | | 7 | | | 14 |
| 11:15 - 11:30 | | | | 0 | | 4 | | 4 | | 0 | | | 4 |
| 11:30 - 11:45 | | | | 0 | | 5 | | 5 | | 8 | | | 13 |
| 11:45 - 12:00 | | | | 0 | | 8 | | 8 | | 10 | | | 18 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 24 | 0 | 25 | 0 | 25 | 49 |
| 12:00 - 12:15 | | | | 0 | | 14 | | 14 | | 11 | | | 25 |
| 12:15 - 12:30 | | | | 0 | | 13 | | 13 | | 24 | | | 37 |
| 12:30 - 12:45 | | | | 0 | | 3 | | 3 | | 8 | | | 11 |
| 12:45 - 1:00 | | | | 0 | | 13 | | 13 | | 10 | | | 23 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 43 | 0 | 53 | 0 | 53 | 96 |
| 2:00 - 2:15 | | | | 0 | | 10 | | 10 | | 2 | | | 12 |
| 2:15 - 2:30 | | | | 0 | | 12 | | 12 | | 6 | | | 18 |
| 2:30 - 2:45 | | | | 0 | | 4 | | 4 | | 1 | | | 5 |
| 2:45 - 3:00 | | | | 0 | | 3 | | 3 | | 2 | | | 5 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 29 | 0 | 11 | 0 | 11 | 40 |
| 3:00 - 3:15 | | | | 0 | | 4 | | 4 | | 3 | | | 7 |
| 3:15 - 3:30 | | | | 0 | | 9 | | 9 | | 12 | | | 21 |
| 3:30 - 3:45 | | | | 0 | | 7 | | 7 | | 3 | | | 10 |
| 3:45 - 4:00 | | | | 0 | | 3 | | 3 | | 13 | | | 16 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 23 | 0 | 31 | 0 | 31 | 54 |
| 4:00 - 4:15 | | | | 0 | | 5 | | 5 | | 4 | | | 9 |
| 4:15 - 4:30 | | | | 0 | | 6 | | 6 | | 2 | | | 8 |
| 4:30 - 4:45 | | | | 0 | | 8 | | 8 | | 6 | | | 14 |
| 4:45 - 5:00 | | | | 0 | | 4 | | 4 | | 3 | | | 7 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 23 | 0 | 15 | 0 | 15 | 38 |
| 5:00 - 5:15 | | | | 0 | | 3 | | 3 | | 5 | | | 8 |
| 5:15 - 5:30 | | | | 0 | | 2 | | 2 | | 2 | | | 4 |
| 5:30 - 5:45 | | | | 0 | | 4 | | 4 | | 3 | | | 7 |
| 5:45 - 6:00 | | | | 0 | | 8 | | 8 | | 5 | | | 13 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 17 | 0 | 15 | 0 | 15 | 32 |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 166 | 0 | 166 | 0 | 161 | 0 | 161 | 327 |

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| WILBUR SMITH ASSOCIATE | | SKETCH | | | | | | | | DATE: 3/1/98 | | | | JOB NUMBER: | | | |
|---|-------------------|--------|-------|-------|-------------------|------|-------|-------|------------|---------------------|-------|-------|------------|--------------------|-------|-------|--------|
| Int. # 6 (Peds) | | | | | | | | | | DAY OF WEEK: Friday | | | | CITY: Pigeon Forge | | | |
| INTERSECTION Lower Middlecreek Road w/River Road (Pedestrians) | | | | | | | | | | COUNTED BY: Phil | | | | COUNTY: Sevier | | | |
| TIME | Lower Middlecreek | | | | Lower Middlecreek | | | | River Road | | | | River Road | | | | TOTALS |
| | EASTBOUND | | | | WESTBOUND | | | | NORTHBOUND | | | | SOUTHBOUND | | | | |
| | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | |
| 7:am - 7:15 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| 7:15 - 7:30 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| 7:30 - 7:45 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| 7:45 - 8:00 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 - 8:15 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| 8:15 - 8:30 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| 8:30 - 8:45 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| 8:45 - 9:00 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 11:00 - 11:15 | | | | 0 | | | 11 | 11 | | | | 0 | | | | 11 | |
| 11:15 - 11:30 | | | | 0 | | | 11 | 11 | | | | 0 | | | | 11 | |
| 11:30 - 11:45 | | | | 0 | | | 9 | 9 | | | | 0 | | | | 9 | |
| 11:45 - 12:00 | | | | 0 | | | 3 | 3 | | | | 0 | | | | 3 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | |
| 12:00 - 12:15 | | | | 0 | | | 5 | 5 | | | | 0 | | | | 5 | |
| 12:15 - 12:30 | | | | 0 | | | 11 | 11 | | | | 0 | | | | 11 | |
| 12:30 - 12:45 | | | | 0 | | | 8 | 8 | | | | 0 | | | | 8 | |
| 12:45 - 1:00 | | | | 0 | | | 9 | 9 | | | | 0 | | | | 9 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | |
| 2:00 - 2:15 | | | | 0 | | | 29 | 29 | | | | 0 | | | | 29 | |
| 2:15 - 2:30 | | | | 0 | | | 7 | 7 | | | | 0 | | | | 7 | |
| 2:30 - 2:45 | | | | 0 | | | 12 | 12 | | | | 0 | | | | 12 | |
| 2:45 - 3:00 | | | | 0 | | | 4 | 4 | | | | 0 | | | | 4 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | |
| 3:00 - 3:15 | | | | 0 | | | 10 | 10 | | | | 0 | | | | 10 | |
| 3:15 - 3:30 | | | | 0 | | | 5 | 5 | | | | 0 | | | | 5 | |
| 3:30 - 3:45 | | | | 0 | | | 11 | 11 | | | | 0 | | | | 11 | |
| 3:45 - 4:00 | | | | 0 | | | 0 | 0 | | | | 0 | | | | 0 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | |
| 4:00 - 4:15 | | | | 0 | | | 18 | 18 | | | | 0 | | | | 18 | |
| 4:15 - 4:30 | | | | 0 | | | 22 | 22 | | | 1 | 1 | | | | 23 | |
| 4:30 - 4:45 | | | | 0 | | | 17 | 17 | | | 7 | 7 | | | | 24 | |
| 4:45 - 5:00 | | | | 0 | | | 23 | 23 | | | 0 | 0 | | | | 23 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 80 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 88 | |
| 5:00 - 5:15 | | | | 0 | | | 10 | 10 | | | 2 | 2 | | | | 12 | |
| 5:15 - 5:30 | | | | 0 | | | 17 | 17 | | | 2 | 2 | | | | 19 | |
| 5:30 - 5:45 | | | | 0 | | | 15 | 15 | | | 0 | 0 | | | | 15 | |
| 5:45 - 6:00 | | | | 0 | | | 12 | 12 | | | 0 | 0 | | | | 12 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 54 | 0 | 54 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 58 | |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 279 | 0 | 279 | 0 | 12 | 0 | 12 | 0 | 0 | 0 | 291 | |

6441wd720

| YLBUR SMITH ASSOCIATES Int. # 7 (Peds) | | SKETCH | | | | | | | | DATE: 8/18/99 | | | | JOB NUMBER: | | | | | | | |
|---|------|------------|-------|-------|------|--------------|-------|-------|------|-------------------------|-------|-------|------|-----------------------|-------|-------|--------|--|--|--|--|
| INTERSECTION U.S. 441/321 w/River Road (Pedestrians) | | | | | | | | | | DAY OF WEEK: Tuesday | | | | CITY: Pigeon Forge | | | | | | | |
| | | | | | | | | | | COUNTED BY: | | | | COUNTY: Sevier | | | | | | | |
| | | River Road | | | | U.S. 441/321 | | | | U.S. 441/321 | | | | | | | | | | | |
| | | EASTBOUND | | | | WESTBOUND | | | | NORTHBOUND | | | | SOUTHBOUND | | | | | | | |
| TIME | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | TOTALS | | | | |
| 7:am - 7:15 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | | | 0 | 2 | | | | |
| 7:15 - 7:30 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | | | 0 | 2 | | | | |
| 7:30 - 7:45 | | 6 | | 6 | | | | 0 | | 0 | | 0 | | | | 0 | 6 | | | | |
| 7:45 - 8:00 | | 5 | | 5 | | | | 0 | | 0 | | 0 | | | | 0 | 5 | | | | |
| SUBTOTALS | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | | | | |
| 8:00 - 8:15 | | 7 | | 7 | | | | 0 | | 2 | | 2 | | | | 0 | 9 | | | | |
| 8:15 - 8:30 | | 5 | | 5 | | | | 0 | | 0 | | 0 | | | | 0 | 5 | | | | |
| 8:30 - 8:45 | | 6 | | 6 | | | | 0 | | 0 | | 0 | | | | 0 | 6 | | | | |
| 8:45 - 9:00 | | 12 | | 12 | | | | 0 | | 0 | | 0 | | | | 0 | 12 | | | | |
| SUBTOTALS | 0 | 30 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 32 | | | | |
| 11:00 - 11:15 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | | | 0 | 2 | | | | |
| 11:15 - 11:30 | | 3 | | 3 | | | | 0 | | 0 | | 0 | | | | 0 | 3 | | | | |
| 11:30 - 11:45 | | 10 | | 10 | | | | 0 | | 3 | | 3 | | | | 0 | 13 | | | | |
| 11:45 - 12:00 | | 8 | | 8 | | | | 0 | | 2 | | 2 | | | | 0 | 10 | | | | |
| SUBTOTALS | 0 | 23 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 28 | | | | |
| 12:00 - 12:15 | | 5 | | 5 | | | | 0 | | 0 | | 0 | | | | 0 | 5 | | | | |
| 12:15 - 12:30 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | | | 0 | 2 | | | | |
| 12:30 - 12:45 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | | | 0 | 2 | | | | |
| 12:45 - 1:00 | | 9 | | 9 | | | | 0 | | 0 | | 0 | | | | 0 | 9 | | | | |
| SUBTOTALS | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | | | | |
| 2:00 - 2:15 | | 8 | | 8 | | | | 0 | | 0 | | 0 | | | | 0 | 8 | | | | |
| 2:15 - 2:30 | | 4 | | 4 | | | | 0 | | 0 | | 0 | | | | 0 | 4 | | | | |
| 2:30 - 2:45 | | 6 | | 6 | | | | 0 | | 1 | | 1 | | | | 0 | 7 | | | | |
| 2:45 - 3:00 | | 12 | | 12 | | | | 0 | | 0 | | 0 | | | | 0 | 12 | | | | |
| SUBTOTALS | 0 | 30 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 31 | | | | |
| 3:00 - 3:15 | | 1 | | 1 | | | | 0 | | 0 | | 0 | | | | 0 | 1 | | | | |
| 3:15 - 3:30 | | 14 | | 14 | | | | 0 | | 0 | | 0 | | | | 0 | 14 | | | | |
| 3:30 - 3:45 | | 2 | | 2 | | | | 0 | | 1 | | 1 | | | | 0 | 3 | | | | |
| 3:45 - 4:00 | | 8 | | 8 | | | | 0 | | 0 | | 0 | | | | 0 | 8 | | | | |
| SUBTOTALS | 0 | 25 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 26 | | | | |
| 4:00 - 4:15 | | 15 | | 15 | | | | 0 | | 0 | | 0 | | | | 0 | 15 | | | | |
| 4:15 - 4:30 | | 6 | | 6 | | | | 0 | | 1 | | 1 | | | | 0 | 7 | | | | |
| 4:30 - 4:45 | | 13 | | 13 | | | | 0 | | 3 | | 3 | | | | 0 | 16 | | | | |
| 4:45 - 5:00 | | 2 | | 2 | | | | 0 | | 0 | | 0 | | | | 0 | 2 | | | | |
| SUBTOTALS | 0 | 36 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 40 | | | | |
| 5:00 - 5:15 | | 7 | | 7 | | | | 0 | | 1 | | 1 | | | | 0 | 8 | | | | |
| 5:15 - 5:30 | | 7 | | 7 | | | | 0 | | 0 | | 0 | | | | 0 | 7 | | | | |
| 5:30 - 5:45 | | 10 | | 10 | | | | 0 | | 1 | | 1 | | | | 0 | 11 | | | | |
| 5:45 - 6:00 | | 10 | | 10 | | | | 0 | | 0 | | 0 | | | | 0 | 10 | | | | |
| SUBTOTALS | 0 | 34 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 36 | | | | |
| TOTALS | 0 | 211 | 0 | 211 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 226 | | | | |

8/18/99

| | | | | | | | | | | | | | | | | | | |
|---|---|--------------------|------|-------|-------|-----------|------|-------|-------|---------------------------|------|-------|-------|----------------------|------|-------|-------|--------|
| L. BUR SMITH ASSOCIATES Int. # 8 (Peds) | | SKETCH | | | | | | | | DATE: 8/12/98 | | | | JOB NUMBER: | | | | |
| INTERSECTION U.S. 441 w/Pine Mountain Road (Pedestrians) | | | | | | | | | | DAY OF WEEK: Wednesday | | | | CITY: Sevierville | | | | |
| | | | | | | | | | | COUNTED BY: | | | | COUNTY: Sevier | | | | |
| | | Pine Mountain Road | | | | U.S. 441 | | | | U.S. 441 | | | | | | | | |
| | | EASTBOUND | | | | WESTBOUND | | | | NORTHBOUND | | | | SOUTHBOUND | | | | |
| TIME | | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | TOTALS |
| 7:am - 7:15 | | | | | 0 | | 7 | | 7 | | 0 | | 0 | | | | 0 | 7 |
| 7:15 - 7:30 | | | | | 0 | | 7 | | 7 | | 1 | | 1 | | | | 0 | 8 |
| 7:30 - 7:45 | | | | | 0 | | 11 | | 11 | | 6 | | 6 | | | | 0 | 17 |
| 7:45 - 8:00 | | | | | 0 | | 8 | | 8 | | 5 | | 5 | | | | 0 | 13 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 33 | 0 | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 45 |
| 8:00 - 8:15 | | | | | 0 | | 9 | | 9 | | 11 | | 11 | | | | 0 | 20 |
| 8:15 - 8:30 | | | | | 0 | | 8 | | 8 | | 8 | | 8 | | | | 0 | 16 |
| 8:30 - 8:45 | | | | | 0 | | 4 | | 4 | | 10 | | 10 | | | | 0 | 14 |
| 8:45 - 9:00 | | | | | 0 | | 4 | | 4 | | 10 | | 10 | | | | 0 | 14 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 25 | 0 | 39 | 0 | 39 | 0 | 0 | 0 | 0 | 64 |
| 11:00 - 11:15 | | | | | 0 | | 25 | | 25 | | 8 | | 8 | | | | 0 | 33 |
| 11:15 - 11:30 | | | | | 0 | | 20 | | 20 | | 5 | | 5 | | | | 0 | 25 |
| 11:30 - 11:45 | | | | | 0 | | 14 | | 14 | | 0 | | 0 | | | | 0 | 14 |
| 11:45 - 12:00 | | | | | 0 | | 7 | | 7 | | 3 | | 3 | | | | 0 | 10 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 66 | 0 | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 82 |
| 12:00 - 12:15 | | | | | 0 | | 11 | | 11 | | 1 | | 1 | | | | 0 | 12 |
| 12:15 - 12:30 | | | | | 0 | | 13 | | 13 | | 5 | | 5 | | | | 0 | 18 |
| 12:30 - 12:45 | | | | | 0 | | 4 | | 4 | | 2 | | 2 | | | | 0 | 6 |
| 12:45 - 1:00 | | | | | 0 | | 9 | | 9 | | 0 | | 0 | | | | 0 | 9 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 37 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 45 |
| 2:00 - 2:15 | | | | | 0 | | 10 | | 10 | | 5 | | 5 | | | | 0 | 15 |
| 2:15 - 2:30 | | | | | 0 | | 21 | | 21 | | 0 | | 0 | | | | 0 | 21 |
| 2:30 - 2:45 | | | | | 0 | | 9 | | 9 | | 0 | | 0 | | | | 0 | 9 |
| 2:45 - 3:00 | | | | | 0 | | 21 | | 21 | | 3 | | 3 | | | | 0 | 24 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 0 | 61 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 69 |
| 3:00 - 3:15 | | | | | 0 | | 20 | | 20 | | 3 | | 3 | | | | 0 | 23 |
| 3:15 - 3:30 | | | | | 0 | | 5 | | 5 | | 0 | | 0 | | | | 0 | 5 |
| 3:30 - 3:45 | | | | | 0 | | 20 | | 20 | | 7 | | 7 | | | | 0 | 27 |
| 3:45 - 4:00 | | | | | 0 | | 27 | | 27 | | 9 | | 9 | | | | 0 | 36 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 72 | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 0 | 91 |
| 4:00 - 4:15 | | | | | 0 | | 16 | | 16 | | 2 | | 2 | | | | 0 | 18 |
| 4:15 - 4:30 | | | | | 0 | | 8 | | 8 | | 0 | | 0 | | | | 0 | 8 |
| 4:30 - 4:45 | | | | | 0 | | 16 | | 16 | | 0 | | 0 | | | | 0 | 16 |
| 4:45 - 5:00 | | | | | 0 | | 13 | | 13 | | 9 | | 9 | | | | 0 | 22 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 53 | 0 | 11 | 0 | 11 | 0 | 0 | 0 | 0 | 64 |
| 5:00 - 5:15 | | | | | 0 | | 16 | | 16 | | 2 | | 2 | | | | 0 | 18 |
| 5:15 - 5:30 | | | | | 0 | | 14 | | 14 | | 4 | | 4 | | | | 0 | 18 |
| 5:30 - 5:45 | | | | | 0 | | 7 | | 7 | | 1 | | 1 | | | | 0 | 8 |
| 5:45 - 6:00 | | | | | 0 | | 14 | | 14 | | 7 | | 7 | | | | 0 | 21 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 51 | 0 | 14 | 0 | 14 | 0 | 0 | 0 | 0 | 65 |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 398 | 0 | 398 | 0 | 127 | 0 | 127 | 0 | 0 | 0 | 0 | 525 |

8/14/98

| VILBUR SMITH ASSOCIATES Int # 11 (Peds) | | SKETCH | | | | | | | | DATE: 7/17/88 | | JOB NUMBER: 245420K | | | | | |
|---|-----------------|---------------|-----------|-------|------------|------|------------|-------|--------------|------------------------|-------|-----------------------|--------------|------|-------|-------|--------|
| INTERSECTION U.S. 441/321 w/ Ent to Red Roof Mall Signalized | | (Pedestrians) | | | | | | | | DAY OF WEEK: Monday | | CITY: Pigeon Forge | | | | | |
| | | | | | | | | | | COUNTED BY: | | COUNTY: Sevier | | | | | |
| TIME | Ent to Red Roof | | | | | | | | U.S. 441/321 | | | | U.S. 441/321 | | | | TOTALS |
| | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | | | | | | | | | |
| | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | |
| 7:am - 7:15 | | 0 | | 0 | | | | 0 | 5 | | 5 | | | | 0 | 5 | |
| 7:15 - 7:30 | | 0 | | 0 | | | | 0 | 0 | | 0 | | | | 0 | 0 | |
| 7:30 - 7:45 | | 0 | | 0 | | | | 0 | 3 | | 3 | | | | 0 | 3 | |
| 7:45 - 8:00 | | 0 | | 0 | | | | 0 | 0 | | 0 | | | | 294 | 294 | |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 8 | |
| 8:00 - 8:15 | | 2 | | 2 | | | | 0 | 8 | | 8 | | | | 0 | 10 | |
| 8:15 - 8:30 | | 0 | | 0 | | | | 0 | 9 | | 9 | | | | 0 | 9 | |
| 8:30 - 8:45 | | 1 | | 1 | | | | 0 | 2 | | 2 | | | | 0 | 3 | |
| 8:45 - 9:00 | | 0 | | 0 | | | | 0 | 8 | | 8 | | | | 0 | 8 | |
| SUBTOTALS | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 27 | 0 | 27 | 0 | 0 | 0 | 0 | 30 | |
| 11:00 - 11:15 | | 32 | | 32 | | | | 0 | 6 | | 6 | | | | 0 | 38 | |
| 11:15 - 11:30 | | 16 | | 16 | | | | 0 | 6 | | 6 | | | | 0 | 22 | |
| 11:30 - 11:45 | | 22 | | 22 | | | | 0 | 15 | | 15 | | | | 0 | 37 | |
| 11:45 - 12:00 | | 11 | | 11 | | | | 0 | 30 | | 30 | | | | 0 | 41 | |
| SUBTOTALS | 0 | 81 | 0 | 81 | 0 | 0 | 0 | 0 | 57 | 0 | 57 | 0 | 0 | 0 | 0 | 138 | |
| 12:00 - 12:15 | | 30 | | 30 | | | | 0 | 18 | | 18 | | | | 0 | 48 | |
| 12:15 - 12:30 | | 27 | | 27 | | | | 0 | 16 | | 16 | | | | 0 | 43 | |
| 12:30 - 12:45 | | 7 | | 7 | | | | 0 | 12 | | 12 | | | | 0 | 19 | |
| 12:45 - 1:00 | | 29 | | 29 | | | | 0 | 12 | | 12 | | | | 0 | 41 | |
| SUBTOTALS | 0 | 93 | 0 | 93 | 0 | 0 | 0 | 0 | 58 | 0 | 58 | 0 | 0 | 0 | 0 | 151 | |
| 2:00 - 2:15 | | 34 | | 34 | | | | 0 | 15 | | 15 | | | | 0 | 49 | |
| 2:15 - 2:30 | | 18 | | 18 | | | | 0 | 8 | | 8 | | | | 0 | 26 | |
| 2:30 - 2:45 | | 35 | | 35 | | | | 0 | 21 | | 21 | | | | 0 | 56 | |
| 2:45 - 3:00 | | 18 | | 18 | | | | 0 | 16 | | 16 | | | | 0 | 34 | |
| SUBTOTALS | 0 | 105 | 0 | 105 | 0 | 0 | 0 | 0 | 60 | 0 | 60 | 0 | 0 | 0 | 0 | 165 | |
| 3:00 - 3:15 | | 55 | | 55 | | | | 0 | 40 | | 40 | | | | 0 | 95 | |
| 3:15 - 3:30 | | 25 | | 25 | | | | 0 | 24 | | 24 | | | | 0 | 49 | |
| 3:30 - 3:45 | | 31 | | 31 | | | | 0 | 16 | | 16 | | | | 0 | 47 | |
| 3:45 - 4:00 | | 28 | | 28 | | | | 0 | 20 | | 20 | | | | 0 | 48 | |
| SUBTOTALS | 0 | 139 | 0 | 139 | 0 | 0 | 0 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 239 | |
| 4:00 - 4:15 | | 27 | | 27 | | | | 0 | 38 | | 38 | | | | 0 | 65 | |
| 4:15 - 4:30 | | 18 | | 18 | | | | 0 | 12 | | 12 | | | | 0 | 30 | |
| 4:30 - 4:45 | | 13 | | 13 | | | | 0 | 24 | | 24 | | | | 0 | 37 | |
| 4:45 - 5:00 | | 19 | | 19 | | | | 0 | 30 | | 30 | | | | 0 | 49 | |
| SUBTOTALS | 0 | 77 | 0 | 77 | 0 | 0 | 0 | 0 | 104 | 0 | 104 | 0 | 0 | 0 | 0 | 181 | |
| 5:00 - 5:15 | | 16 | | 16 | | | | 0 | 32 | | 32 | | | | 0 | 48 | |
| 5:15 - 5:30 | | 23 | | 23 | | | | 0 | 12 | | 12 | | | | 0 | 35 | |
| 5:30 - 5:45 | | 17 | | 17 | | | | 0 | 10 | | 10 | | | | 0 | 27 | |
| 5:45 - 6:00 | | 24 | | 24 | | | | 0 | 12 | | 12 | | | | 0 | 36 | |
| SUBTOTALS | 0 | 80 | 0 | 80 | 0 | 0 | 0 | 0 | 66 | 0 | 66 | 0 | 0 | 0 | 0 | 146 | |
| TOTALS | 0 | 578 | 0 | 578 | 0 | 0 | 0 | 0 | 480 | 0 | 480 | 0 | 0 | 0 | 0 | 1058 | |

as441wd720

| WILBUR SMITH ASSOCIATES | | SKETCH | | | | | | | | DATE: 01/19/98 | | JOB NUMBER: | | | | | |
|---|--------------|--------|-----------|-------|------------|------|------------|-------|-----------|----------------|-----------|-------------------|------------|------|------------|-------|--------|
| Int. # 12 (Peds) | | | | | | | | | | DAY OF WEEK: | | CITY: | | | | | |
| INTERSECTION | | | | | | | | | | Friday | | Sevierville | | | | | |
| U.S. 441/Wears Valley/ Davis Road (Pedestrians) | | | | | | | | | | COUNTED BY: | | COUNTY: Sevier | | | | | |
| TIME | Wears Valley | | | | Davis Road | | | | U.S. 441 | | | | U.S. 441 | | | | TOTALS |
| | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | |
| | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | |
| 7:am - 7:15 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 7:15 - 7:30 | | 0 | | 0 | | 1 | | 1 | | 0 | | 0 | | 0 | | 0 | 1 |
| 7:30 - 7:45 | | 0 | | 0 | | 2 | | 2 | | 0 | | 0 | | 2 | | 2 | 4 |
| 7:45 - 8:00 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 5 |
| 8:00 - 8:15 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 1 | | 1 | 1 |
| 8:15 - 8:30 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 8:30 - 8:45 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 8:45 - 9:00 | | 0 | | 0 | | 1 | | 1 | | 0 | | 0 | | 0 | | 0 | 1 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| 11:00 - 11:15 | | 0 | | 0 | | 3 | | 3 | | 4 | | 4 | | 2 | | 2 | 9 |
| 11:15 - 11:30 | | 2 | | 2 | | 7 | | 7 | | 9 | | 9 | | 3 | | 3 | 21 |
| 11:30 - 11:45 | | 0 | | 0 | | 2 | | 2 | | 1 | | 1 | | 2 | | 2 | 5 |
| 11:45 - 12:00 | | 0 | | 0 | | 2 | | 2 | | 0 | | 0 | | 3 | | 3 | 5 |
| SUBTOTALS | 0 | 2 | 0 | 2 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 10 | 0 | 10 | 40 |
| 12:00 - 12:15 | | 0 | | 0 | | 8 | | 8 | | 5 | | 5 | | 3 | | 3 | 16 |
| 12:15 - 12:30 | | 0 | | 0 | | 2 | | 2 | | 0 | | 0 | | 0 | | 0 | 2 |
| 12:30 - 12:45 | | 0 | | 0 | | 9 | | 9 | | 0 | | 0 | | 0 | | 0 | 9 |
| 12:45 - 1:00 | | 1 | | 1 | | 0 | | 0 | | 2 | | 2 | | 2 | | 2 | 5 |
| SUBTOTALS | 0 | 1 | 0 | 1 | 0 | 19 | 0 | 19 | 0 | 7 | 0 | 7 | 0 | 5 | 0 | 5 | 32 |
| 2:00 - 2:15 | | 0 | | 0 | | 9 | | 9 | | 0 | | 0 | | 1 | | 1 | 10 |
| 2:15 - 2:30 | | 0 | | 0 | | 2 | | 2 | | 2 | | 2 | | 0 | | 0 | 4 |
| 2:30 - 2:45 | | 0 | | 0 | | 5 | | 5 | | 2 | | 2 | | 0 | | 0 | 7 |
| 2:45 - 3:00 | | 2 | | 2 | | 2 | | 2 | | 0 | | 0 | | 4 | | 4 | 8 |
| SUBTOTALS | 0 | 2 | 0 | 2 | 0 | 18 | 0 | 18 | 0 | 4 | 0 | 4 | 0 | 5 | 0 | 5 | 29 |
| 3:00 - 3:15 | | 0 | | 0 | | 6 | | 6 | | 0 | | 0 | | 0 | | 0 | 6 |
| 3:15 - 3:30 | | 1 | | 1 | | 8 | | 8 | | 2 | | 2 | | 5 | | 5 | 16 |
| 3:30 - 3:45 | | 0 | | 0 | | 8 | | 8 | | 2 | | 2 | | 0 | | 0 | 10 |
| 3:45 - 4:00 | | 0 | | 0 | | 3 | | 3 | | 0 | | 0 | | 4 | | 4 | 7 |
| SUBTOTALS | 0 | 1 | 0 | 1 | 0 | 25 | 0 | 25 | 0 | 4 | 0 | 4 | 0 | 9 | 0 | 9 | 39 |
| 4:00 - 4:15 | | 0 | | 0 | | 5 | | 5 | | 0 | | 0 | | 0 | | 0 | 5 |
| 4:15 - 4:30 | | 0 | | 0 | | 10 | | 10 | | 7 | | 7 | | 0 | | 0 | 17 |
| 4:30 - 4:45 | | 0 | | 0 | | 1 | | 1 | | 1 | | 1 | | 5 | | 5 | 7 |
| 4:45 - 5:00 | | 0 | | 0 | | 19 | | 19 | | 5 | | 5 | | 0 | | 0 | 24 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 35 | 0 | 13 | 0 | 13 | 0 | 5 | 0 | 5 | 53 |
| 5:00 - 5:15 | | 0 | | 0 | | 19 | | 19 | | 5 | | 5 | | 5 | | 5 | 29 |
| 5:15 - 5:30 | | 0 | | 0 | | 5 | | 5 | | 0 | | 0 | | 1 | | 1 | 6 |
| 5:30 - 5:45 | | 0 | | 0 | | 2 | | 2 | | 0 | | 0 | | 0 | | 0 | 2 |
| 5:45 - 6:00 | | 0 | | 0 | | 11 | | 11 | | 9 | | 9 | | 2 | | 2 | 22 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 37 | 0 | 14 | 0 | 14 | 0 | 8 | 0 | 8 | 59 |
| TOTALS | 0 | 6 | 0 | 6 | 0 | 152 | 0 | 152 | 0 | 56 | 0 | 56 | 0 | 45 | 0 | 45 | 259 |

cs441wd720

| WILBUR SMITH ASSOCIATES | | SKETCH | | | | | | | | DATE: 7/23/98 | | JOB NUMBER: 245420K | | | | | |
|---|------|------------|-------|---------------|------|------|-------|-------------|------|---------------------------|-------|---------------------|------|------|-------|-------|--------|
| Int # 13 (Peds) | | | | | | | | | | DAY OF WEEK: Thursday | | CITY: Pigeon Forge | | | | | |
| INTERSECTION | | | | | | | | | | COUNTED BY: Laura & Jason | | COUNTY: Knox | | | | | |
| Teaster Ln. w/ Davis Rd. & Belz Mall Ent. (Pedestrians) | | Davis Road | | Belz Mall Ent | | | | Teaster Ln. | | | | Old Davis Rd. | | | | | |
| | | EASTBOUND | | WESTBOUND | | | | NORTHBOUND | | | | SOUTHBOUND | | | | | |
| TIME | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | TOTALS |
| 7:am - 7:15 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| 7:15 - 7:30 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| 7:30 - 7:45 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| 7:45 - 8:00 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 - 8:15 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 |
| 8:15 - 8:30 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 4 | | 4 | 4 | 4 |
| 8:30 - 8:45 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 1 | | 1 | 1 | 1 |
| 8:45 - 9:00 | 0 | | 0 | 0 | 1 | | 1 | 1 | 0 | | 0 | 0 | 3 | | 3 | 3 | 4 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 9 |
| 11:00 - 11:15 | 0 | | 0 | 0 | 2 | | 2 | 2 | 0 | | 0 | 0 | 2 | | 2 | 2 | 4 |
| 11:15 - 11:30 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 3 | | 3 | 3 | 3 |
| 11:30 - 11:45 | 9 | | 9 | 9 | 1 | | 1 | 1 | 1 | | 1 | 1 | 4 | | 4 | 4 | 15 |
| 11:45 - 12:00 | 1 | | 1 | 1 | 0 | | 0 | 0 | 8 | | 8 | 8 | 0 | | 0 | 0 | 9 |
| SUBTOTALS | 0 | 10 | 0 | 10 | 0 | 3 | 0 | 3 | 0 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 31 |
| 12:00 - 12:15 | 0 | | 0 | 0 | 3 | | 3 | 3 | 7 | | 7 | 7 | 3 | | 3 | 3 | 13 |
| 12:15 - 12:30 | 6 | | 6 | 6 | 0 | | 0 | 0 | 5 | | 5 | 5 | 6 | | 6 | 6 | 17 |
| 12:30 - 12:45 | 6 | | 6 | 6 | 5 | | 5 | 5 | 11 | | 11 | 11 | 14 | | 14 | 14 | 36 |
| 12:45 - 1:00 | 4 | | 4 | 4 | 12 | | 12 | 12 | 3 | | 3 | 3 | 7 | | 7 | 7 | 26 |
| SUBTOTALS | 0 | 16 | 0 | 16 | 0 | 20 | 0 | 20 | 0 | 26 | 0 | 26 | 0 | 30 | 0 | 30 | 92 |
| 2:00 - 2:15 | 7 | | 7 | 7 | 15 | | 15 | 15 | 5 | | 5 | 5 | 19 | | 19 | 19 | 46 |
| 2:15 - 2:30 | 6 | | 6 | 6 | 8 | | 8 | 8 | 5 | | 5 | 5 | 19 | | 19 | 19 | 38 |
| 2:30 - 2:45 | 6 | | 6 | 6 | 4 | | 4 | 4 | 23 | | 23 | 23 | 12 | | 12 | 12 | 45 |
| 2:45 - 3:00 | 3 | | 3 | 3 | 13 | | 13 | 13 | 6 | | 6 | 6 | 29 | | 29 | 29 | 51 |
| SUBTOTALS | 0 | 22 | 0 | 22 | 0 | 40 | 0 | 40 | 0 | 39 | 0 | 39 | 0 | 79 | 0 | 79 | 180 |
| 3:00 - 3:15 | 0 | | 0 | 0 | 0 | | 0 | 0 | 2 | | 2 | 2 | 0 | | 0 | 0 | 2 |
| 3:15 - 3:30 | 1 | | 1 | 1 | 2 | | 2 | 2 | 1 | | 1 | 1 | 4 | | 4 | 4 | 8 |
| 3:30 - 3:45 | 2 | | 2 | 2 | 1 | | 1 | 1 | 0 | | 0 | 0 | 6 | | 6 | 6 | 9 |
| 3:45 - 4:00 | 6 | | 6 | 6 | 4 | | 4 | 4 | 9 | | 9 | 9 | 14 | | 14 | 14 | 33 |
| SUBTOTALS | 0 | 9 | 0 | 9 | 0 | 7 | 0 | 7 | 0 | 12 | 0 | 12 | 0 | 24 | 0 | 24 | 52 |
| 4:00 - 4:15 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 1 | | 1 | 1 | 1 |
| 4:15 - 4:30 | 3 | | 3 | 3 | 0 | | 0 | 0 | 12 | | 12 | 12 | 2 | | 2 | 2 | 17 |
| 4:30 - 4:45 | 0 | | 0 | 0 | 0 | | 0 | 0 | 2 | | 2 | 2 | 4 | | 4 | 4 | 6 |
| 4:45 - 5:00 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 7 | | 7 | 7 | 7 |
| SUBTOTALS | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 14 | 31 |
| 5:00 - 5:15 | 0 | | 0 | 0 | 0 | | 0 | 0 | 4 | | 4 | 4 | 1 | | 1 | 1 | 5 |
| 5:15 - 5:30 | 1 | | 1 | 1 | 1 | | 1 | 1 | 0 | | 0 | 0 | 4 | | 4 | 4 | 6 |
| 5:30 - 5:45 | 4 | | 4 | 4 | 1 | | 1 | 1 | 2 | | 2 | 2 | 2 | | 2 | 2 | 9 |
| 5:45 - 6:00 | 0 | | 0 | 0 | 2 | | 2 | 2 | 2 | | 2 | 2 | 8 | | 8 | 8 | 12 |
| SUBTOTALS | 0 | 5 | 0 | 5 | 0 | 4 | 0 | 4 | 0 | 8 | 0 | 8 | 0 | 15 | 0 | 15 | 32 |
| TOTALS | 0 | 65 | 0 | 65 | 0 | 75 | 0 | 75 | 0 | 108 | 0 | 108 | 0 | 179 | 0 | 179 | 427 |

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|--|------|----------------|-------|-----------|------|---------------------|-------|------------|------|--------------------|-------|-------|------|------|-------|-------|--------|
| YILBUR SMITH ASSOCIATE | | SKETCH | | | | DATE: 8/17/88 | | | | JOB NUMBER: | | | | | | | |
| Int. # 15 (Peds) | | | | | | DAY OF WEEK: Monday | | | | CITY: Pigeon Forge | | | | | | | |
| INTERSECTION | | | | | | COUNTED BY: | | | | COUNTY: Sevier | | | | | | | |
| U.S. 441 w/ Old Davis Road (Pedestrians) | | | | | | | | | | | | | | | | | |
| | | Old Davis Road | | | | U.S. 441 | | | | U.S. 441 | | | | | | | |
| | | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | | | | | | | | |
| TIME | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | TOTALS |
| 7:am - 7:15 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| 7:15 - 7:30 | | | | 0 | | | | 3 | | | | 3 | | | | 0 | 3 |
| 7:30 - 7:45 | | | | 0 | | | | 2 | | | | 2 | | | | 1 | 3 |
| 7:45 - 8:00 | | | | 0 | | | | 3 | | | | 3 | | | | 1 | 4 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 10 |
| 8:00 - 8:15 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| 8:15 - 8:30 | | | | 0 | | | | 3 | | | | 3 | | | | 2 | 5 |
| 8:30 - 8:45 | | | | 0 | | | | 1 | | | | 1 | | | | 1 | 2 |
| 8:45 - 9:00 | | | | 0 | | | | 4 | | | | 4 | | | | 4 | 8 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 15 |
| 11:00 - 11:15 | | | | 0 | | | | 8 | | | | 8 | | | | 0 | 8 |
| 11:15 - 11:30 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| 11:30 - 11:45 | | | | 0 | | | | 1 | | | | 1 | | | | 0 | 1 |
| 11:45 - 12:00 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 12:00 - 12:15 | | | | 0 | | | | 3 | | | | 3 | | | | 0 | 3 |
| 12:15 - 12:30 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| 12:30 - 12:45 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| 12:45 - 1:00 | | | | 0 | | | | 3 | | | | 3 | | | | 0 | 3 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:00 - 2:15 | | | | 0 | | | | 4 | | | | 4 | | | | 0 | 4 |
| 2:15 - 2:30 | | | | 0 | | | | 1 | | | | 1 | | | | 0 | 1 |
| 2:30 - 2:45 | | | | 0 | | | | 3 | | | | 3 | | | | 3 | 6 |
| 2:45 - 3:00 | | | | 0 | | | | 1 | | | | 1 | | | | 3 | 4 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 15 |
| 3:00 - 3:15 | | | | 0 | | | | 1 | | | | 1 | | | | 0 | 2 |
| 3:15 - 3:30 | | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 |
| 3:30 - 3:45 | | | | 0 | | | | 1 | | | | 1 | | | | 0 | 1 |
| 3:45 - 4:00 | | | | 0 | | | | 4 | | | | 4 | | | | 0 | 4 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 4:00 - 4:15 | | | | 0 | | | | 2 | | | | 2 | | | | 0 | 2 |
| 4:15 - 4:30 | | | | 0 | | | | 4 | | | | 4 | | | | 0 | 4 |
| 4:30 - 4:45 | | | | 0 | | | | 3 | | | | 3 | | | | 1 | 4 |
| 4:45 - 5:00 | | | | 0 | | | | 2 | | | | 2 | | | | 0 | 2 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 12 |
| 5:00 - 5:15 | | | | 0 | | | | 2 | | | | 2 | | | | 0 | 4 |
| 5:15 - 5:30 | | | | 0 | | | | 13 | | | | 13 | | | | 0 | 13 |
| 5:30 - 5:45 | | | | 0 | | | | 2 | | | | 2 | | | | 0 | 2 |
| 5:45 - 6:00 | | | | 0 | | | | 3 | | | | 3 | | | | 0 | 3 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 22 |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 77 | 0 | 77 | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 0 | 96 |

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| YILBUR SMITH ASSOCIATES | | SKETCH | | | | | | | | | | DATE: 8/4/88 | | JOB NUMBER: | | | |
| Int. # 22 (Peds) | | | | | | | | | | | | DAY OF WEEK: | | CITY: | | | |
| INTERSECTION | | | | | | | | | | | | Tuesday | | | | | |
| U.S. 441 w/ Golf Road (Pedestrians) | | | | | | | | | | | | COUNTED BY: | | COUNTY: Sevier | | | |
| | | Golf Road | | | | U.S. 441 | | | | U.S. 441 | | | | | | | |
| | | EASTBOUND | | WESTBOUND | | NORTHBOUND | | SOUTHBOUND | | | | | | | | | |
| TIME | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | LEFT | THRU | RIGHT | TOTAL | TOTALS |
| 7:am - 7:15 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15 - 7:30 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30 - 7:45 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 - 8:00 | | | | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 5 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 8:00 - 8:15 | | | | 0 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 8 |
| 8:15 - 8:30 | | | | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 4 |
| 8:30 - 8:45 | | | | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 6 |
| 8:45 - 9:00 | | | | 0 | 6 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 7 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 | 0 | 14 | 0 | 14 | 0 | 0 | 0 | 0 | 25 |
| 11:00 - 11:15 | | | | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 8 |
| 11:15 - 11:30 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 - 11:45 | | | | 0 | 2 | 2 | 2 | 2 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 11 |
| 11:45 - 12:00 | | | | 0 | 2 | 2 | 2 | 2 | 6 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 8 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 23 | 0 | 23 | 0 | 0 | 0 | 0 | 27 |
| 12:00 - 12:15 | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 - 12:30 | | | | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| 12:30 - 12:45 | | | | 0 | 2 | 2 | 2 | 2 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 7 |
| 12:45 - 1:00 | | | | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 6 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 17 |
| 2:00 - 2:15 | | | | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 2:15 - 2:30 | | | | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| 2:30 - 2:45 | | | | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| 2:45 - 3:00 | | | | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 12 |
| 3:00 - 3:15 | | | | 0 | 2 | 2 | 2 | 2 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 7 |
| 3:15 - 3:30 | | | | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 3:30 - 3:45 | | | | 0 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 9 |
| 3:45 - 4:00 | | | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 3 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 20 |
| 4:00 - 4:15 | | | | 0 | 2 | 2 | 2 | 2 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 7 |
| 4:15 - 4:30 | | | | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 6 |
| 4:30 - 4:45 | | | | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |
| 4:45 - 5:00 | | | | 0 | 2 | 2 | 2 | 2 | 10 | 10 | 10 | 10 | 0 | 0 | 0 | 0 | 12 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 24 | 0 | 24 | 0 | 0 | 0 | 0 | 28 |
| 5:00 - 5:15 | | | | 0 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 6 |
| 5:15 - 5:30 | | | | 0 | 9 | 9 | 9 | 9 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 12 |
| 5:30 - 5:45 | | | | 0 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 9 |
| 5:45 - 6:00 | | | | 0 | 6 | 6 | 6 | 6 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 15 |
| SUBTOTALS | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 | 0 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 42 |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 60 | 0 | 116 | 0 | 116 | 0 | 0 | 0 | 0 | 176 |

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VITA

Dawn-Michelle Foster had always had an interest in the field of transportation engineering and planning. Her career began after graduating from Western High School in Louisville, Kentucky in May 1979. She was awarded a 4-year scholarship from the Kentucky Department of Transportation to further her interests in the field of civil engineering. She received her Bachelor of Science degree in Civil Engineering from Western Kentucky University in May 1984. After graduation, she immediately began working with the Kentucky Department of Transportation in Louisville, Kentucky as a project manager on several construction projects.

In 1988 she relocated to Knoxville, Tennessee where she started working with Wilbur Smith Associates as a project manager of construction projects. Her duties included field inspection, overseeing construction projects for compliance to state requirements and preparing cost estimate reports. After several years in this field, she transferred to the Transportation Engineering and Planning Division within the company where her interests gave her insight to obtain a Master's degree. In August 1995, she entered the Master's program at the University of Tennessee, Knoxville in Planning. The Master's degree was received August 1999 where she specialized in Transportation and Land Use Planning.

She is presently working with Wilbur Smith Associates in Knoxville, Tennessee as a Transportation Planner. She has been involved with many transportation planning projects including the Intelligent Transportation Systems (ITS) Study for the Knoxville-Knox County MPO and the Downtown Knoxville Transportation Linkages Study. She currently resides in Knoxville, Tennessee with her husband, James and their four children, Jason, Allyson, Alexis, and Camera.