Downtown Parking Study

2016

COOKEVILLE, TENNESSEE

CITY OF COOKEVILLE

DOWNTOWN PARKING STUDY UPDATE

Prepared by the

COOKEVILLE PLANNING DEPARTMENT

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INTRODUCTION

The City of Cookeville downtown area is the vibrant core of the municipality. This vibrancy is due to the efforts and investment of property owners, merchants and the local government. The availability of downtown parking is a significant issue for many communities. Parking problems are often a sign of the success of a downtown area. The demand for parking is directly correlated to growth or decline in the availability of business, employment, shopping and dining opportunities. As is true with any other thriving downtown, the provision of ample and convenient parking to accommodate the needs of employment, living, shopping, entertainment, and dining activities is important to the vitality of the Cookeville downtown.

Parking has been perceived to be a problem in the Cookeville downtown area for a number of years. Downtown parking was identified as a moderate to serious concern by nearly 60 percent of respondents in the 2003 Cookeville Citizen Survey. In a 2010 City Survey, downtown parking was the community characteristic most frequently rated as fair or poor by respondents. Most recently, concern regarding the adequacy of parking was a primary reason for the 2015 decision not to reduce the off-street parking requirement for high density residential development as means to encourage such development in the Cookeville Central Business District.

PURPOSE OF STUDY

This study was prepared by the Cookeville Planning Department and is intended to provide an update of the inventory and analysis of parking in the downtown area completed by the department in 2004. The 2004 Downtown Parking Study was the first known comprehensive study of parking in the Cookeville downtown area. The primary purpose of the original inventory was to determine how many and what type of parking spaces were available in the downtown area. As the first such inventory it also provided a base line for future trend studies. This study is intended to update the inventory, identify significant changes that have occurred in the past 12 years, evaluate the parking supply versus the parking demand, and to explore options for improvements.

The reasons for completing the original analysis of parking in the downtown remain valid for this updated study. First an analysis can reveal whether the available parking meets the current demand. In the 2004 study it was determined that the supply was significantly less than the demand. This study will help to determine if the parking situation has improved or worsened.

As with the 2004 analysis, the 2016 analysis is intended to provide insight on future parking needs. Prior to 2002, developments within areas zoned as CBD, Central Business District, were not required to provide off-street parking. Developments in the CBD are now

required to supply off-street parking when adequate public parking is not available within 500 feet of the development. An updated parking analysis is needed to determine whether the current Zoning Code requirements for new developments in the CBD are adequate.

DELINATION OF STUDY AREA

For the purposes of this study, the Cookeville downtown is defined primarily as the area within the city zoned as CBD, Central Business District. Parking areas on the immediate fringe of the CBD utilized by employees and visitors to the downtown are also included in the study area. Illustration 1 depicts the location of the study area. The area generally consists of a corridor along Spring Street and Broad Street extending approximately from Maple Avenue on the east to Whitney Avenue on the west. It is composed of a total of 225 parcels in their entirety and portions of seven other parcels and occupies an area of approximately 91 acres or 0.14 square miles.

The study area includes what have been historically identified as the two downtown areas of Cookeville. These are the area immediately around the Putnam County Courthouse referred to as "The Square" and the area along West Broad Street in the vicinity of the Cookeville Depot referred to as "West Side". These two areas were combined into one contiguous CBD zone in a 2002 citywide rezoning. Prior to the 2002 rezoning, the two areas within the city zoned as CBD comprised a total land area of only 21 acres. Since 2002 the CBD has been further expanded through the rezoning of two additional areas.

To facilitate a more in depth analysis the study area was divided into nine sub areas. Generally, the boundaries of each sub area were defined by identifying a principal land use or uses and by including the primary parking areas for these uses. These areas are depicted on Illustration 2 and are identified as follows:

- Sub Area 1 is located east of South Lowe Avenue and south of East Spring Street. This area includes the Putnam County Justice Center and consists of only 1 parcel and a portion of another occupying approximately 7 acres.

- Sub Area 2 is located east of Staley Avenue extending to South Maple Avenue north of East Spring Street and south of East Broad Street. This area is the smallest sub area occupying approximately 5.7 acres and consisting of 13 parcels.

- Sub Area 3 includes the area around the Putnam County Courthouse between Madison Avenue and Staley Avenue from Reagan Street north to East 1st Street. It consists of 36 parcels occupying approximately 11.5 acres.

- Sub Area 4 is located south of Reagan Street between South Lowe Avenue and South Dixie Avenue. It contains 20 parcels consisting of approximately 6.6 acres.

- Sub Area 5 extends west from South Madison Avenue to Fleming Avenue between East Broad Street and Reagan Street. This area consists of approximately 11.2 acres and contains 21 parcels in their entirety and a portion of one other parcel. It includes the First United Methodist Church.

- Sub Area 6 is located between East Spring Street and East Broad Street from Fleming Avenue to South Walnut Avenue. This area consists of approximately 8 acres and contains 4 parcels and a portion of another. It includes Cookeville City Hall.

- Sub Area 7 is located between West Broad Street and West Spring Street west of South Walnut Avenue. This is the second largest sub area containing approximately 13.6 acres located on 43 parcels in their entirety a portion of another.

- Sub Area 8 extends west of North Cedar Avenue between West 1st Street and West Broad Street. This sub area has 40 parcels and portions of four (4) others occupying approximately 12.4 acres.

- Sub Area 9 is located between Walnut Avenue and Cedar Avenue north of West Broad Street. This is the largest sub area consisting of approximately 14.9 acres on 47 parcels. It includes Cookeville Town Centre and the Farmer's Market.


Farmer's Market
Gas Dept.
Town Centre
Depot
Dogwood Park
Post Office
City Hall
Court House
Justice Center
City Cemetery
1
2
3
4
5
6
7
8
9
Illustration 1
LOCATION MAP
Downtown Parking Study
COOKEVILLE, TENNESSEE

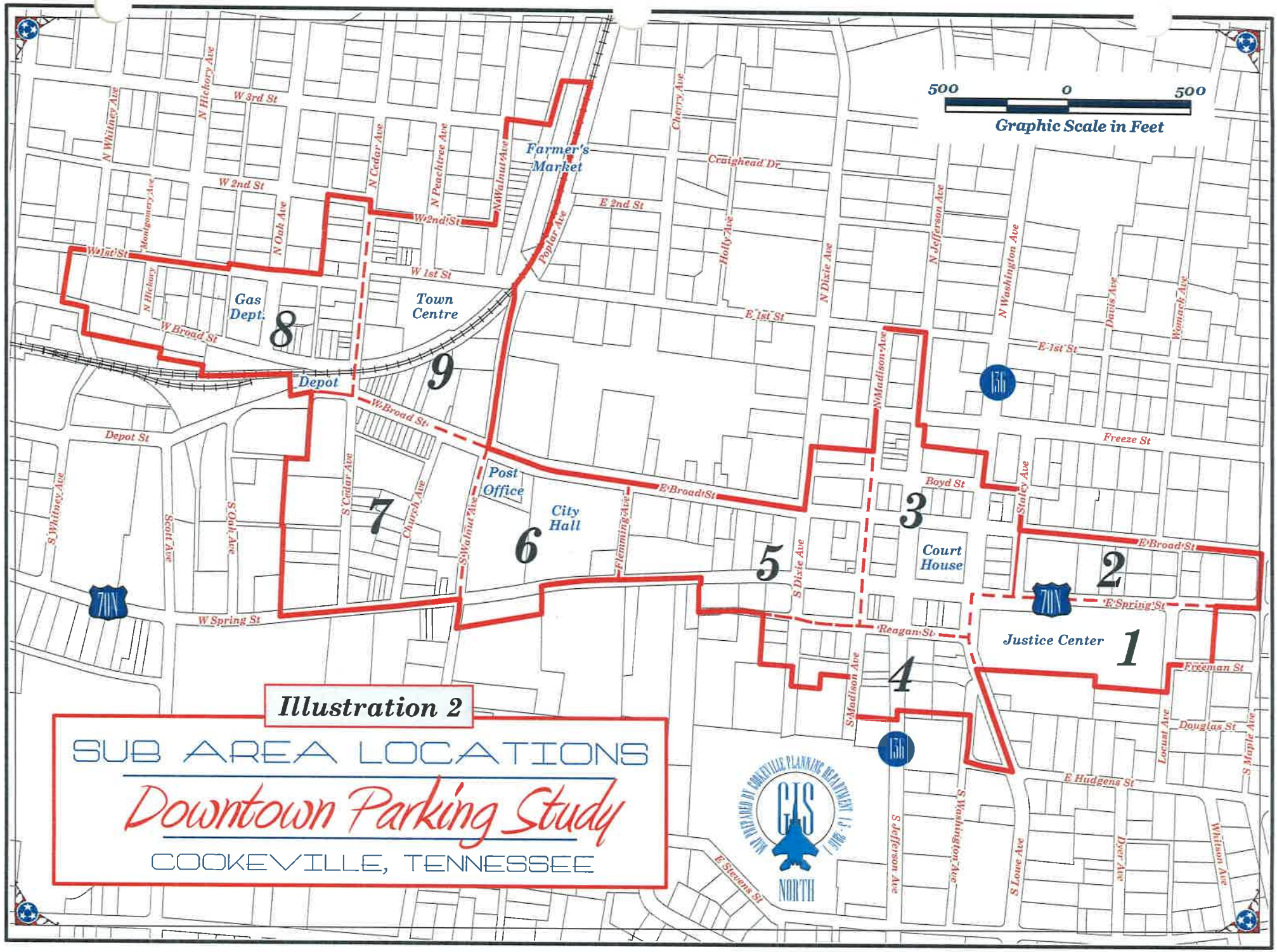


Illustration 2

SUB AREA LOCATIONS

Downtown Parking Study

COOKEVILLE, TENNESSEE

EXISTING PARKING CONDITIONS

The staff of the Cookeville Planning Department completed an inventory of all public and private on-street and off-street parking in the study area in March of 2016. Through this inventory the total parking supply, location, type of parking (on-street or off-street), type of use (public or private), use restrictions, parking fees, and total accessible parking were determined and compared with the findings for the 2004 inventory. The results of the inventory for each sub area are depicted on Illustrations 3 through 11. A summary of the inventory findings is presented in this section.

PARKING SUPPLY

In the March 2004 inventory an estimated total of 3,195 parking spaces were identified in the downtown study area. The March 2016 inventory identified an estimated total of 3,158 parking spaces, which is a reduction of 37 spaces or approximately 1 percent. In 2004 the total parking spaces were comprised of 1,712 public spaces and 1,483 private spaces. This included 668 public on-street spaces, 1,044 public off-street spaces, 29 private on-street spaces, and 1,454 private off-street spaces. In 2016 the total parking spaces were comprised of 1,651 public spaces and 1,507 private spaces. This included 631 public on-street spaces, 1,020 public off-street spaces, 4 private on-street spaces, and 1,503 private off-street spaces.

From 2004 to 2016 the inventories completed by the Planning Department indicate that the total parking supply in the downtown study area decreased by 37 spaces. During the 12 year period, total public parking decreased by 61 spaces with on-street parking declining by 37 spaces and off-street parking declining by 24 spaces. It should be noted, however, that a total of 65 public off-street parking spaces were lost due to the reconfiguration of a parking lot in Sub Area 7. Total private parking increased by 24 spaces for the same period with a loss of 25 private on-street spaces offset by an increase 49 off-street private spaces. Six of the nine sub areas had a decline in total parking while two sub areas gained parking spaces. Sub Area 7 experienced the largest loss in total parking supply with a loss of 37 parking spaces (this includes the loss of 65 spaces due to the reconfiguration of a public parking lot). Sub Area 5 saw the largest gain in total parking supply with a gain of 27 spaces.

A summary of the parking supply by sub area in 2004 and 2016 is presented in Table 1 and the change in the total supply by sub area from 2004 to 2016 is presented in Table 2.

TABLE 1
PARKING SUPPLY BY SUB AREA
2004 and 2016

SUB AREA	PARKING SUPPLY									
	PUBLIC ON-STREET		PUBLIC OFF-STREET		PRIVATE ON-STREET		PRIVATE OFF-STREET		TOTAL	
	2004	2015	2004	2016	2004	2016	2004	2016	2004	2016
1	--	--	270	270	--	--	--	--	270	270
2	29	28	--	--	--	--	237	234	266	262
3	225	228	90	90	1	--	41	36	357	354
4	36	33	22	--	--	4	231	261	289	298
5	104	87	52	116	--	--	171	151	327	354
6	23	23	165	163	--	--	101	99	289	285
7	30	28	157	92	--	--	220	250	407	370
8	111	117	63	54	28	--	248	262	450	433
9	110	87	225	235	--	--	205	210	540	532
TOTAL	**668**	**631**	**1044**	**1020**	**29**	**4**	**1454**	**1503**	**3195**	**3158**

TABLE 2
CHANGE IN PARKING SUPPLY BY SUB AREA
2004 to 2016

SUB AREA	PARKING SUPPLY				
	PUBLIC ON-STREET	PUBLIC OFF-STREET	PRIVATE ON-STREET	PRIVATE OFF-STREET	TOTAL
1	0	0	0	0	0
2	-1	0	0	-3	-4
3	3	0	-1	-5	-3
4	-3	-22	4	30	9
5	-17	64	0	-20	27
6	0	-2	0	-2	-4
7	-2	-65	0	30	-37
8	6	-9	-28	14	-17
9	-23	10	0	5	-8
TOTAL	**-37**	**-24**	**-25**	**49**	**-37**

Downtown Parking Study

COOKEVILLE, TENNESSEE

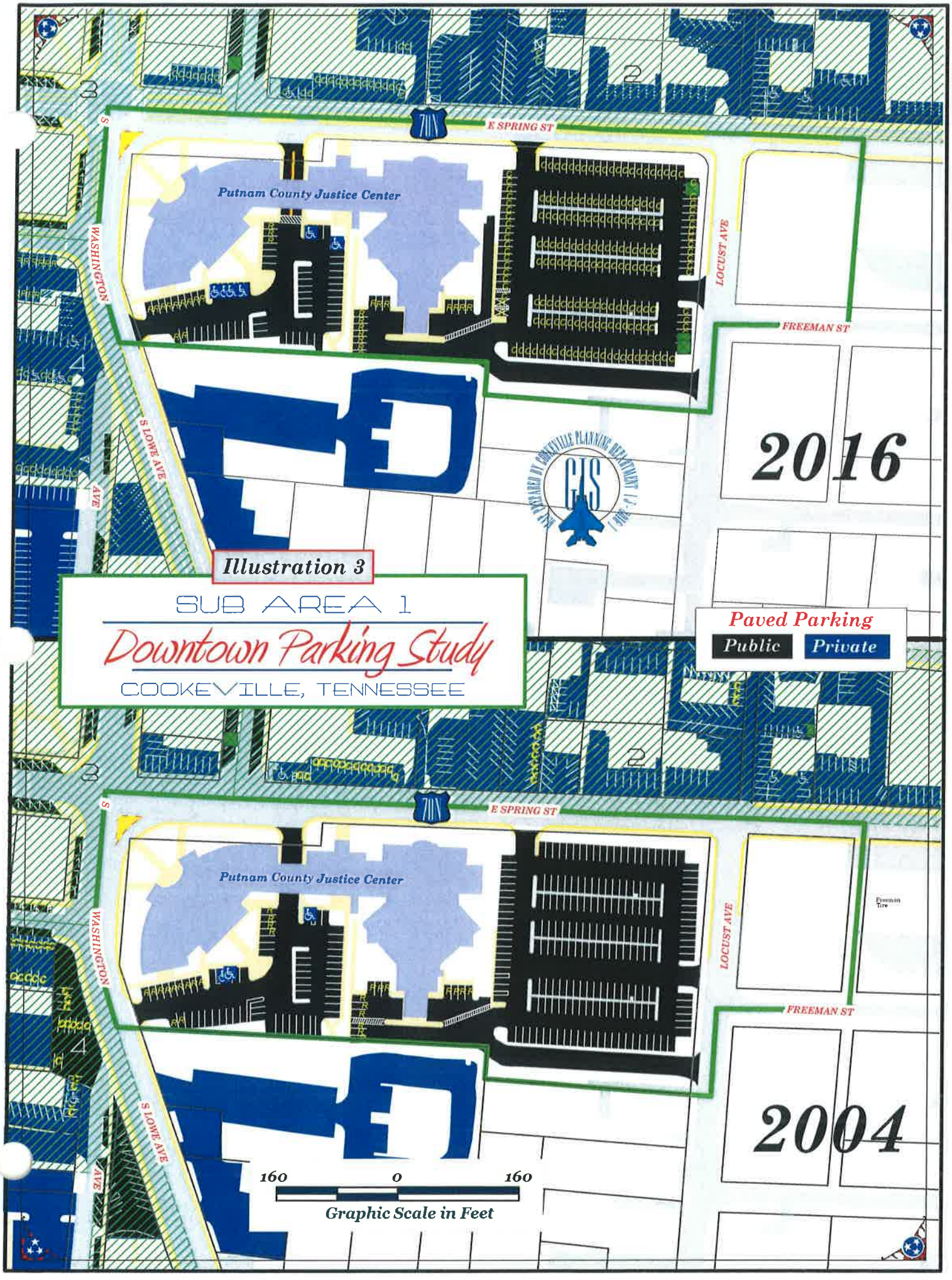
LEGEND

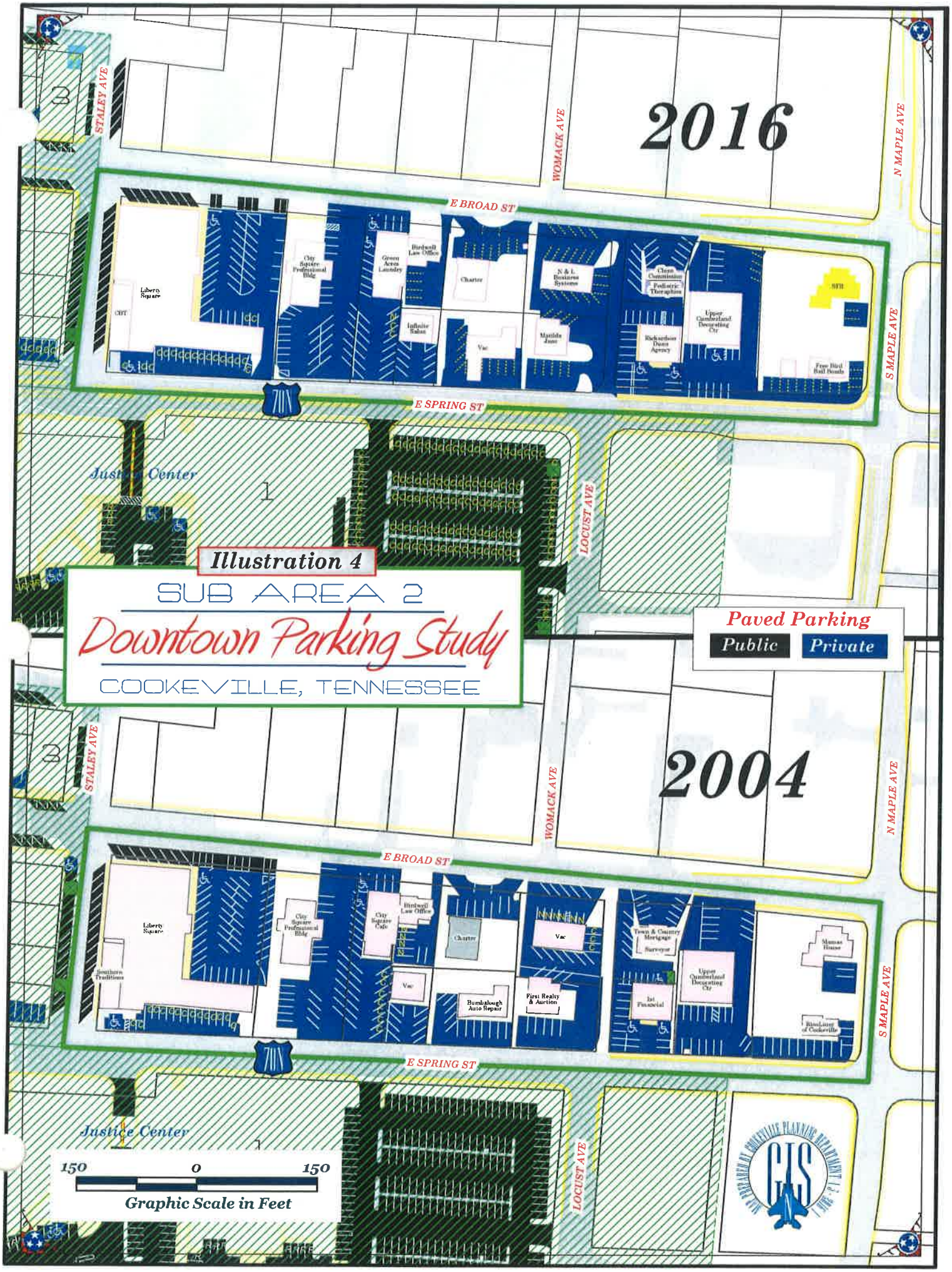
15	*15 Minute Parking Only*
1	*1 Hour Parking Only*
2	*2 Hour Parking Only*
12	*12 Hour Parking Only*
C	*Customer Parking Only*
N	*No Parking*
R	*Reserved Parking*
V	*Visitor Parking*
●	*Utility Pole In Parking Space*
	*Dumpster in Parking Space*
	*Handicapped Parking Only*

Unpaved Private Parking 

Unpaved Public Parking 

Unmarked Parking Space 


E SPRING ST
Putnam County Justice Center
WASHINGTON
LOCUST AVE
FREEMAN ST
S LOWE AVE
2016
Illustration 3
SUB AREA 1
Downtown Parking Study
COOKEVILLE, TENNESSEE
Paved Parking
Public
Private
E SPRING ST
Putnam County Justice Center
WASHINGTON
LOCUST AVE
FREEMAN ST
S LOWE AVE
2004
160
0
160
Graphic Scale in Feet


2016
2004
E BROAD ST
E SPRING ST
STALEY AVE
WOMACK AVE
LOCUST AVE
N MAPLE AVE
S MAPLE AVE
Justice Center
Liberty Square
City Square Professional Bldg
Green Acres Laundry
Birdwell Law Office
Charter
N & L Business Systems
Infinite Salon
Matilda Jane
Richardson Dunn Agency
Upper Cumberland Decorating Ctr
Free Bird Bail Bonds
City Square Cafe
Vac
Town & Country Mortgage
Surveyor
1st Financial
Monroe House
Southern Traditions
Bumbalough Auto Repair
First Realty & Auction
Illustration 4
SUB AREA 2
Downtown Parking Study
COOKEVILLE, TENNESSEE
Paved Parking
Public
Private
150
0
150
Graphic Scale in Feet
CTS

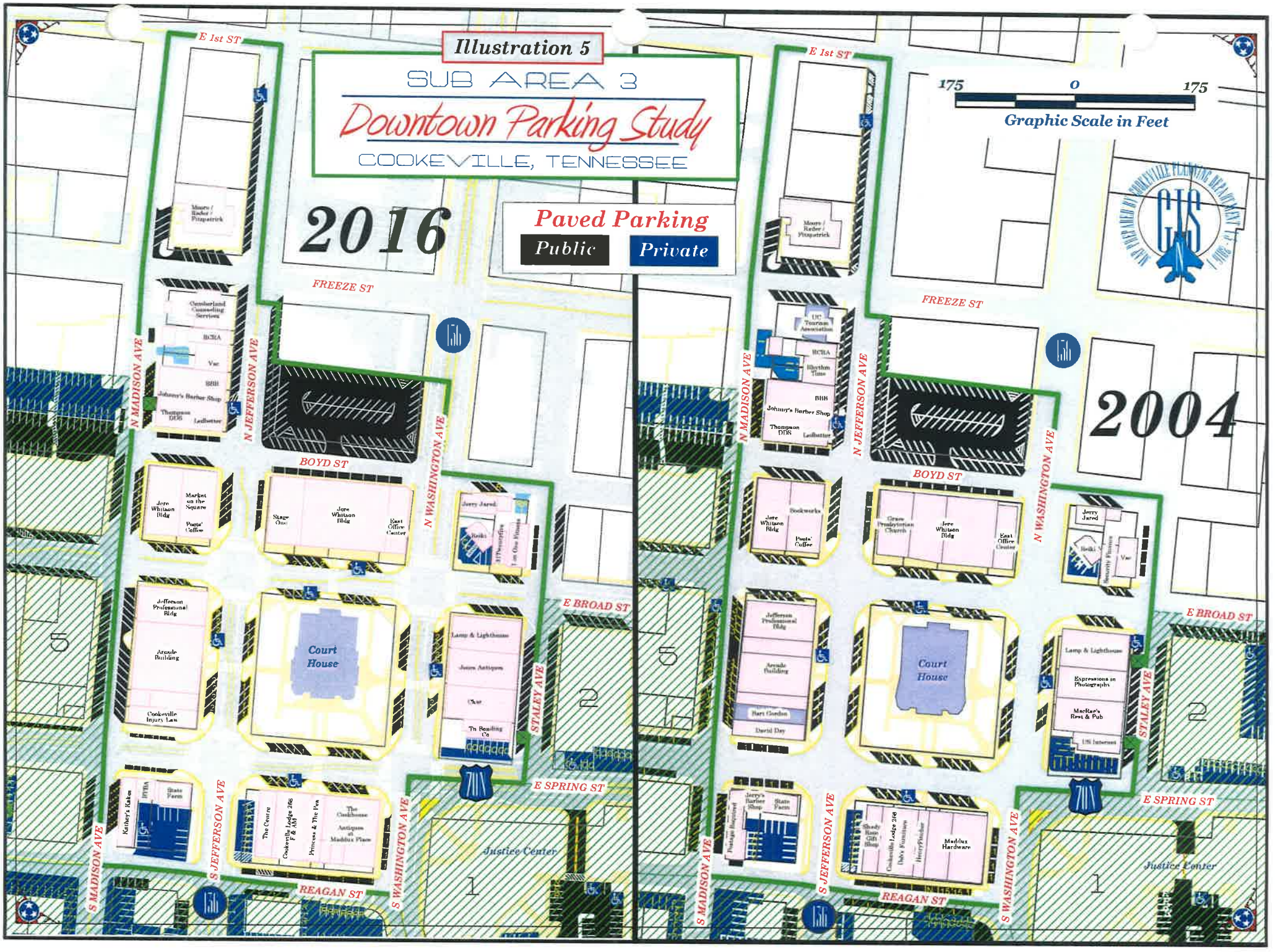
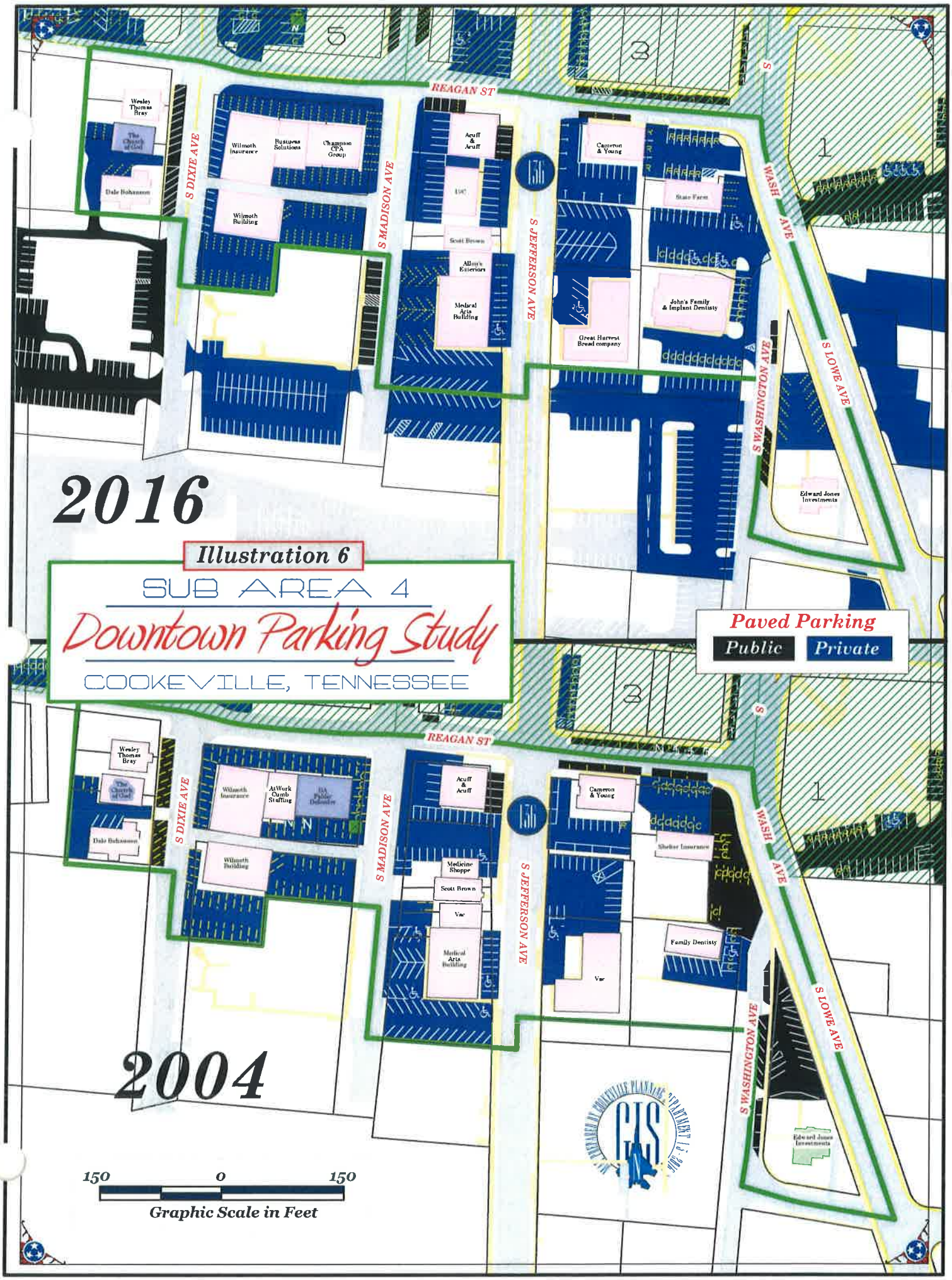
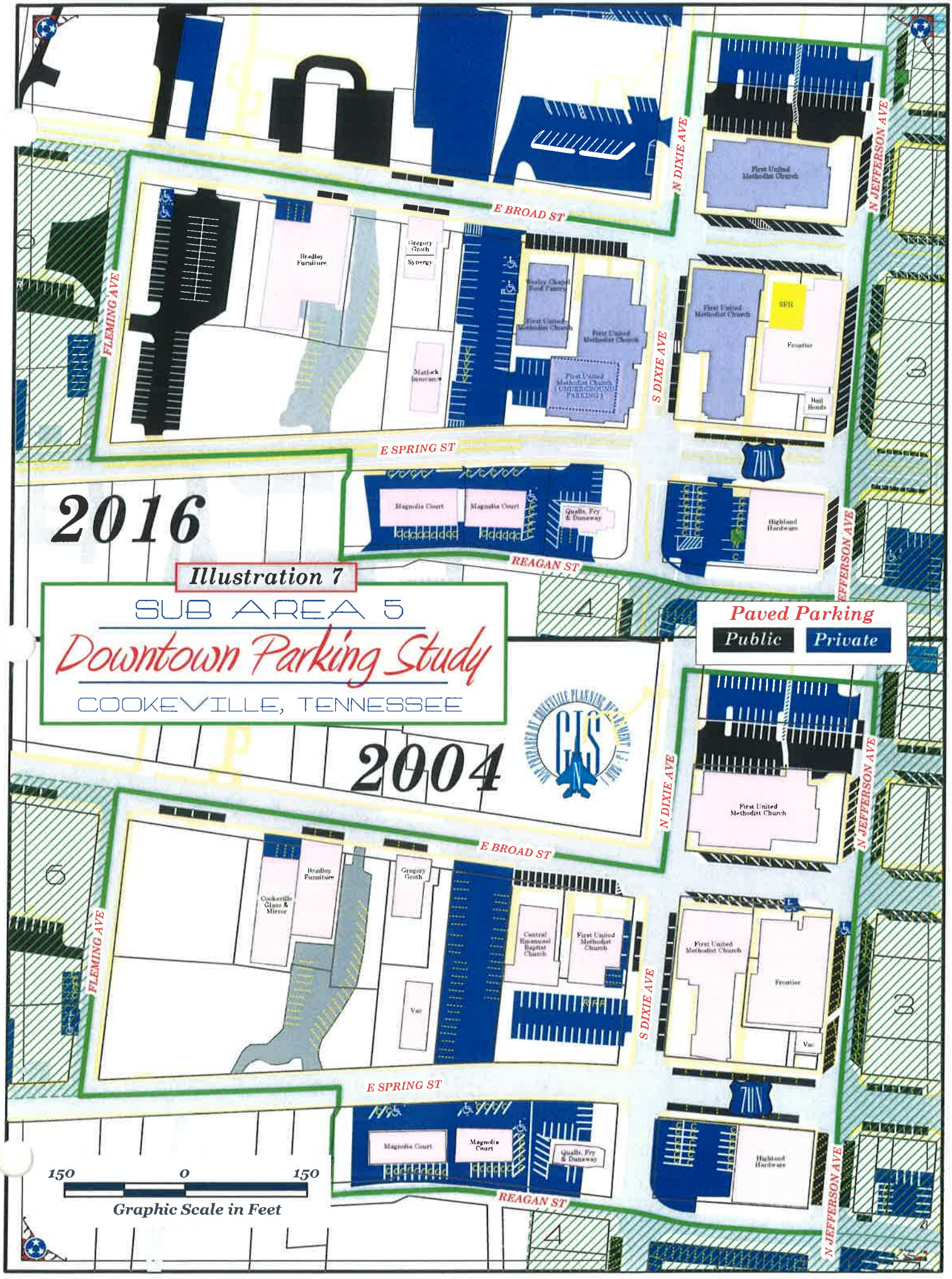
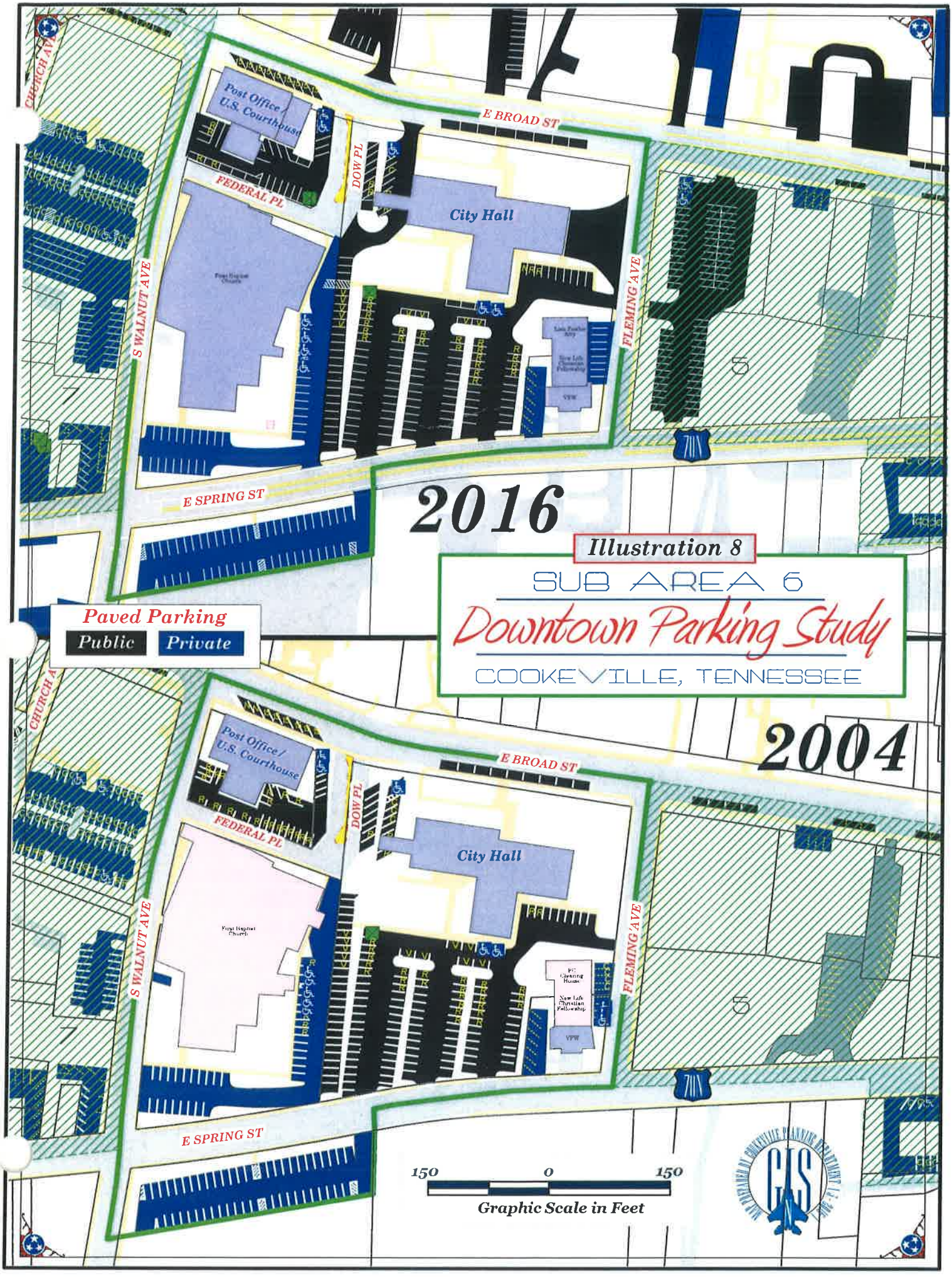


Illustration 5
SUB AREA 3
Downtown Parking Study
COOKEVILLE, TENNESSEE
2016
Paved Parking
Public
Private
2004
175
0
175
Graphic Scale in Feet
E 1st ST
FREEZE ST
N MADISON AVE
N JEFFERSON AVE
N WASHINGTON AVE
BOYD ST
E BROAD ST
STALEY AVE
E SPRING ST
S MADISON AVE
S JEFFERSON AVE
S WASHINGTON AVE
REAGAN ST
Court House
Justice Center
Moore / Reder / Fitzpatrick
Cumberland Counseling Services
RCBA
Vac
BBB
Johnny's Barber Shop
Thompson DDS
Ledbetter
Jere Whitson Bldg
Market on the Square
Poets' Coffee
Stage One
East Office Center
Jerry Jared
Reiki
Jefferson Professional Bldg
Arcade Building
Cookeville Injury Law
Lamp & Lighthouse
Jones Antiques
Chez
Tn Bonding Co
Kather's Kakes
DTHA
State Farm
The Centre
Cookeville Lodge 266 F & AM
Princess & The Pea
The Cookhouse
Antiques at Maddux Place
Tourism Association
Rhythm Time
Bookworks
Grace Presbyterian Church
Bart Gordon
David Day
Expressions in Photography
MacRae's Rest & Pub
Jerry's Barber Shop
Pottage Boutique
Cookeville Lodge 266
Shady Rose Gift Shop
Debi's Furniture
Henry Pitcher
Maddux Hardware


2016
Illustration 6
SUB AREA 4
Downtown Parking Study
COOKEVILLE, TENNESSEE
Paved Parking
Public
Private
REAGAN ST
S DIXIE AVE
S MADISON AVE
S JEFFERSON AVE
WASH AVE
S WASHINGTON AVE
S LOWE AVE
Wesley Thomas Bray
The Church of God
Dale Bohannon
Wilmoth Insurance
Business Solutions
Champion CPA Group
Wilmoth Building
Acuff & Acuff
USC
Scott Brown
Allen's Exteriors
Medical Arts Building
Cameron & Young
State Farm
John's Family & Implant Dentistry
Great Harvest Bread company
Edward Jones Investments
AtWork Oumb Staffing
Medicine Shoppe
Vac
Shelter Insurance
Family Dentistry
2004
150
0
150
Graphic Scale in Feet


2016
Illustration 7
SUB AREA 5
Downtown Parking Study
COOKEVILLE, TENNESSEE
2004
Paved Parking
Public
Private
E BROAD ST
E SPRING ST
REAGAN ST
FLEMING AVE
N DIXIE AVE
S DIXIE AVE
N JEFFERSON AVE
Bradley Furniture
Gregory Groth
Synergy
Matlock Insurance
First United Methodist Church
Magnolia Court
Quails, Fry & Dunaway
Highland Hardware
SFB
Frontier
Bail Bonds
Cookeville Glass & Mirror
Central Emanuel Baptist Church
Vac
150
0
150
Graphic Scale in Feet


2016
Illustration 8
SUB AREA 6
Downtown Parking Study
COOKEVILLE, TENNESSEE
Paved Parking
Public
Private
2004
E BROAD ST
E SPRING ST
S WALNUT AVE
FLEMING AVE
DOW PL
FEDERAL PL
CHURCH AVE
Post Office / U.S. Courthouse
City Hall
First Baptist Church
New Life Christian Fellowship
VFW
150
0
150
Graphic Scale in Feet

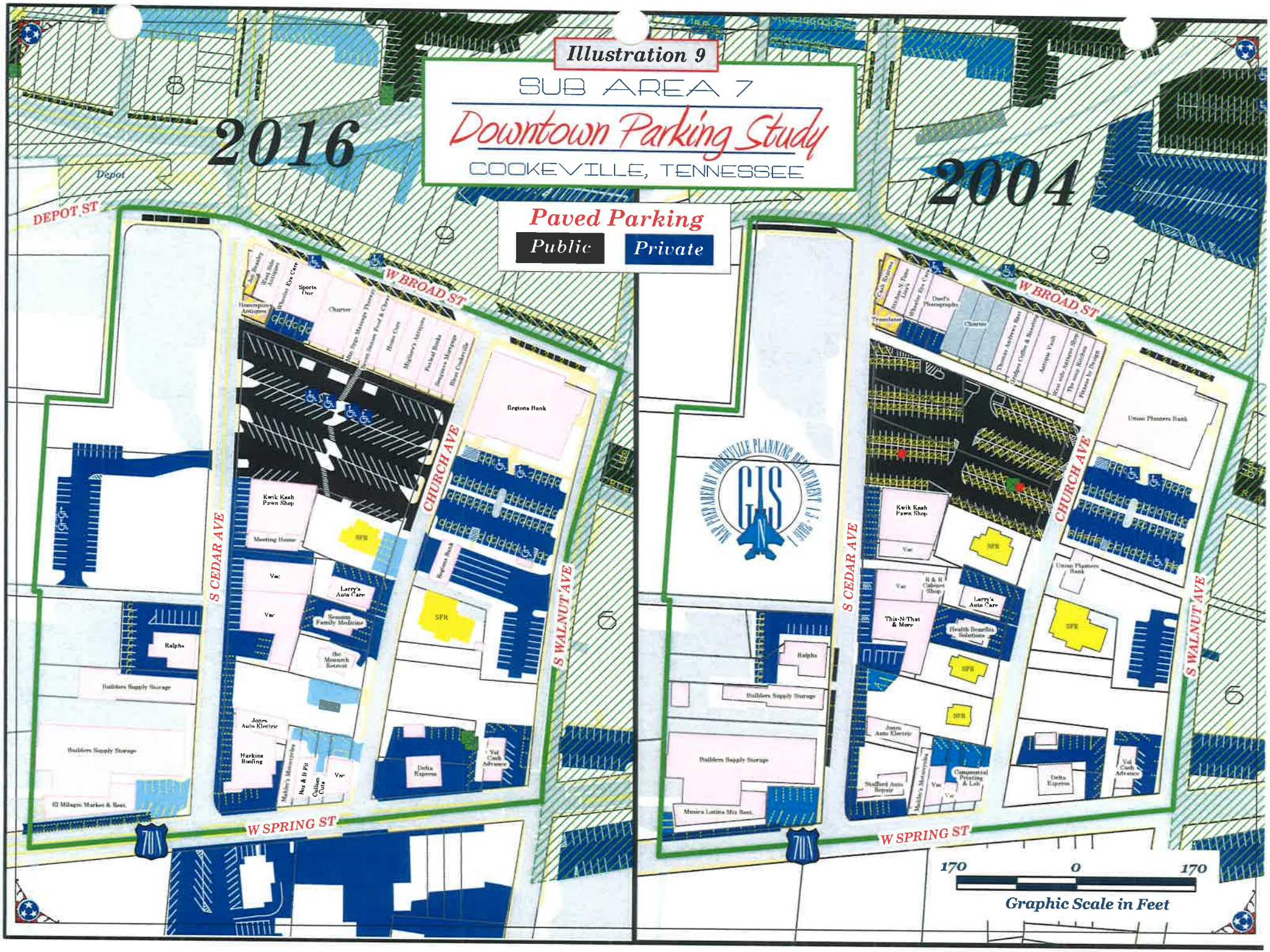
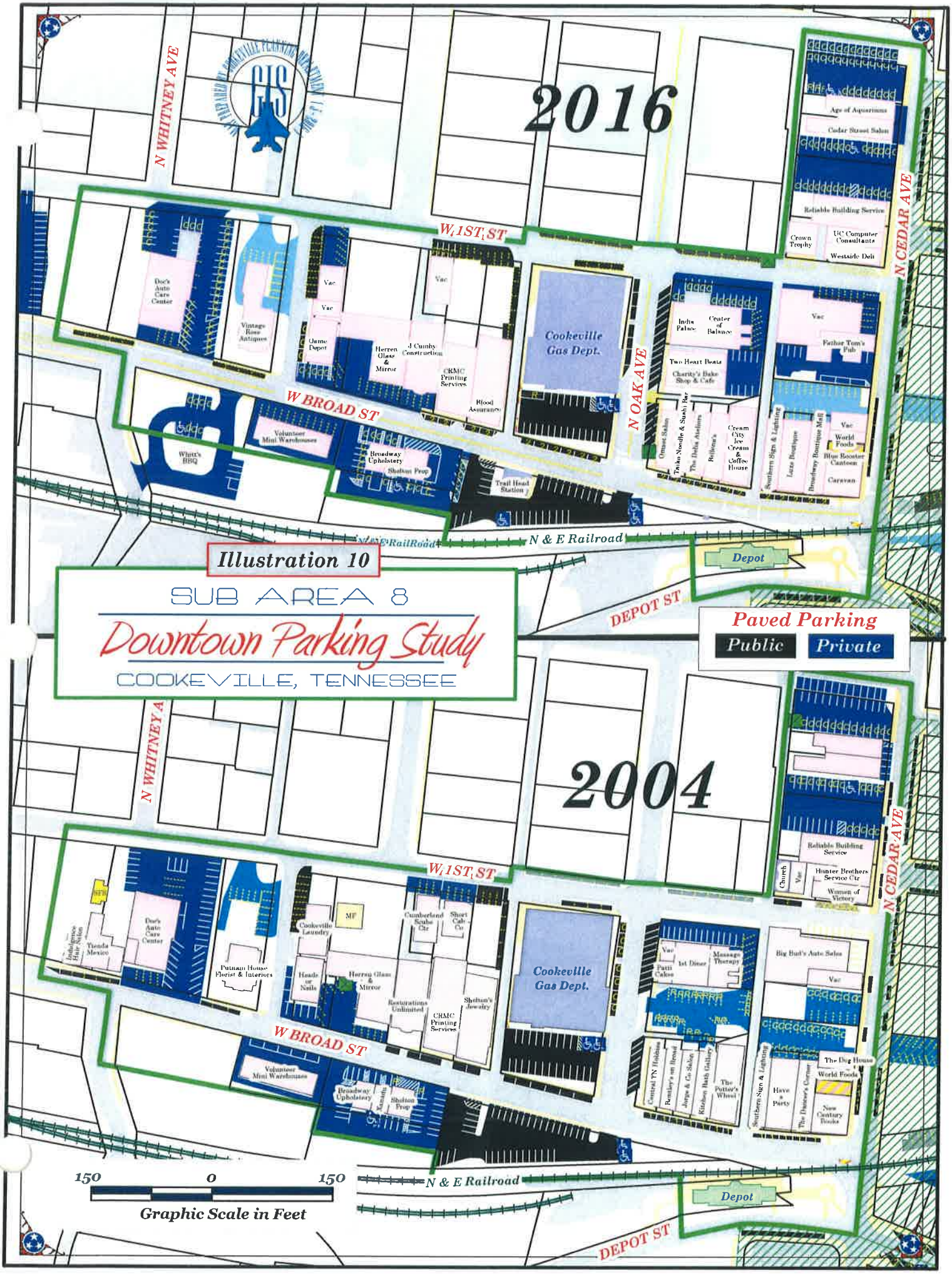


Illustration 9
SUB AREA 7
Downtown Parking Study
COOKEVILLE, TENNESSEE
Paved Parking
Public
Private
2016
2004
DEPOT ST
W BROAD ST
W SPRING ST
S CEDAR AVE
CHURCH AVE
S WALNUT AVE
Depot
Regions Bank
Union Planters Bank
Kwik Kash Pawn Shop
Larry's Auto Care
Ralphs
Builders Supply Storage
Jones Auto Electric
Harkins Roofing
Delta Express
Thin-N-That & More
Health Benefits Solutions
Stafford Auto Repair
Commercial Printing & Lab
Charter
Sports One
Meeting House
Var
SFR
170
0
170
Graphic Scale in Feet


2016
N WHITNEY AVE
W 1ST ST
N CEDAR AVE
N OAK AVE
W BROAD ST
DEPOT ST
N & E Railroad
Depot
Cookeville Gas Dept.
Illustration 10
SUB AREA 8
Downtown Parking Study
COOKEVILLE, TENNESSEE
Paved Parking
Public
Private
2004
150
0
150
Graphic Scale in Feet

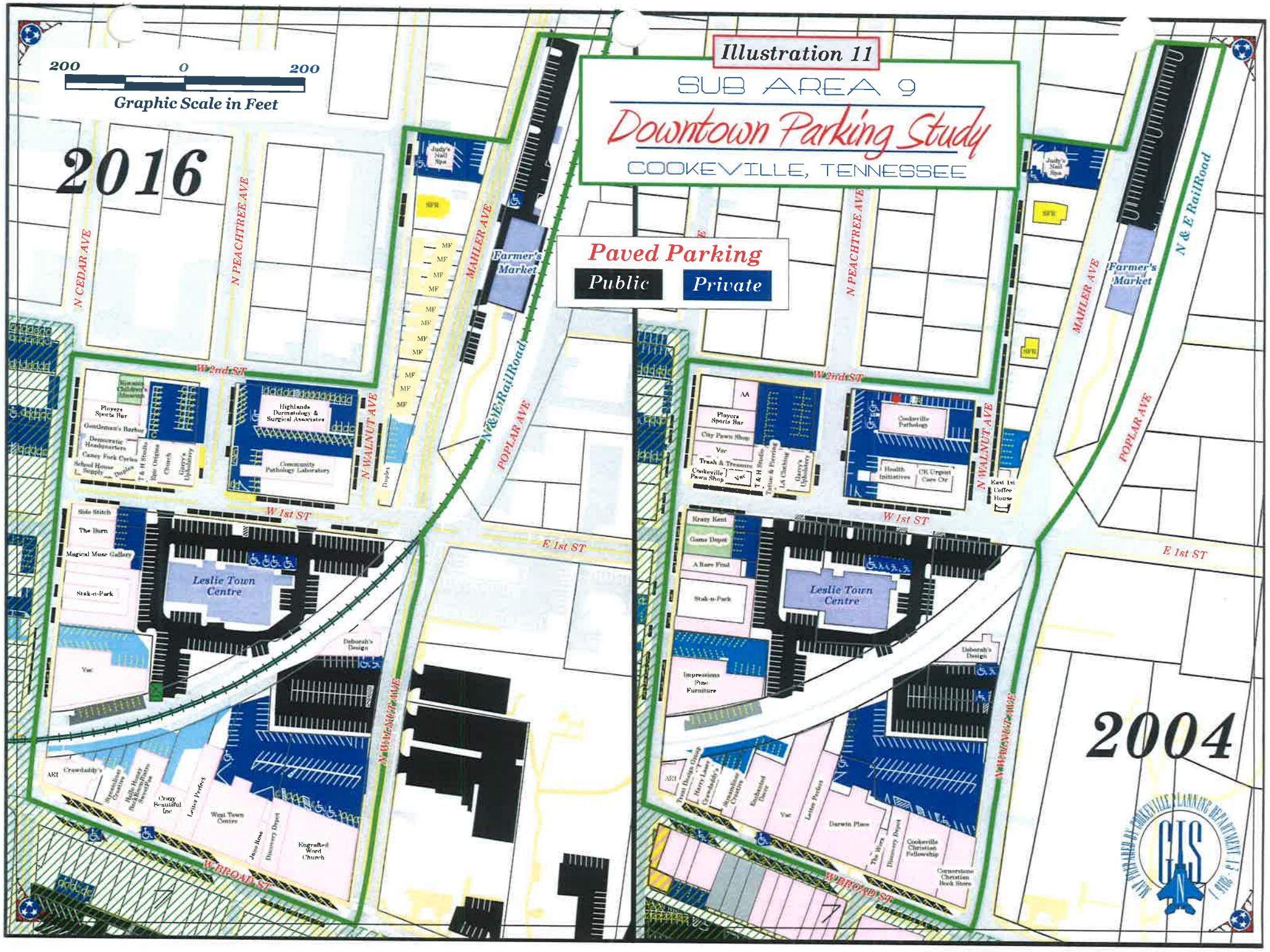


Illustration 11
SUB AREA 9
Downtown Parking Study
COOKEVILLE, TENNESSEE
200 0 200
Graphic Scale in Feet
2016
2004
Paved Parking
Public
Private
N CEDAR AVE
N PEACHTREE AVE
MAHLER AVE
N WALNUT AVE
POPLAR AVE
N & E RailRoad
W 2nd ST
W 1st ST
E 1st ST
W BROAD ST
Farmer's Market
Leslie Town Centre
Judy's Nail Spa
Players Sports Bar
Gentleman's Barber
Democratic Headquarters
Highlands Dermatology & Surgical Associates
Community Pathology Laboratory
Side Stitch
The Barn
Magical Muse Gallery
Stak-n-Pack
Deborah's Design
Crawdaddy's
Crazy Beautiful Inc
Letter Perfect
West Town Centre
Jama Rose
Discovery Depot
Engrafted Word Church
City Pawn Shop
Trash & Treasures
Cookeville Pawn Shop
Cookeville Pathology
Health Initiatives
CK Urgent Care Ctr
East 1st Coffee House
Krazy Kent
Game Depot
A Rare Find
Impressions Fine Furniture
Darwin Place
Cookeville Christian Fellowship
Cornerstone Christian Book Store
CLS

It should be noted that a number of city parking areas and several of the private parking lots in the study area have either not been surfaced or have not been marked. The lack of marked spaces can result in haphazard parking, prohibiting the maximum use of the parking supply. In 2004 and 2016 the Planning Department estimated the number of spaces that could be provided for each of these areas, should they be paved and/or marked. For 2004 this estimate includes 58 public and 141 private spaces not surfaced, and 160 public and 378 private spaces paved but not marked. For 2016 this estimate includes 59 public and 100 private spaces not surfaced, and 103 public and 317 private spaces paved but not marked. From 2004 to 2016 the total estimated parking spaces not surfaced or not marked has decreased from 737 to 579, or by 158 spaces. The estimated parking spaces in 2004 and 2016 not surfaced or not marked are included in the totals presented in Table 1 and are summarized by sub area in Table 3.

TABLE 3
ESTIMATED PARKING SPACES NOT SURFACED OR NOT MARKED BY SUB AREA
2004-2016

SUB AREA	NUMBER OF PARKING SPACES NOT SURFACED OR NOT MARKED									
	PUBLIC NOT SURFACED		PRIVATE NOT SURFACED		PUBLIC NOT MARKED		PRIVATE NOT MARKED		TOTAL	
	2004	2016	2004	2016	2004	2016	2004	2016	2004	2016
1	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	82	66	82	66
3	--	--	4	5	18	7	13	--	35	12
4	--	--	--	--	21	11	83	109	104	120
5	26	26	--	--	29	8	43	5	98	39
6	--	--	--	--	--	--	6	6	6	6
7	--	--	25	21	13	12	83	68	122	101
8	21	21	70	32	31	43	33	56	155	152
9	11	12	42	42	48	22	34	7	135	83
TOTAL	**58**	**59**	**141**	**100**	**160**	**103**	**378**	**317**	**737**	**579**

RESTRICTIONS ON PARKING SUPPLY

Several of the parking spaces available in the study area have certain restrictions that limit their use. These include reserved spaces and time limits. Other restrictions include spaces used for dumpster locations and spaces blocked by utility poles. The most significant change from 2004 to 2016 was with spaces marked for customer/visitor, which increased from 267 to 613 spaces, or by 346 spaces. A summary of the various types of restrictions by sub area for 2004 and 2016 is presented in Table 4.

TABLE 4
PARKING RESTRICTIONS BY SUB AREA
2004-2016

TYPE RESTRICTION	YEAR	NUMBER OF SPACES WITH RESTRICTIONS									
		SUB AREA									
		1	2	3	4	5	6	7	8	9	TOTAL
15 MINUTE LIMIT	2004	--	--	3	--	--	6	--	--	--	9
	2016	--	--	--	--	--	9	--	--	--	9
1 HOUR LIMIT	2004	--	--	112	--	40	--	--	16	11	179
	2016	--	--	69	--	--	--	--	--	3	72
2 HOUR LIMIT	2004	--	--	--	--	--	--	16	--	19	35
	2016	--	--	26	--	--	--	15	22	19	82
12 HOUR LIMIT	2004	--	--	--	--	--	--	154	--	--	154
	2016	--	--	--	--	--	--	--	--	--	0
CUSTOMER/ VISITOR	2004	--	25	15	34	44	18	56	75	--	267
	2016	188	21	17	24	54	10	68	148	83	613
NO PARKING	2004	--	10	1	2	--	2	--	--	--	15
	2016	--	1	--	--	1	1	--	--	--	3
RESERVED	2004	28	--	--	1	3	57	7	25	1	122
	2016	30	--	3	15	--	33	--	8	--	89
PERMIT REQUIRED	2004	--	--	--	--	--	--	--	23	--	23
	2016	--	--	--	--	--	--	--	--	--	0
DUMPSTER	2004	0	1	2	1	--	1	1	2	--	8
	2016	3	--	2	--	1	2	2	2	2	14
UTILITY POLE	2004	--	--	--	--	--	--	2	--	1	3
	2016	--	--	--	--	--	--	--	--	--	0
TOTAL	2004	28	36	133	38	87	84	236	118	32	792
	2016	221	22	117	39	56	55	85	184	107	882

PARKING FEES

All publicly supplied parking spaces are provided free of charge. Parking meters have in the past been utilized in the downtown area but were removed in the early 1990's as a part of downtown improvements completed under the Main Street Program.

ADA COMPLIANCE

The Americans with Disabilities Act (ADA) requires that accessible parking spaces for persons with disabilities be provided for new parking lots and when existing parking lots are re-striped. Accessible spaces must comply with the ADA Standards for Accessible Design. The minimum number of accessible parking spaces that must be provided per number of total spaces provided in a parking lot is depicted in Table 5.

Design guidelines for accessible parking spaces are specified in the ADA Standards for Accessible Design. Accessible parking spaces for cars must have at least a 60-inch wide access isle located adjacent to the designated parking space. These parking spaces must also be identified with a sign and located on level ground. Van-accessible parking spaces must have a minimum 96-inch access isle adjacent to the parking space. If only one accessible parking space is required, it must be a van accessible space. In facilities where more than one accessible parking space is required, one of eight accessible parking spaces must be van accessible. Two parking spaces may share an access isle. All accessible parking spaces must connect to an accessible route to the building.

Progress has been made in the downtown area toward meeting the ADA accessible parking requirements. As depicted in Table 6, the number of accessible parking spaces in the downtown area has increased from 67 to 77 since 2004. In 2004, 32 of the 67 spaces were in publicly provided parking areas and 35 were provided in private parking areas. In 2016, 40 of the 77 spaces were located in public parking areas and 37 were located in private parking areas. Of the total accessible spaces none are considered van accessible spaces.

As indicated in Table 6, when applying the ADA standard to the individual sub areas a total of 73 accessible parking spaces were required in 2004 and 72 in 2016. Utilizing this standard indicates that in 2004 the downtown area had five less spaces than required and that in 2016 the area had five more spaces than required. An analysis of the provision of accessible parking by individual parking areas was not completed as a part of this study. It is anticipated that such an analysis would indicate a shortage of accessible parking spaces.

TABLE 5
ADA ACCESSIBLE PARKING REQUIREMENTS

NUMBER OF SPACES SPACES PROVIDED PER PARKING LOT	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED	MINIMUM NUMBER OF VAN ACCESSIBLE SPACES REQUIRED
1-25	1	1
26-50	2	1
51-75	3	1
76-100	4	1
101-150	5	1
151-200	6	1
201-300	7	1
301-400	8	1
401-500	9	2
501-1000	2 % of total	1 out of every 8 accessible spaces
1001 & over	20 plus 1 for each 100 over 1000	1 out of every 8 accessible spaces

TABLE 6
ACCESSIBLE PARKING SUPPLY BY SUB AREA
2004-2016

	TOTAL PARKING SPACES		ACCESSIBLE SPACES REQUIRED		ACCESSIBLE SPACES PROVIDED		OVER (UNDER) REQUIRED	
	2004	2016	2004	2016	2004	2016	2004	2016
Sub Area 1	270	270	7	7	3	6	(4)	(1)
Sub Area 2	266	262	7	7	7	7	--	--
Sub Area 3	357	354	8	8	7	8	(10	--
Sub Area 4	289	298	7	7	7	5	--	(2)
Sub Area 5	327	354	8	8	5	5	(3)	(3)
Sub Area 6	289	285	7	7	13	11	6	4
Sub Area 7	407	370	9	8	4	10	(5)	2
Sub Area 8	450	433	9	9	6	10	(3)	1
Sub Area 9	540	532	11	11	15	15	4	4
TOTAL	**3,195**	**3,158**	**73**	**72**	**67**	**77**	**(6)**	**5**

PARKING DEMAND

Parking demand is defined as the number of spaces that should be provided for employees, shoppers, and business visitors that park within the study area. There is a direct relationship between land use and the parking demand it generates. Therefore to determine parking demand an inventory of land use must be compiled. In this section a summary of the downtown land use, parking demand by demand ratio, parking demand by total square feet of floor space by sub area, and parking demand by land use by sub area is presented.

LAND USE INVENTORY

Land use information was gathered by the Cookeville Planning Department in March of 2004 and March of 2016 and compiled for each parcel within the study area. Individual land uses were placed in the following land use categories:

- Single Family Residential. This category consists of single-family detached homes.
- Multi-Family Residential. This category includes townhomes, condominiums, duplexes, apartment buildings, and accessory dwelling units located within a structure with a principal use other than residential.
- Private Service/Office. This category includes professional offices, banks, personal services and repair services.
- Commercial. All retail or wholesale trade activities, including restaurants, are included in this category.
- Public. This category consists of all governmental uses and includes the Justice Center, County Courthouse, City Hall, Federal Courthouse and Post Office, Town Centre and the Farmers Market.
- Semi-Public. This category includes all churches, clubs, lodges, and social organizations.
- Utilities. This category includes any utility structures or facilities, including the Cookeville Gas Department, and the phone and cable TV companies.
- Recreation. The only recreational facilities located in the study area are the Cookeville Depot Museum and the Cookeville History Museum.
- Vacant Floor Space. All unused floor spaces in any of the land use categories, with the exception of single or multi-family residential uses, is included in this category.

As a part of the land use inventory, the number of establishments or units in each land use category and the total square footage of the structures, or portion of structures utilized, were also determined. A summary of the land use in the study area by number of units or establishments and by total square feet of floor space in 2004 and 2016 is presented in Table 7.

As depicted in Table 7, from 2004 to 2016, the total square feet of floor space in the downtown area has increased from 1,569,766 to 1,615,452 square feet. This is an increase of 45,686 square feet of floor space, or approximately three (3) percent. The area continues to be dominated by land uses in the private service category, with the actual number of such uses increasing from 172 to 218 and the floor space increasing by nearly 100,000 square feet. Public uses remain the second largest occupier of floor space with the total square feet dedicated to such uses basically unchanged. Commercial uses remain as a large category of land use; however, the total commercial units have decreased from 67 to 63 and the total floor space has declined by approximately 88,000 square feet. The land use category experiencing the largest percentage increase in the downtown area since 2004 is multi-family residential, which increased by 18 units and by 36,559 square feet in floor space. The total square feet of vacant floor space has not significantly changed during the time period.

TABLE 7
EXISTING LAND USE
BY NUMBER OF UNITS AND TOTAL SQUARE FEET
2004 and 2016

LAND USE CATEGORY	NUMBER OF UNITS		TOTAL SQUARE FEET OF FLOOR SPACE	
	2004	2016	2004	2016
Single Family Residential	7	5	12,632	17,168
Multi-Family Residential	6	24	6,222	42,781
Private Service	172	218	490,015	589,151
Commercial	67	63	325,999	238,250
Restaurant	14	18	29,686	50,197
Public	14	12	328,029	326,096
Semi-Public and Churches	11	8	258,609	243,878
Utilities	3	4	54,988	47,489
Recreation	3	3	10,318	6,560
Vacant Floor Space	20	13	53,269	53,873
TOTAL	317	368	1,569,766	1,615,452

PARKING DEMAND BY DEMAND RATIO

The parking demand for the Cookeville downtown area can be calculated by multiplying the square feet of building space by a "demand ratio" which is the number of spaces required per total square feet of generating land use such as residential, private service, or commercial. A demand ratio is specified in the Cookeville Zoning Code based on the type of land use. With the exception of churches, restaurants, and residential land uses, this ratio is based on the square feet of floor space. As depicted in Tables 8 and 9, applying the demand ratio specified in the Zoning Code to the various categories of land use indicates a total parking demand of 5,590 spaces in the downtown area in 2004 and a total parking demand of 5,736 spaces in 2016. Comparing the parking demands shown in Tables 8 and 9 with the parking supplies shown in Table 1 indicates that in 2004 the parking demand exceeded the supply by 2,395 parking spaces and that it 2016 demand exceeded supply by 2,578 spaces.

TABLE 8
PARKING DEMAND BY DEMAND RATIO
2004

LAND USE CATEGORY	TOTAL SQUARE FEET OF FLOOR SPACE	DEMAND RATIO SPECIFIED BY ZONING CODE	TOTAL REQUIRED PARKING
SF Residential	12,632 (7 units)	3 per unit	21
MF Residential	6,222 (6 units)	1.25 per bedroom	15
Private Service	490,015	1 per 250 sq. ft.	1,960
Commercial	325,999	1 per 200 sq. ft.	1,630
Restaurant	29,686 (548 seats)	1 per 3 seats	183
Public	328,029	1 per 300 sq. ft.	1,093
Semi-Public (churches)	248,632 (1,840 seats)	1 per 3 seats	613 x .25 = 153*
Semi-Public (other)	9,976	1 per 300 sq. ft.	33
Utilities	54,988	1 per 250 sq. ft.	220
Recreation	10,318	1 per 150 sq. ft.	69
Vacant Floor Space	53,269	1 per 250 sq. ft.	213
TOTAL	1,569,766		5,590

TABLE 9
PARKING DEMAND BY DEMAND RATIO
2016

LAND USE CATEGORY	TOTAL SQUARE FEET OF FLOOR SPACE	DEMAND RATIO SPECIFIED BY ZONING CODE	TOTAL REQUIRED PARKING
SF Residential	17,168 (5 units)	3 per unit	15
MF Residential	42,781 (24 units)	1.25 per bedroom	60
Private Service	589,151	1 per 250 sq. ft.	2,357
Commercial	238,250	1 per 200 sq. ft.	1,191
Restaurant	50,197 (1,245 seats)	1 per 3 seats	415
Public	326,096	1 per 300 sq. ft.	1,087
Semi-Public (churches)	238,691 (1,740 seats)	1 per 3 seats	580 x .25 = 145*
Semi-Public (other)	5,187	1 per 300 sq. ft.	17
Utilities	47,499	1 per 250 sq. ft.	190
Recreation	6,560	1 per 150 sq. ft.	44
Vacant Floor Space	53,873	1 per 250 sq. ft.	215
TOTAL	1,615,452		5,736

*The Cookeville Zoning Code specifies that certain uses, such as churches, whose peak attendance is at night or on Sunday, are permitted to share parking with other uses that are closed at night or on Sunday. Since the majority of the parking for the churches identified in the downtown area is shared parking, the total parking requirement for churches was reduced by 75 percent.

As is indicated in Tables 8 and 9, when determining total parking demand by demand ratio significant fluctuations in required parking can occur due to changes in land use. From 2004 to 2016, the total required parking in the downtown area based on the demand ratio specified in the Cookeville Zoning Code increased from 5,590 to 5,736 parking spaces. While some of this 146 space increase can be attributed to an expansion of over 45,680 square feet in total floor space, it is significant to note that the demand for restaurant parking increased by 232 spaces. It is also noteworthy that the increase in overall parking demand occurred along with a 42 parking space decrease in the combined demand for commercial and private service land uses. This decrease in demand can be at least partially attributed to a decline in commercial land uses and an increase in private service land uses, which require less parking per square foot of floor space than commercial land uses.

PARKING DEMAND BY LAND USE PER SUB AREA

To more thoroughly understand the impact changes in land use have on the demand for parking an examination of land uses from 2004 and 2016 and their corresponding parking requirements for each individual sub area was completed. In Tables 10 - 19 the parking demand by land use and parking determinant for each of the nine sub areas is presented. These tables also depict the change in parking demand from 2004 to 2016 for each of the sub areas.

TABLE 10
PARKING DEMAND BY LAND USE SUB AREA 1
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family					
Multi-Family					
Church					
Commercial					
Private Service					
Restaurant					
Semi-Public					
Public	142,021 SF	142,021 SF	473	473	0
Recreation					
Utility					
Vacant					
TOTAL			473	473	0

TABLE 11
PARKING DEMAND BY LAND USE SUB AREA 2
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family		1 unit	0	3	3
Multi-Family			0	0	
Church			0	0	
Commercial	15,436 sf	17,405 sf	77	87	10
Private Service	39,124 sf	53,689 sf	156	215	59
Restaurant			0	0	
Semi-Public		1,689 sf	0	6	6
Public			0	0	
Recreation			0	0	
Utility	2,011 sf	2,011 sf	4	4	0
Vacant	24,202 sf	2,394 sf	97	10	(87)
TOTAL			334	325	(9)

TABLE 12
PARKING DEMAND BY LAND USE SUB AREA 3
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family					
Multi-Family					
Church	30 seats		10		(10)
Commercial	74,419 sf	41,494 sf	372	207	(165)
Private Service	135,133 sf	188,165 sf	540	753	213
Restaurant	55 seats	330 seats	18	110	92
Semi-Public	7,707 sf	3,498 sf	26	12	(14)
Public	42,565 sf	34,380 sf	142	115	(27)
Recreation					
Utility					
Vacant		2,413 sf		10	10
TOTAL			1,108	1,207	99

TABLE 13
PARKING DEMAND BY LAND USE SUB AREA 4
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family					
Multi-Family					
Church	50 seats	50 seats	17	17	0
Commercial	1,151 sf	2,400 sf	6	12	6
Private Service	54,876 sf	78,836 sf	220	315	95
Restaurant		30 seats		10	10
Semi-Public					
Public	4,568 sf		15	0	(15)
Recreation	3,537 sf		24	0	(24)
Utility					
Vacant	9,091 sf		36	0	(36)
TOTAL			318	354	36

TABLE 14
PARKING DEMAND BY LAND USE SUB AREA 5
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family		1 unit		3	3
Multi-Family					
Church	600 seats	600 seats	200	200	0
Commercial	46,215 sf	46,215 sf	231	231	0
Private Service	41,660 sf	49,259 sf	167	197	30
Restaurant					
Semi-Public					
Public					
Recreation					
Utility	45,504 sf	40,160 sf	182	161	(21)
Vacant	7,600 sf		30		(30)
TOTAL			810	792	(18)

TABLE 15
PARKING DEMAND BY LAND USE SUB AREA 6
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family					
Multi-Family					
Church	850 seats	800 seats	283	267	(16)
Commercial					
Private Service	6,356 sf	6,356 sf	25	25	0
Restaurant					
Semi-Public					
Public	55,622 sf	61,977	185	207	22
Recreation					
Utility					
Vacant					
TOTAL			493	499	6

TABLE 16
PARKING DEMAND BY LAND USE SUB AREA 7
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family	4 units	2 units	12	6	(6)
Multi-Family	4 bedrooms	6 bedrooms	5	8	3
Church					
Commercial	45,828 sf	57,353 sf	229	287	58
Private Service	96,552 sf	95,338 sf	386	381	(5)
Restaurant	222 seats	152 seats	74	51	(23)
Semi-Public					
Public					
Recreation					
Utility	7,473 sf	5,328 sf	30	21	(9)
Vacant	6,659 sf	12,310 sf	27	49	22
TOTAL			763	803	40

TABLE 17
PARKING DEMAND BY LAND USE SUB AREA 8
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family	1 unit		3		(3)
Multi-Family	8 bedrooms	12 bedrooms	10	15	5
Church	20 seats		7		(7)
Commercial	64,917 sf	37,848 sf	325	189	(136)
Private Service	52,322 sf	48,057 sf	209	192	(17)
Restaurant	107 seats	498 seats	36	166	130
Semi-Public					
Public	43,808 sf	46,099 sf	146	154	8
Recreation	3,250 sf	4,660 sf	22	31	9
Utility					
Vacant	5,716 sf	13,668 sf	23	55	32
TOTAL			781	802	21

TABLE 18
PARKING DEMAND BY LAND USE SUB AREA 9
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family	2 units	1 unit	6	3	(3)
Multi-Family		30 bedrooms		38	38
Church	290 seats	290 seats	97	97	0
Commercial	78,032 sf	35,536 sf	390	178	(212)
Private Service	63,991 sf	69,451 sf	256	278	22
Restaurant	164 seats	235 seats	55	78	23
Semi-Public	2,270 sf		8		(8)
Public	39,444 sf	41,620 sf	132	139	7
Recreation	3,531 sf	1,900 sf	24	13	(11)
Utility					
Vacant		23,089 sf		92	92
TOTAL			968	916	(52)

As is depicted in Table 12, the sub area in which changes in land use most negatively affected parking demand was Sub Area 3. This area experienced a 92 parking space demand increase due specifically to location of new restaurants. Sub Area 4 saw the second largest increase (48) in parking demand due to changes in land use since 2004. This area, as shown in Table 13, experienced notable growth in private service developments. Sub Area 7 depicted in Table 16 also has seen a growth in demand due to primarily to an increase in commercial land use. Sub Area 9, as depicted in Table 18, experienced the most positive affect on parking demand due to changes in land use. Since 2004, this area's parking demand declined by 52 spaces primarily due to a nearly 50 percent decrease in commercial land uses.

The overall impact of changes in land use on parking demand is depicted in Table 19 below. Since 2004 the study area has seen a 146 space increase in parking demand due to changes in land use. A major reduction in the parking demand for commercial land uses (decrease of 439 spaces) was offset by large increases in the parking demand for private service (increase of 397 spaces) and restaurant (increase of 232 spaces) land uses.

TABLE 19
PARKING DEMAND BY LAND USE ALL SUB AREAS
2004-2016

LAND USE	PARKING DETERMINANT		PARKING REQUIRED		CHANGE 2004-2016
	2004	2016	2004	2016	
Single Family	7 units	5 units	21	15	(6)
Multi-Family	12 bedrooms	48 bedroom	15	60	45
Church	1,840 seats	1,740 seats	153	145	(8)
Commercial	325,999 sf	238,250 sf	1,630	1,191	(439)
Private Service	490,015 sf	589,151 sf	1,960	2,357	397
Restaurant	548 seats	1,245 seats	183	415	232
Semi-Public	9,976 sf	5,187 sf	33	17	(16)
Public	328,029 sf	326,096 sf	1,093	1,087	(6)
Recreation	10,318 sf	6,560 sf	69	44	(25)
Utility	54,988 sf	47,499 sf	220	190	(30)
Vacant	53,269 sf	53,873 sf	213	215	2
TOTAL			5,590	5,736	146

PARKING DEMAND BY TOTAL SQUARE FEET OF FLOOR SPACE PER SUB AREA

As previously noted, the Cookeville Zoning Code requires that new developments within the CBD must provide off-street parking if it is determined that adequate parking is not available within a distance of 500 feet. To evaluate the effectiveness of this requirement an examination of the changes in the number of required parking spaces for each individual sub area is beneficial. The total floor space for each individual land use category was combined and an average requirement of 1 space per every 300 square feet of floor space was utilized. Adjustments to reflect shared parking for churches and residential uses, for which required parking is not based on square footage, were made for the total square feet of floor space in each sub area. The results of this assessment from 2004 and 2016 are presented in Tables 20 and 21.

TABLE 20
PARKING DEMAND BY TOTAL SQUARE FEET OF FLOOR SPACE PER SUB AREA
2004

SUB AREA	TOTAL SQUARE FEET OF FLOOR SPACE	REQUIRED PARKING	PARKING PROVIDED	OVER (UNDER) REQUIRED
Sub Area 1	142,021	473	270	(203)
Sub Area 2	80,774	269	266	(3)
Sub Area 3	275,952 – 9,766 = 266,186	887	357	(530)
Sub Area 4	76,816 – 3,593 = 73,223	244	289	45
Sub Area 5	232,344 – 91,365 = 140,979	470	327	(143)
Sub Area 6	189,492 – 127,515 = 61,977	207	289	82
Sub Area 7	178,843 – 11,620 = 167,223	557	407	(150)
Sub Area 8	183,883 – 5,338 = 178,545	595	450	(145)
Sub Area 9	209,641 – 15,434 = 191,352	638	540	(98)
TOTAL	1,569,766 – 264,631 = 1,305,135	4,350	3,195	(1,155)

TABLE 21
PARKING DEMAND BY TOTAL SQUARE FEET OF FLOOR SPACE PER SUB AREA
2016

SUB AREA	TOTAL SQUARE FEET OF FLOOR SPACE	REQUIRED PARKING	PARKING PROVIDED	OVER (UNDER) REQUIRED
Sub Area 1	142,021	473	270	(203)
Sub Area 2	81,208 – 4,020 = 77,188	257	262	5
Sub Area 3	282,691	942	354	(588)
Sub Area 4	87,564 – 3,593 = 83,971	280	298	18
Sub Area 5	238,670 – 103,065 = 135,605	452	354	(98)
Sub Area 6	189,492 – 121,159 = 68,333	228	285	57
Sub Area 7	182,246 – 7,513 = 174,733	582	370	(212)
Sub Area 8	181,816 – 11,437 = 170,379	568	433	(135)
Sub Area 9	229,716 – 47,853 = 181,863	606	532	(74)
TOTAL	1,615,452 – 298,640 = 1,316,812	4,397	3,158	(1,229)

As indicated in Tables 20 and 21, the total parking demand for the downtown area by total square feet of floor space exceeded the supply in both 2004 and 2016. The deficit has increased since 2004 by approximately 74 parking spaces. This shortage can be partially attributed to both an increase in floor space and a decrease in the parking supply.

Sub Area 3, which includes the area around the Putnam County Courthouse, has the largest parking shortage with over 580 spaces below the estimated demand. The parking shortage in this area grew by 58 spaces, which can primarily be attributed to a 16,505 square feet increase of floor space and the provision of no additional parking. Sub Area 7, which is the area west of South Walnut Avenue and south of West Broad Street, replaced Sub Area 1 as the sub area with the second largest shortage of parking. A significant portion of the 62 space increase in shortage of parking in Sub Area 7 is a result of the

reconfiguration of a large public off-street parking area. This reconfiguration resulted in a 65 space reduction in parking. No improvements to the parking shortage in Sub Area 1, which is the area around the Justice Center, have been completed since 2004 and the area still has a deficit of 203 spaces. It is significant that Sub Areas 1 and 3 are contiguous because combined they have an estimated parking shortage of over 790 spaces.

Sub Area 5 (the area between Fleming and Madison Avenues) and Sub Areas 8 and 9 (the areas west of Walnut and north of Broad), continue to have parking deficits. The parking deficits in these three areas, as is depicted in Tables 20 and 21, have improved significantly since 2004. These improvements can be partially attributed to conversions of land uses requiring less parking per square foot of floor space and to the provision of additional parking.

The sub area parking demand analysis by total square feet of floor space suggests that the parking supply in Sub Areas 2, 4, and 6 meets or exceeds the current demand. Sub Area 6, which is located between Fleming and South Walnut Avenues and includes City Hall, has the largest surplus of parking. The estimated surplus has, however, decreased by 25 spaces since 2004. It is significant to note that Sub Area 4 (area south of Reagan between Dixie and Lowe), which is indicated to have the second largest surplus of parking, was located within a zoning district prior to 2003 in which the provision of off-street parking was required.

The parking demand analysis by sub area indicates that demand exceeds supply in the downtown area as a whole by approximately 1,229 parking spaces. The actual parking shortage may be higher when the estimated number of unmarked spaces is considered. For example, Sub Area 8 (area west of Cedar and north of Broad), with an estimated 152 unmarked spaces, may have a more significant parking problem than the 135 shortage indicated in the sub area analysis. Sub Area 4 (area south of Reagan between Dixie and Lowe), with more than half of its parking spaces unmarked, may not exceed the required number of parking spaces as much as is reflected in the analysis. When factoring parking demand and supply with the number of unmarked spaces, Sub Area 6 appears to be the sub area least likely to have a parking problem.

CONCLUSIONS

By applying a parking ratio to the square feet of land use in 2004 and 2016 and comparing the results with the available parking supply it is estimated that the parking deficit in the downtown area has increased by six (6) percent. In 2004 the analysis indicated that the parking demand was approximately 1,155 parking spaces greater than the parking supply. In 2016 this deficit has increased to approximately 1,229 spaces. Factors contributing to the rising deficit include a reduction in the parking supply (37 spaces), moderate growth in land use (3 percent), and conversions of land uses requiring a greater number of parking spaces.

Sub Area 3, which is the area in the vicinity of the Putnam County Courthouse, continues to be the area with the largest deficit in parking. The deficit for this area worsened from 2004 to 2016, increasing from 530 to 588. The analysis of land use changes indicates that a significant portion of this deficit increase can be attributed to a surge in the demand for restaurant parking.

Sub Area 7, which is the area west of South Walnut Avenue and south of West Broad Street, also experienced a substantial increase in parking deficit. Since 2004 this area's deficit has increased by an estimated 62 parking spaces, or approximately five (5) percent. Most of the discrepancy between supply and demand can be directly assigned to increased commercial development and to the reconfiguration of a large public parking lot resulting in the loss of 65 parking spaces.

While the downtown area has experienced a moderate three (3) percent increase in square feet of floor space since 2004, conversions of land uses in existing floor space have had a more significant impact on parking demand. A loss of approximately 88,000 square feet of commercial land use reduced the parking demand in the downtown by 439 spaces. However, this reduction was minimized by the growth of land used for private services purposes by an estimated 99,000 square feet, increasing the parking demand by 397 spaces. The land use conversion having the greatest impact on parking demand is restaurants. From 2004 to 2016, the parking demand for restaurants increased from 183 to 415 parking spaces, a 127 percent increase.

FUTURE PARKING CONSIDERATIONS

The demand for and supply of parking in a downtown area changes over time due to various factors. Several factors that can be expected to significantly affect the future parking demand and supply in the Cookeville downtown area include the following:

Fluctuations in supply: The supply of parking is obviously affected by decisions to construct new parking spaces or to remove existing parking facilities. Altering the layout of existing parking facilities can also increase or decrease the amount of parking.

Change of use: Changes in the use of properties can create fluctuations in parking demand in the future. For example a general office typically generates less demand for parking than a retail establishment. One of the most significant impacts on parking demand occurring since 2004 has been the conversion of uses to restaurants, which can require considerable more parking than office or general retail uses.

New development and redevelopment: New construction or the redevelopment of existing properties can increase the demand for parking and can reduce the amount of existing parking.

Thoroughfare improvements: Street improvements, such as the construction of additional traffic lanes, can result in a reduction of on-street parking spaces.

Zoning amendments: Amendments to the Zoning Code, such as changes in the requirements for off-street parking, expansion of the area zoned as CBD, or rezoning of areas currently within the CBD to something other than CBD, can affect the parking supply in the downtown.

SUMMARY

This study was completed for the purpose of updating the 2004 inventory and analysis of the parking supply in the Cookeville Downtown area. Major findings derived and noteworthy trends identified in the 2016 study are presented in this section.

FINDINGS/TRENDS

- The total parking supply in the downtown area has decreased by 37 spaces since 2004, from a total of 3,195 spaces to 3,158 spaces.
- The total square feet of floor space in the downtown area has grown by approximately three (3) percent since 2004, from 1,569,766 square feet to 1,615,452 square feet.
- Vacant floor space as a percentage of total floor space was approximately three (3) percent in both 2004 and 2016, which is a good indicator of the economic stability of the downtown area.
- The public parking supply was larger than that the private supply in both 2004 and 2016; however, since 2016 the public parking supply has decreased by 61 spaces and the private parking supply has increased 24 spaces.
- Utilization of the parking supply has been improved due a significant reduction (737 to 579) in the number of spaces that are not surfaced and/or are not marked.
- Parking spaces reserved for customer/visitor have more than doubled since 2004, increasing from 267 spaces to 613 spaces.
- Since 2004 the number of parking spaces used as a dumpster location has increased from eight (8) to 14 spaces.
- There has been improvement in the provision of accessible parking spaces, increasing from 68 such spaces in 2004 to 77 in 2016.
- The total square feet of floor space utilized for commercial purposes has decreased since 2004 while that utilized for private service purposes has increased, resulting in a net reduction in the parking demand.
- Parking demand generated by restaurants has more than doubled since 2004, increasing from 183 to 415 parking spaces.
- Higher density residential development has increased in the downtown area by 18 dwelling units since 2004 with all new such construction providing required off-street parking.
- As in 2004, the 2016 demand ratio analysis indicates that parking demand exceeds parking supply for the downtown area as a whole.

- Sub Area 3 (Courthouse/Square) continues to be the area with the greatest deficit in parking with the gap between supply and demand increasing by an estimated 58 spaces since 2004.

- Sub Area 7 (area south of Broad and west of Walnut) has experienced the largest increase in its parking deficit, increasing by 62 spaces or by approximately 41 percent since 2004. This deficit increase can be primarily attributed to the reconfiguration of the sub area's main public parking lot which reduced the number of parking spaces by 65.

- Sub Area 6 (City Hall) remains the sub area with the largest surplus of parking, however, this surplus has decreased by approximately 30 percent since 2004.

- Land use changes, new development or redevelopment, street improvements, zoning amendments and other factors will continue to affect the future parking supply and demand in the downtown area.

SUGGESTIONS FOR ADDITIONAL ANALYSES

The 2004 and 2016 demand ratio analyses indicate that there is a significant shortage of parking in the downtown area; however, the actual effect of this shortage was not evaluated in 2004 or in this update. Downtowns are unique areas; typically with a mixture of land uses not usually found in any one contiguous area elsewhere in a municipality. Due to this uniqueness, the following additional studies or analyses, which were also recommended in 2004, should be completed to more thoroughly access the parking supply and demand.

- Complete a study on the utilization of the existing parking supply, including occupancy at peak hours.

- Complete a study on parking duration, including parking in spaces with restricted time limits.

- Complete a survey of motorists parking in the downtown area to determine parking duration, trip purpose, walking distance, trip frequency, and type of parking facility utilized.

- Complete a survey of downtown merchants and business owners to determine perceived parking problems and recommended courses of action.

OPTIONS FOR IMPROVEMENTS

In the 2004 Downtown Parking Study a number of measures that have been successfully utilized to address parking deficits in the downtown areas of other municipalities were identified. These options for improvements remain valid in 2016 and are as follows:

- Pave and/or stripe existing parking areas that are currently not paved and/or are not striped.
- Re-stripe existing parking areas to increase the number of spaces.
- Improve signage to better identify the location of available parking.
- Improve enforcement of existing time-restricted public parking.
- Increase the number of time-restricted public parking spaces.
- Install parking meters.
- Construct additional public surface parking areas.
- Construct a public parking garage.
- Implement a transit system to shuttle downtown visitors and customers at remote parking areas to and from the downtown.
- Require the provision of off-street parking for all new development in the downtown area.
- Solicit cooperation from downtown business owners to encourage employees to park at more remote locations.
- Require new developments in the downtown area, which cannot or choose to not provide off-street parking, pay an in-lieu of fee that would be utilized to pay for the provision of additional public parking.
- Establish a Downtown Improvement District in which downtown property owners are assessed a fee or a tax to pay for parking improvements.