Capital Improvement Plan and Development Impact Fee Study

Prepared for:

Horry County, South Carolina

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Development Impact Fee Study

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EXECUTIVE SUMMARY

Horry County, South Carolina, retained TischlerBise to prepare a Capital Improvement Plan and Development Impact Fee study. Development impact fees are collected from new construction at the time a building permit is issued. The fees are one-time payments for new development's proportionate share of the capital cost of infrastructure.

The following study addresses Horry County's Parks & Recreation, Public Safety (Police, Fire & Medic, and Emergency Operations Center), Transportation, Solid Waste, and Storm Water facilities. Development impact fees do have limitations and should not be regarded as the total solution for infrastructure funding. Rather, they are one component of a comprehensive funding strategy to ensure provision of adequate public facilities. Development impact fees may only be used for capital improvements or debt service for growth-related infrastructure. Under South Carolina Development Impact Fee enabling legislation (Section 6-1-910), fees may not be used for operations, maintenance, replacement of infrastructure, or to correct existing deficiencies.

South Carolina Development Impact Fee Act[1]

The State of South Carolina grants the power for cities and counties to collect development impact fees on new development pursuant to the rules and regulations set forth in the South Carolina Development Impact Fee Act (Code of Laws of South Carolina, Section 6-1-910 et seq.). The process to create a local impact fee system begins with a resolution by the County Council directing the Planning Commission to conduct an impact fee study and recommend a development impact fee ordinance for legislative action.

Generally, a governmental entity must have an adopted comprehensive plan to enact development impact fees; however, certain provisions in State law allow counties, cities, and towns that have not adopted a comprehensive plan to impose development impact fees. Those jurisdictions must prepare a capital improvement plan as well as prepare an impact fee study that substantially complies with Section 6-1-960(B) of the Code of Laws of South Carolina.

All counties, cities, and towns are also required to prepare a report that estimates the effect of development impact fees on the availability of affordable housing before imposing development impact fees on residential dwelling units. Based on the findings of the study, certain developments may be exempt from development impact fees when all or part of the project is determined to create affordable housing, and the exempt development's proportionate share of system improvements is funded through a revenue source other than impact fees. A housing affordability analysis in support of the development impact fee study is published as a separate report.

Eligible costs may include design, acquisition, engineering, and financing attributable to those improvements recommended in the local capital improvements plan that qualify for impact fee funding.

[1] See Appendix D for a copy of the South Carolina Development Impact Fee Act.

Revenues collected by the county, city, or town may not be used for administrative or operating costs associated with imposing the impact fee. All revenues from development impact fees must be maintained in an interest-bearing account prior to expenditure on recommended improvements. Monies must be returned to the owner of record of the property for which the impact fee was collected if they are not spent within three years from the date they are scheduled to be encumbered in the local capital improvements plan. All refunds to private landowners must include the pro rata portion of interest earned while on deposit in the impact fee account.

Horry County is also responsible for preparing and publishing an annual report describing the amount of impact fees collected, appropriated, and spent during the preceding year. These updates must occur at least once every five years. If capital improvement program changes significantly then Horry County should revisit the development impact fee study in compliance with existing state law.

Conceptual Development Impact Fee Calculation

In contrast to project-level improvements, development impact fees fund growth-related infrastructure that will benefit multiple development projects, or the entire jurisdiction (referred to as system improvements). The first step is to determine an appropriate service demand indicator for the particular type of infrastructure. The service indicator measures the number of service units for each unit of development. For example, an appropriate indicator of the demand for park facilities is population growth, and the increase in population can be estimated from the average number of residents per housing unit. The second step in the development impact fee formula is to determine infrastructure units per service unit, typically called level-of-service (LOS) standards. In keeping with the parks example, a common LOS standard is number of park acres per resident. The third step in the development impact fee formula is the cost of various system improvements. To complete the parks example, this part of the formula would establish the cost per acre for acquiring new parkland.

General Methodologies

There are three general methods for calculating development impact fees. The choice of a particular method depends primarily on the timing of infrastructure construction (past, concurrent, or future) and service characteristics of the facility type being addressed. Each method has advantages and disadvantages in a particular situation and can be used simultaneously for different cost components.

Reduced to its simplest terms, the process of calculating development impact fees involves two main steps: (1) determining the cost of development-related system capital improvements and (2) allocating those costs equitably to various types of development. In practice, though, the calculation of development impact fees can become quite complicated because of the many variables involved in defining the relationship between development and the need for facilities within the designated service area. The following paragraphs discuss three basic methods for calculating development impact fees and how those methods can be applied.

Cost Recovery (Past Improvements)

The rationale for recoupment, often called cost recovery, is that new development is paying for its share of the useful life and remaining capacity of facilities already built, or land already purchased, from which new growth will benefit. This methodology is often used for utility systems that must provide adequate capacity before new development can take place. This methodology is based on an existing level of service.

Incremental Expansion (Concurrent Improvements)

The incremental expansion method documents existing level-of-service (LOS) standards for each type of public facility, using both quantitative and qualitative measures. This approach ensures that there are no existing infrastructure deficiencies or surplus capacity in infrastructure. New development is only paying its proportionate share for growth-related infrastructure. Revenue will be used to expand or provide additional facilities, as needed, to accommodate new development. An incremental expansion cost method is best suited for public facilities that will be expanded in regular increment to keep pace with development.

Plan-Based Fee (Future Improvements)

The plan-based method allocates costs for a specified set of improvements to a specified amount of development. Improvements are typically identified in a long-range facility plan and development potential is identified by a land use plan. There are two options for determining the cost per service unit: (1) total cost of a public facility can be divided by total service units (average cost), or (2) the growth-share of the public facility cost can be divided by the net increase in service units over the planning timeframe (marginal cost). Both approaches reflect the existing level of service.

Credits

Regardless of the methodology, a consideration of "credits" is integral to the development of a legally defensible development impact fee methodology. There are two types of "credits" with specific characteristics, both of which should be addressed in development impact fee studies and ordinances.

- First, a revenue credit might be necessary if there is a double payment situation and other revenues are contributing to the capital costs of infrastructure to be funded by development impact fees. This type of credit is integrated into the development impact fee calculation, thus reducing the fee amount.
- Second, a site-specific credit or developer reimbursement might be necessary for dedication of land or construction of system improvements funded by development impact fees. This type of credit is addressed in the administration and implementation of the development impact fee program.

Proposed Fee Methods and Cost Components

Figure 1 summarizes the methods and cost allocation components used for each infrastructure category in Horry County's development impact fee study.

The development impact fees are based on the existing level of service. Parks and Recreation components are allocated to peak population in the unincorporated County including from residential development and lodging land uses. Public Safety components of Police and Emergency Operations Center allocate costs to residential and nonresidential development based on unincorporated peak County population and vehicle trips, respectively. The Public Safety component of Fire & Medic allocates costs to residential and nonresidential development based on peak population and nonresidential vehicle trips in the unincorporated County outside the existing Murrells Inlet-Garden City Fire District. The Transportation component is allocated to unincorporated peak County residential and nonresidential development based on vehicle miles traveled (VMT). Solid Waste is allocated to peak population in the unincorporated County from residential units only. Storm Water improvements are allocated to unincorporated County developed acres by watershed.

Figure 1. Proposed Fee Methods and Cost Components

Fee Category	Service Area	Incremental Expansion	Plan-Based	Cost Recovery	Cost Allocation
Parks and Recreation	Unincorporated County	Beach Access, Trails, Boat Landings, Park Land, Park Improvements, Rec Centers	N/A	N/A	Uninc. Peak Population; Uninc. Residential Peak Population (Rec Ctrs)
Public Safety: Police	Unincorporated County	Police Stations, Animal Shelter	N/A	N/A	Uninc. Peak Population and Uninc. Peak Nonres. Vehicle Trips
Public Safety: Fire and Medic	Unincorporated County (outside Murrells Inlet-Garden City Fire District)	Fire Apparatus, Medic Apparatus	Fire Stations, Medic Stations	N/A	Uninc. Peak Population and Uninc. Peak Nonres. Vehicle Trips (less Horry County portion of the Murrells Inlet-Garden City Fire District)
Public Safety: Emergency Operations Center	Unincorporated County	N/A	Emergency Operations Center	N/A	Uninc. Peak Population and Uninc. Peak Nonres. Vehicle Trips
Transportation	Unincorporated County	Transportation Improvements	N/A	N/A	Uninc. Peak Vehicle Miles of Travel
Solid Waste	Unincorporated County	Convenience Centers (Land and Facilities)	N/A	N/A	Uninc. Residential Peak Population (Rec Ctrs)
Storm Water	Three Watersheds in Unincorporated County	Stormwater Improvements	N/A	N/A	Uninc. County Developed Acreage

Proposed Development Impact Fee Schedule

As documented in this report, Horry County has complied with the South Carolina Development Impact Fee Act and applicable legal precedents. Development impact fees are proportionate and reasonably related to capital improvement demands from new development. Specific costs have been identified using local data and current dollars. This report documents the formulas and input variables used to calculate the development impact fees. The development impact fee methodologies also identify the extent to which new development is entitled to various types of credits to avoid potential double payment of growth-related capital costs.

For residential development, proposed fees are assessed per housing unit by size of unit, except for stormwater impact fees which are calculated per housing unit type. The proposed residential fee categories range from 1,000 square feet or less to 3,501 square feet or more. Single family units include detached, attached (i.e., "townhouse"), and mobile home units. Multifamily units include duplexes, condominiums and apartments with two or more units. For nonresidential development, fees are assessed per 1,000 square feet of floor area. The proposed fee schedule for nonresidential development is designed to provide a reasonable development impact fee determination for broad property classes—retail, office, industrial, institutional, and lodging.

Figure 2 summarizes proposed development impact fees for new development in Horry County. The amounts shown are "maximum allowable" amounts based on the methodologies, levels of service, and costs for the capital improvements identified herein. The fees represent the highest amount feasible for each type of applicable development, which reflects the full proportional amount that represents new growth's fair share of the system improvement costs detailed in this report. The County can adopt amounts that are lower than the maximum amounts shown; however, a reduction in fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in the County's level of service.

Figure 2. Maximum Supportable Development Impact Fees (Unincorporated County): All Categories Except Storm Water

			PUBLIC SAFETY						
Development Type	Demand Unit	Parks & Recreation	Public Safety: Police	Public Safety: Fire/Medic	Public Safety: EOC	Transportation	Solid Waste	Storm Water	Maximum Supportable Impact Fee
Residential (per Demand Unit)									
1,000 or less	DU	$702	$37	$285	$41	$978	$140	*See Separate Figure*	**$2,183**
1,001 to 1,500	DU	$1,139	$61	$462	$66	$1,797	$227		**$3,752**
1,501 to 2,000	DU	$1,446	$77	$587	$83	$2,378	$288		**$4,859**
2,001 to 2,500	DU	$1,687	$90	$685	$97	$2,827	$336		**$5,722**
2,501 to 3,000	DU	$1,882	$100	$764	$109	$3,197	$375		**$6,427**
3,001 to 3,500	DU	$2,047	$109	$831	$118	$3,506	$408		**$7,019**
3,501 or more	DU	$2,189	$117	$888	$126	$3,774	$436		**$7,530**
Nonresidential (per Demand Unit)									
Retail	1,000 Sq. Ft.	n/a	$154	$4,005	$390	$5,591	n/a	*See Separate Figure*	**$10,140**
Office	1,000 Sq. Ft.	n/a	$69	$1,798	$175	$2,443	n/a		**$4,485**
Industrial	1,000 Sq. Ft.	n/a	$20	$533	$52	$723	n/a		**$1,328**
Institutional	1,000 Sq. Ft.	n/a	$159	$4,156	$404	$5,651	n/a		**$10,370**
Lodging	Room	$425	$46	$1,199	$117	$1,630	n/a		**$3,417**

It is preferable to base nonresidential Storm Water Development Impact Fees on floor area rather than on a per acre basis because the fee will increase or decrease according to the intensity of an individual project. Maximum Storm Water Development Impact Fees are listed in Figure 3.

Figure 3. Maximum Supportable Development Impact Fees (Unincorporated County): Storm Water Development Impact Fees

		Watershed		
Development Type	Demand Unit	Little Pee Dee	Waccamaw	Coastal Carolina
Residential (per Demand Unit)				
Single Family	DU	$162	$76	$38
Multifamily	DU	$46	$34	$26
Nonresidential (per Demand Unit)				
Retail/Office/Lodgi	1,000 Sq. Ft.	$544	$93	$48
Industrial	1,000 Sq. Ft.	$398	$189	$182
Institutional	1,000 Sq. Ft.	$378	$205	$235

Projected Demand

Section 6-1-960(6) of the South Carolina Development Impact Fee Act requires:

> *"the total number of service units necessitated by and attributable to new development within the service area, based on the land use assumptions and calculated in accordance with generally accepted engineering or planning criteria."*

Based on the Land Use Assumptions discussed in Appendix B, both residential and nonresidential development is expected to continue in Horry County over the next ten years. The following figures illustrate the projected population, housing units, jobs, and nonresidential floor area over the next ten years.

Figure 4. Horry County Residential Projections

Housing Projections	Base Year 2022	*1* 2023	*2* 2024	*3* 2025	*4* 2026	*5* 2027	*6* 2028	*7* 2029	*8* 2030	*9* 2031	*10* 2032	10-Year Total
Unincorporated Housing Type												
Single Family [1]	115,529	118,685	121,841	124,998	128,154	131,310	134,466	137,622	140,778	144,576	148,375	32,846
Multifamily [2]	37,588	38,615	39,642	40,669	41,696	42,723	43,749	44,776	45,803	47,039	48,275	10,687
Total Housing Units	153,118	157,301	161,484	165,666	169,849	174,032	178,215	182,398	186,581	191,615	196,650	43,532
Countywide Housing												
Single Family [1]	154,656	158,881	163,106	167,331	171,555	175,780	180,005	184,230	188,455	193,540	198,625	43,969
Multifamily [2]	76,845	78,944	81,043	83,142	85,242	87,341	89,440	91,539	93,639	96,165	98,692	21,847
Total Housing Units	231,500	237,825	244,149	250,473	256,797	263,121	269,445	275,770	282,094	289,705	297,317	65,817
Fire and EMS Service Area Housing												
Single Family [1]	105,664	108,550	111,437	114,323	117,210	120,096	122,983	125,870	128,756	132,230	135,704	30,041
Multifamily [2]	32,506	33,394	34,282	35,170	36,058	36,946	37,834	38,722	39,610	40,679	41,748	9,242
Total Housing Units	138,170	141,944	145,719	149,493	153,268	157,043	160,817	164,592	168,366	172,909	177,452	39,282

Peak Population Projection	Base Year 2022	*1* 2023	*2* 2024	*3* 2025	*4* 2026	*5* 2027	*6* 2028	*7* 2029	*8* 2030	*9* 2031	*10* 2032	10-Year Increase
Grand Total Peak Uninc. Population	398,675	409,398	420,121	430,845	441,570	452,296	463,023	473,751	484,481	497,374	510,268	111,592
Grand Total Peak Uninc. Fire and EMS Pop^	370,768	380,740	390,712	400,686	410,660	420,635	430,612	440,589	450,567	462,558	474,549	103,781
Grand Total Peak Countywide Population	603,446	619,392	635,341	651,294	667,250	683,209	699,171	715,136	731,105	750,260	769,418	165,972

** Includes population in group quarters.*
^ Uninc. peak population less Horry County portion of Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)
[1] includes single family detached, single family attached, and mobile homes
[2] Includes structures with 2+ units; other (boats, RV, van)
Source: Horry County; U.S. Census Bureau, 2020 Census and 2020 American Community Survey 5-Year Estimates.

Figure 5. Horry County Nonresidential Projections

	Base Year 2022	*1* 2023	*2* 2024	*3* 2025	*4* 2026	*5* 2027	*6* 2028	*7* 2029	*8* 2030	*9* 2031	*10* 2032	10-Year Increase
Countywide Jobs												
Total	136,088	138,268	140,448	142,628	144,808	146,988	149,119	151,281	153,475	155,700	157,958	21,870
Unincorporated County Jobs												
Total	55,834	56,728	57,622	58,517	59,411	60,306	61,180	62,067	62,967	63,880	64,806	8,973
Incorporated County Jobs												
Total	80,254	81,540	82,825	84,111	85,396	86,682	87,939	89,214	90,508	91,820	93,151	12,897
Countywide Nonresidential Floor Area (1,000 sq. ft.)												
Total	67,000	68,073	69,146	70,220	71,293	72,366	73,416	74,480	75,560	76,656	77,767	10,767
Unincorporated County Nonresidential Floor Area (1,000 sq. ft.)												
Total	29,288	29,757	30,226	30,695	31,164	31,634	32,092	32,558	33,030	33,509	33,994	4,707
Incorporated County Nonresidential Floor Area (1,000 sq. ft.)												
Total	37,712	38,316	38,920	39,524	40,129	40,733	41,323	41,922	42,530	43,147	43,773	6,061
Peak Unincorporated County Demand Base												
Peak Unincorporated Jobs*												
Total	58,067	58,997	59,927	60,858	61,788	62,718	63,627	64,550	65,486	66,435	67,399	9,332
Peak Unincorporated Nonres Floor Area (1,000 sq. ft.)												
Total	30,459	30,947	31,435	31,923	32,411	32,899	33,376	33,860	34,351	34,849	35,354	4,895
Fire and EMS Service Area^												
Peak Unincorporated Jobs Fire and EMS Service Area*												
Total	53,966	54,831	55,695	56,560	57,424	58,289	59,134	59,991	60,861	61,744	62,639	8,673
Peak Unincorporated Nonres Floor Area (1,000 sq. ft.) Fire and EMS Service Area^												
Total	28,341	28,795	29,249	29,703	30,157	30,611	31,055	31,505	31,962	32,425	32,895	4,555

** Peak employment is 4 percent over year-round average (SC Dept. of Employment & Workforce).*

^ Unincorporated projections less Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)

Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce; Horry County Comprehsive Plan; Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

A note on rounding: Calculations throughout this report are based on an analysis conducted using Excel software. Most results are discussed in the report using one, two, and three digit places, which represent rounded figures. However, the analysis itself uses figures carried to their ultimate decimal places; therefore, the sums and products generated in the analysis may not equal the sum or product if the reader replicates the calculation with the factors shown in the report (due to the rounding of figures shown, not in the analysis).

PARKS & RECREATION CIP AND DEVELOPMENT IMPACT FEE CALCULATIONS

Methodology

Section 6-1-920(18c) of the South Carolina Development Impact Fee Act states that a development impact fee may be imposed on public facilities including:

> *"…parks, libraries, and recreational facilities."*

The Parks and Recreation Development Impact Fee is calculated for residential development and on a per housing unit basis. The incremental expansion methodology is used to calculate the current level of service for beach access, trails, boat landings, park land, park improvements, and recreation centers. Facilities are developed by the County to serve unincorporated peak population for a service area that covers the unincorporated County. Other types of park improvements such as beach nourishment may be identified in the future as growth-related improvement projects for which the County would participate in the funding.

Section 6-1-960(1) of the South Carolina Development Impact Fee Act requires:

> *"a general description of all existing facilities and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage."*

Section 6-1-960(2) of the South Carolina Development Impact Fee Act requires:

> *"an analysis of total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by qualified a professional using generally accepted principles and professional standards."*

Residential development impact fees are calculated on a per housing unit basis using persons per household factors by type of housing unit. Based on services and facilities provided by Horry County, current levels of service are calculated based on the unincorporated peak population of Horry County for all components except recreation centers which excludes population in lodging accommodations.

Parks and Recreation Service Area

The service area for parks and recreation improvements is the unincorporated County. Horry County plans and develops parks and recreation facilities to serve the unincorporated County.

Parks and Recreation Service Units

Section 6-1-960(4) of the South Carolina Development Impact Fee Act requires:

> *"a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate."*

The "service unit" used for residential development is persons per household (PPHH). This is a measure of the average number of persons residing in each occupied housing unit. (See Figure 6.) Factors have been calculated based on data obtained from the U.S. Census Bureau's 2020 ACS 5-year PUMS estimates (further discussed in Appendix B).

Figure 6. Residential Service Units

Development Type	Persons per Household[1]
1,001 to 1,500	1.19
1,501 to 2,000	1.93
2,001 to 2,500	2.45
2,501 to 3,000	2.86
3,001 to 3,500	3.19
3,501 or more	3.47

[1] See Land Use Assumptions

Parks & Recreation Facilities Level of Service & Cost Analysis

The Parks and Recreation Development Impact Fee includes the County's beach access, trails, boat landings, park land, and park improvements. Additional expansion will be necessary to serve future growth to maintain current levels of service. An incremental methodology is used with 2022 unincorporated peak population as the base year demand factor. For outdoor park facilities, unincorporated peak population includes population from lodging establishments to reflect the demand and use for those facilities, per the County.

Beach Access Parks

As shown in Figure 7, beach access parks have a total area of 6.14 acres at a total improvement (construction and development) cost of $3.9 million. Additionally, based on current market values of oceanfront properties, the County anticipates spending $6.4 million per acre for new beachfront land.

To calculate the current level of service, the total acreage is divided by the current peak unincorporated population. This results in 0.015 acres per 1,000 persons (6.14 acres / 398,675 unincorporated peak residents = 0.015 acres per 1,000 persons, rounded).

The level of service is combined with the average improvement cost per acre to calculate the capital cost per person. This results in a capital cost per person totaling $104.91 (0.015 acres per 1,000 persons x $6,356,000 per acre for land = $95.34 per person, rounded; 0.015 acres per 1,000 persons x $638,000 per acre for improvements = $9.57 per person, rounded).

Figure 7. Beach Access Parks Level of Service and Cost Factors

Facility	Acre	Improvement Cost
1. Cedar Ave	0.21	$87,000
2. Holly Ave	0.21	$109,400
3. Azalea	0.19	$478,200
4. Magnolia Ave	0.06	$53,400
5. Yaupon Ave	0.24	$131,800
6. Pine Ave	0.17	$131,800
7. Oak Ave	0.17	$98,200
8. Cypress Ave	0.03	$53,400
9. Anglers Dr	0.25	$165,400
10. Holiday Dr	0.26	$165,400
11. Sunset Dr	0.26	$154,200
12. Rainbow Dr	0.26	$120,600
13. Seabreeze Dr	0.25	$131,800
14. Calhoun Dr	0.56	$199,000
15. Woodland Dr	0.26	$103,800
16. Hawes Ave	0.24	$143,000
17. Nash St	0.75	$305,400
18. Sands Ocean Club South (Ocean Annies)	0.29	$226,200
19. Sands Ocean Club North	0.44	$211,000
20. Cottage Beach	0.30	$275,400
21. Maison Dr	0.43	$123,400
22. Hibben Memorial Park	0.31	$448,000
Total	**6.14**	**$3,915,803**

Level-of-Service Standards	**Land Cost**	**Improvements**
Proportionate Share	100%	100%
Share of Facility Acre	6.14	6.14
2022 Peak Population (Unincorporated)	398,675	398,675
Acres per 1,000 Persons	**0.015**	**0.015**

Cost Analysis	**Land Cost**	**Improvements**
Acres per 1,000 Persons	0.015	0.015
Cost per Acre [1]	$6,356,000	$638,000
Cost Per Person	**$95.34**	**$9.57**

[1] Cost per acre of land was determined based on current market values of oceanfront properties.

Trails

Horry County has a current trail system and plans to continue expanding it, primarily as a component of a larger trail system called the East Coast Greenway that will eventually run along the eastern seaboard. The current County-owned and maintained inventory of trails is 21.9 linear miles at a current value of $10.4 million.

The current level of service for County trails serving the unincorporated peak population is 0.055 linear miles per 1,000 persons (21.9 linear miles / 398,675 unincorporated peak residents = 0.055 miles per 1,000 persons, rounded).

The level of service is combined with the average cost per linear mile. This results in a capital cost per person totaling $26.02 (0.055 linear miles per 1,000 persons x $473,000 per linear mile of trails = $26.02 per person).

Figure 8. Trails Level of Service and Cost Factors

Facility	Linear Mile	Improvement Cost
1. Atlantic Avenue	1.3	$288,251
2. Little River Neck Road Multipurpose Path	2.0	$1,411,200
3. Kings Highway - Briarcliffe	0.4	$98,503
4. Town Center Multipurpose Path	1.7	$1,200,304
5. River Oaks - Multipurpose Path Ph1	1.0	$706,098
6. River Oaks - Multipurpose Path Ph2	1.0	$706,098
7. Carolina Forest Blvd Multipurpose Path	11.6	$3,835,000
8. Waccamaw Drive Sidewalk & Multipurpose Path	1.3	$917,840
9. Palmetto Pointe Blvd Sidewalk	1.7	$1,200,382
Total	**21.9**	**$10,363,677**

Level-of-Service Standards	**Miles**
Proportionate Share	100%
Share of Facility Linear Mile	21.9
2022 Peak Population (Unincorporated)	398,675
Miles per 1,000 Persons	**0.055**

Cost Analysis	**Miles**
Linear Mile per 1,000 Persons	0.055
Cost per Linear Mile	$473,000
Cost Per Person	**$26.02**

Boat Landing Parks

As shown in The level of service is combined with the average cost per acre for land and improvements. This results in a capital cost per person totaling $44.65 (0.122 acres per 1,000 persons x $177,000 per acre for land = $14.27 per person, rounded; 0.122 acres per 1,000 persons x $249,000 per acre for improvements = $30.38 per person, rounded).

Figure 9, there are 28 boat landings with totaling 48.55 acres. The land costs for the landings total $5.7 million ($117,000 per acre) and the improvement costs for the landings total $12.1 million ($249,000 per acre).

To calculate the current level of service, the total number of acres is divided by the current unincorporated peak population (48.55 acres / 398,675 unincorporated peak residents = 0.122 acres per 1,000 persons, rounded).

The level of service is combined with the average cost per acre for land and improvements. This results in a capital cost per person totaling $44.65 (0.122 acres per 1,000 persons x $177,000 per acre for land = $14.27 per person, rounded; 0.122 acres per 1,000 persons x $249,000 per acre for improvements = $30.38 per person, rounded).

Figure 9. Boat Landing Parks Level of Service and Cost Factors

Facility	Acres	Land Cost	Improvement Cost
1. Causey Landing	0.89	$25,290	$201,290
2. Ricefield Cove Landing	0.73	$50,000	$241,000
3. Sandy Bluff Landing	0.90	$35,280	$221,280
4. Galivants Ferry Landing	0.20	$16,600	$127,600
5. Huggins Landing	4.39	$143,500	$289,500
6. Gunters Lake Landing	1.59	$79,500	$190,500
7. Hughes Landing	0.25	$1,320	$173,320
8. Jordan Lake Landing	0.42	$45,000	$156,000
9. Pitts Landing	4.82	$16,920	$208,920
10. Punch Bowl Landing	1.86	$7,820	$274,820
11. Yauhannah Landing	2.35	$744,680	$1,031,680
12. Port Harrelson Landing	1.07	$41,420	$218,920
13. Enterprise Landing	2.72	$479,440	$885,640
14. Peachtree Landing	0.53	$3,800	$153,400
15. Bucksville Landing	0.26	$98,070	$390,070
16. Pitch Landing	0.60	$60,010	$370,010
17. Billy Witherspoon Landing	0.78	$59,240	$361,840
18. Lee's Landing	0.47	$108,120	$217,220
19. Reaves Ferry Landing	5.88	$65,950	$298,550
20. Danny Knight Landing	0.88	$6,640	$304,841
21. Chris Anderson Landing	2.11	$393,820	$758,620
22. Johnny Causey Landing	2.30	$100,000	$401,200
23. T. Craig Campbell Landing	0.30	$72,400	$373,600
24. Peter Vaught Sr Landing	6.55	$845,000	$1,282,200
25. Rosewood Landing	2.12	$295,000	$478,100
26. Socastee Landing	2.72	$1,500,000	$1,954,800
27. Stanley Drive Landing	0.21	$260,000	$320,000
28. Lees Landing Circle Park	0.65	$146,020	$221,020
Total	**48.55**	**$5,700,840**	**$12,105,941**

Level-of-Service Standards	Land Cost	Improvements
Proportionate Share	100%	100%
Share of Facility Acres	48.55	48.55
2022 Peak Population (Unincorporated)	398,675	398,675
Acres per 1,000 Persons	**0.122**	**0.122**

Cost Analysis	Land Cost	Improvements
Acres per 1,000 Persons	0.122	0.122
Cost per Acre/Improvement	$117,000	$249,000
Cost Per Person	**$14.27**	**$30.38**

Parks

As shown in Figure 10, Horry County parks have a total current area of 552.1 acres of developed parks (with a grand total of 585.9 acres of park land) at a total land value of $36.6 million and a total improved value (construction and development) of $75.6 million.

To calculate the current level of service, developed park acreage is divided by the current peak unincorporated population. This results in 1.385 acres per 1,000 persons (552.09 acres / 398,675 unincorporated peak residents = 1.385 acres per 1,000 persons, rounded).

The cost per person is calculated by multiplying the current level of service by the current cost to purchase park land ($36.6 million / 552.09 acres = $66,000 per acre, rounded) and the current cost to improve parks ($75.6 million / 552.09 acres = $137,000 per acre, rounded). The cost per person calculation is as follows: 1.385 acres per 1,000 persons x $66,000 per acre = $91.41 per person; 1.385 acres per 1,000 persons x $137,000 per acre = $189.75 per person.

Figure 10. Parks Level of Service and Cost Factors

Facility	Acres	Land Cost	Improvement Cost*
1. Green Sea Floyds Ballfields	22.8	$67,637	$4,357,976
2. Bayboro Park	6.6	$89,600	$3,203,760
3. Michael Morris Graham Park	30.0	$243,824	$6,051,472
4. Aynor Fire Tower Property	10.0	$220,640	$0
5. Dog Bluff Park	2.1	$49,582	$140,000
6. Pee Dee Park	5.0	$156,800	$3,486,784
7. Greenwood Park (Undeveloped)	10.0	$134,400	$0
8. Sandridge Park	5.1	$87,987	$3,124,800
9. James R. Frazier Community Center's Park	8.7	$132,070	$4,461,968
10. Mt. Vernon Tennis Courts	3.3	$0	$1,400,000
11. White Oak Park	8.9	$76,765	$1,266,664
12. Loris Nature Park	21.6	$140,000	$873,432
13. Simpson Creek Park	10.0	$114,240	$1,307,376
14. North Strand Recreation Center's Park	18.6	$103,992	$3,932,768
15. Vereen Memorial Gardens	108.0	$13,012,160	$2,791,488
16. Little River Neck Park	2.5	$97,955	$11,760
17. Frink Park	0.1	$22,848	$3,265,640
18. Poplar Park	4.2	$0	$3,288,208
19. Hibben Memorial Park	0.2	$0	$0
20. Bike & Run Park	71.5	$5,732,496	$219,128
21. International Drive Ballfields	24.1	$1,416,800	$5,234,824
22. Carolina Forest Rec Center's Park	30.3	$3,576,104	$1,339,072
23. Carolina Forest Soccer Field Property	15.0	$572,712	$0
24. Huger Park (Under Construction)	5.0	$243,152	$0
25. McNeil Park	9.5	$2,810,147	$3,500,112
26. Waccamaw/ Sam Cox Park	5.5	$91,280	$3,502,688
27. Racepath Park	3.2	$0	$588,001
28. Stalvey Creek Boardwalk (Future)	18.8	$906,696	$0
29. Socastee Landing & Park	2.5	$27,552	$2,599,296
30. Socastee Recreation Park's Park	91.5	$4,779,936	$5,533,584
31. South Strand Recreation Center's Park	27.6	$1,414,997	$6,253,408
32. Burgess Park	3.3	$0	$1,337,558
33. Sandford Cox Jr Park	0.4	$314,686	$2,537,696
Undeveloped Acres	33.8		
Grand Total Developed	**552.1**	**$36,637,059**	**$75,609,463**

Level-of-Service Standards	**Land Cost**	**Improvements**
Proportionate Share	100%	100%
Share of Facility Acres	552.09	552.09
2022 Peak Population (Unincorporated)	398,675	398,675
Acres per 1,000 Persons	**1.385**	**1.385**

Cost Analysis	**Land Cost**	**Improvements**
Acres per 1,000 Persons	1.385	1.385
Cost per Acre/Improvement	$66,000	$137,000
Cost Per Person	**$91.41**	**$189.75**

** Value of park portion*

Recreation Centers

As shown in Figure 11, recreation centers have a total of 86,529 square feet at a total improvement (construction and development) cost of $47.5 million. Land for the recreation centers have been included in the park level of service.

To calculate the current level of service, the total square feet is divided by the current peak unincorporated population excluding lodging population. This results in 222.5 square feet per 1,000 persons (86,529 acres / 388,919 unincorporated peak residents = 222.5 square feet per 1,000 persons, rounded).

The level of service is combined with the average improvement cost per square foot to calculate the capital cost per person. This results in a capital cost per person of $133.28 (222.5 square feet per 1,000 persons x $599 per square foot = $133.28, rounded).

Figure 11. Recreation Center Level of Service and Cost Factors

Facility	Building Square Feet	Building Cost
1. James R. Frazier Community Center	15,625	$8,680,000
2. North Strand Recreation Center	22,621	$8,680,000
3. CB Berry Community Center	4,745	$8,588,339
4. Carolina Forest Rec Center	21,769	$9,519,944
5. South Strand Recreation Center	21,769	$11,984,000
Total	**86,529**	**$47,452,283**

Level-of-Service Standards	**Rec Centers**
Proportionate Share	100%
Share of Facility (square feet)	86,529
2022 Peak Population (Unincorporated) [1]	388,919
Square Feet per 1,000 Persons	**222.5**

Cost Analysis	**Rec Centers**
Square Feet per 1,000 Persons	222.5
Cost per Square Foot	$599
Cost Per Person	**$133.28**

[1] Peak population for recreation centers does not include lodging population

Projection of Parks Growth-Related Facility Needs

Section 6-1-960(5) of the South Carolina Development Impact Fee Act requires:

> *"a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration."*

Section 6-1-960(7) of the South Carolina Development Impact Fee Act requires:

> *"the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years."*

Parks & Recreation Facilities

To estimate 10-year growth needs for park and recreational facilities in Horry County, current levels of service is applied to residential growth projections for the unincorporated County. Figure 12 projects the growth-related needs for each component to maintain current levels of service. In total, growth will require the County to acquire 1.70 beach access acres, 6.20 trail miles, 13.70 boat landing acres, 154.50 park acres, and 24,603 recreation center square feet resulting in a capital cost of $66 million over the next ten years.

Figure 12. 10-Year Parks and Recreation Needs to Accommodate Growth

Type of Infrastructure	Level of Service		Demand Unit	Cost / Unit
Beach Access	0.015	Acres	per 1,000 persons	$6,994,000
Trails	0.055	Linear Mile	per 1,000 persons	$473,000
Boat Landings	0.122	Acres	per 1,000 persons	$366,000
Park Land & Imprvts	1.385	Acres	per 1,000 persons	$203,000
Rcreation Centers	222.5	Square Feet	per 1,000 persons	$599

Growth-Related Need for Parks & Recreation Facilities							
Year		Uninc. Peak Population	Beach Access Acres	Trail Miles	Boat Landing Acres	Park Land & Improvements	Recreation Centers
Base	2022	398,675	6.0	21.9	48.6	552.2	86,534
Year 1	2023	409,398	6.1	22.5	49.9	567.0	88,898
Year 2	2024	420,121	6.3	23.1	51.3	581.9	91,262
Year 3	2025	430,845	6.5	23.7	52.6	596.7	93,626
Year 4	2026	441,570	6.6	24.3	53.9	611.6	95,990
Year 5	2027	452,296	6.8	24.9	55.2	626.4	98,354
Year 6	2028	463,023	6.9	25.5	56.5	641.3	100,718
Year 7	2029	473,751	7.1	26.1	57.8	656.1	103,082
Year 8	2030	484,481	7.3	26.6	59.1	671.0	105,446
Year 9	2031	497,374	7.5	27.4	60.7	688.9	108,291
Year 10	2032	510,268	7.7	28.1	62.3	706.7	111,137
Ten-Year Increase		111,592	**1.70**	**6.20**	**13.70**	**154.50**	**24,603**
	Projected Expenditure		**$11,889,800**	**$2,932,600**	**$5,014,200**	**$31,363,500**	**$14,737,197**

Growth-Related Expenditures for Parks & Recreation Facilities	**$65,937,297**

Maximum Supportable Parks and Recreation Development Impact Fee

Figure 13 shows the maximum supportable Parks and Recreation Development Impact Fee for Horry County. All components of the development impact fees for Parks & Recreation facilities are assessed on residential development. The components are assessed on Lodging land use based on utilization of the facilities. Residential development impact fees are based on household size (i.e., persons per household) by size of housing unit. Differentiating the fee by housing size allows the results to be proportional to the level of demand (persons per household) that a residential development will place on the need for infrastructure based on level of service standards. For residential development, the total cost per person is multiplied by the household size to calculate the proposed fee by size of housing unit.

For the lodging land use category, demand is determined by the average number of persons per occupied room (per Horry County Accommodations Inventory, March 2018). To calculate the fee, the cost per person for outdoor Parks and Recreation components of $590.02 is multiplied by the average number of persons per room (.72) for an impact fee of $425 per room.

The results of the 2019 Development Impact Fee Study are included in the figure to illustrate potential changes in impact fee, if adopted at the maximum supportable level.

The fees represent the highest amount supportable for each type of development, which represents new growth's fair share of the cost for capital facilities. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 13. Maximum Supportable Parks and Recreation Development Impact Fee (Unincorporated County)

Fee Component	Cost per Person
Beach Access	$104.91
Trails	$26.02
Boat Landings and Improvements	$44.65
Park Land and Improvements	$281.16
Recreation Centers	$133.28
Total	**$590.02**

Sq. Ft. Range	Demand Unit	Persons per Demand Unit	Maximum Supportable Impact Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
1,000 or less	DU	1.19	**$702**	$679	$23
1,001 to 1,500	DU	1.93	**$1,139**	$679	$460
1,501 to 2,000	DU	2.45	**$1,446**	$679	$767
2,001 to 2,500	DU	2.86	**$1,687**	$814	$873
2,501 to 3,000	DU	3.19	**$1,882**	$814	$1,068
3,001 to 3,500	DU	3.47	**$2,047**	$814	$1,233
3,501 or more	DU	3.71	**$2,189**	$814	$1,375
Lodging	Room	0.72	**$425**	$135	$290

Revenue from Parks and Recreation Development Impact Fee

Revenue from the Parks and Recreation Development Impact Fee is projected in Figure 14, if the fee were implemented at the maximum supportable level and growth occurs as projected. To estimate single family revenue the 2,001 square feet to 2,500 square feet fee is used, and for multi-family the 1,001 square feet to 1,500 square feet fee is used.

Based on the growth projections shown below and at the maximum development impact fee amount shown below, development impact fee revenue over the next ten years is projected at $68 million. Based on the actual mix of future residential construction, the projected parks fee revenue shown below may change.

Figure 14. Projected Revenue from the Parks and Rec Development Impact Fee (Unincorporated County)

Infrastructure Costs for Parks & Recreation Facilities

	Total Cost	Growth Cost
Beach Access	$11,889,800	$11,889,800
Trails	$2,932,600	$2,932,600
Boat Landings and Improvements	$5,014,200	$5,014,200
Park Land and Improvements	$31,363,500	$31,363,500
Recreation Centers	$14,737,197	$14,737,197
Total Expenditures	**$65,937,297**	**$65,937,297**

Projected Development Impact Fee Revenue

		Single Family $1,687 per unit	Multifamily $1,139 per unit	Lodging $425 per room
Year		**Housing Units**	**Housing Units**	**Rooms**
Base	2022	115,529	37,588	10,667
Year 10	2032	148,375	48,275	11,783
Ten-Year Increase		32,846	10,687	1,116
Projected Revenue =>		*$55,410,436*	*$12,171,990*	*$474,284*
			Projected Revenue =>	**$68,056,710**
			Total Expenditures =>	**$65,937,297**
			Non-Impact Fee Revenues =>	**$0**

PUBLIC SAFETY CIP AND DEVELOPMENT IMPACT FEE CALCULATIONS

Methodology

Section 6-1-920(18f) of the South Carolina Development Impact Fee Act states that a development impact fee may be imposed on public facilities including:

> *"…public safety facilities, including law enforcement, fire, emergency medical and rescue, and street lighting facilities."*

The Public Safety development impact fee includes components for police, fire and Medic (Medic), and the Emergency Operations Center (EOC). The components include:

- Police Stations
- Fire / Medic Stations
- Fire / Medic Apparatus
- Emergency Operations Center

An incremental expansion methodology is applied to all components except for Fire / Medic Stations and EOC, which use a plan-based methodology. Costs are allocated to both residential and nonresidential development using different demand indicators for each type of development. Other types of public safety capital facilities may be identified in the future as growth-related needs for inclusion in a subsequent impact fee study such as Fire administration space, separated Fire vehicle maintenance facility, or a logistics facility, consistent with applicable statutes and case law at the time.

Section 6-1-960(1) of the South Carolina Development Impact Fee Act requires:

> *"a general description of all existing facilities and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage."*

Section 6-1-960(2) of the South Carolina Development Impact Fee Act requires:

> *"an analysis of total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by qualified a professional using generally accepted principles and professional standards."*

Residential development impact fees are calculated on a per housing unit basis using persons per household factors by type of housing unit. Nonresidential development impact fees are calculated using nonresidential vehicle trips. Trip generation rates are highest for commercial/retail development and lowest for industrial development, whereas trip rates for office & institutional development fall between the other two categories. Using vehicle trip rates ensures that development impact fees are consistent with the relative demand for Public Safety services from nonresidential development.

Medic services are being provided on a countywide basis, therefore Medic Stations (or portions of joint Fire/Medic Stations) and Medic Apparatus are allocated to the unincorporated County.

Service Units for Public Safety

Section 6-1-960(4) of the South Carolina Development Impact Fee Act requires:

> *"a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate."*

The "service unit" used for residential development is persons per household (PPHH). This is a measure of the average number of persons residing in each occupied housing unit. (See Figure 15.) Factors have been calculated based on data provided by the U.S. Census Bureau's 2020 ACS PUMS 5-year estimates (further discussed in Appendix B).

Figure 15. Residential Service Units

Development Type	Persons per Household[1]
1,001 to 1,500	1.19
1,501 to 2,000	1.93
2,001 to 2,500	2.45
2,501 to 3,000	2.86
3,001 to 3,500	3.19
3,501 or more	3.47

[1] See Land Use Assumptions

TischlerBise recommends using nonresidential vehicle trips as the nonresidential "service unit" for Public Safety infrastructure. Average weekday vehicle trip ends for nonresidential development are from the Grand Strand Area Transportation Study (GSATS) Traffic Model. A "trip end" represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). Trip ends for nonresidential development are calculated per thousand square feet.

Trip generation rates are used for nonresidential development because vehicle trips are highest for retail developments, such as shopping centers, and lowest for industrial development. Office and institutional trip rates fall between the other two categories. This ranking of trip rates is consistent with the relative demand for public safety services from nonresidential development. Other possible nonresidential demand indicators, such as employment or floor area, will not accurately reflect the demand for service. For example, if employees per thousand square feet were used as the demand indicator, public safety development fees would be disproportionately high for office and institutional development because offices typically have more employees per 1,000 square feet than retail uses. If floor area were used as the demand indicator, public safety development fees would be disproportionately high for industrial development.

For nonresidential land uses, the standard 50 percent adjustment is applied to Office/Service, Industrial, and Institutional. A lower vehicle trip adjustment factor is used for Retail because this type of development attracts vehicles as they pass-by on arterial and collector roads. For example, when someone stops at a convenience store on their way home from work, the convenience store is not their primary destination. Further detail on vehicle trip factors can be found in Appendix B: Land Use Assumptions.

Figure 16. Nonresidential Service Units

Development Type	Weekday VTE [1]	Trip Adj. Factor [2]	Weekday Vehicle Trips
Retail	33.00	33%	10.89
Office	9.77	50%	4.89
Industrial	2.89	50%	1.45
Institutional	22.59	50%	11.30
Lodging	6.52	50%	3.26

[1] Local vehicle trip generation rates from the GSATS Traffic Model
[2] Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Both residential and nonresidential developments increase the demand on Public Safety facilities. To calculate the proportionate share between residential and nonresidential demand on Public Safety facilities and apparatus, calls for service/incident data is used. Police and Fire/Medic provided calls for service data, which is addressed in the respective sections below.

Police CIP and Development Impact Fee Calculation

Police Service Area

The Police Development Impact Fee covers the unincorporated County, which reflects the current service area of the Horry County Police Department. All other municipalities (cities and towns) in the County provide their own police force.

Police Service Units

Horry County Police Department provided calls for service/incident data for the Horry County Police Department for calendar year 2021. Data are shown in Figure 17. As shown, 76 percent of the calls were from residential locations, 24 percent were from nonresidential locations.

Figure 17. Horry County Police Incidents

Land Use	Total Incidents (2021)	% by Land Use
Residential	94,329	76%
Nonresidential	29,250	24%
Total	123,579	100%

Source: Horry County Police Department

Police Facilities Level of Service and Cost Analysis

The Police component of the Public Safety Development Impact Fee includes Horry County Police Stations and Animal Shelter. Additional expansion of the facilities will be necessary to serve future growth.

Police Station Space

As shown in Figure 18, the Horry County Police Department occupies four buildings, totaling 39,333 square feet. M. L. Brown Public Safety Building includes other public safety uses but the square footage listed reflects Police station space only. To determine the level of service factors for the development impact fee, Police calls for service percentages are used to allocate the facility floor area in the figure. Of the total square feet, 29,893 is allocated to residential development and 9,440 is allocated to nonresidential development.

The allocated floor area of the Horry County Police facilities is divided by the 2022 residential and nonresidential service units (population and nonresidential vehicle trips). The result is the current level of service for Police stations in the County. Specifically, 0.075 square feet of facility per person and 0.047 square feet per nonresidential vehicle trip.

From County staff, station construction costs an average of $300 per square foot. To find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost per square foot. For example, the residential cost per person is $22.50 (0.075 square feet per person x $300 per square foot = $22.50 per person, rounded).

Figure 18. Police Station Level of Service and Cost Factors

Facility	Square Feet	Replacement Cost
M. L. Brown Public Safety Bldg	28,966	$8,689,800
Mt. Olive Fire/Ems/Magistrate/Police	3,079	$923,700
Ralph Ellis Police Precinct	3,644	$1,093,200
South Strand Police Precinct	3,644	$1,093,200
Total	**39,333**	**$11,799,900**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	76%	24%
Share of Facility Square Feet	29,893	9,440
2022 Peak Uninc. Population/Nonres. Trips	398,675	199,966
Square Feet per Person/Nonres. Trip	**0.075**	**0.047**

Cost Analysis	Residential	Nonresidential
Square Feet per Person/Nonres. Trip	0.075	0.047
Cost per Square Foot	$300	$300
Cost Per Person or Nonres. Trip	**$22.50**	**$14.10**

Animal Shelter Space

Figure 19 shows the Horry County Animal Shelter facility current level of service. The Animal Shelter facility is allocated 100 percent to residential development. Floor area of the Horry County Animal Shelter is divided by the 2022 residential service units (population). The result is the current level of service of 0.032 square feet of facility per person.

From County staff, the Center's construction costs an average of $300 per square foot. The capital cost per person is the level of service standard multiplied by the average cost per square foot (0.032 square feet per person x $300 per square foot = $9.60 per person, rounded).

Figure 19. Animal Shelter Level of Service and Cost Factors

Facility	Square Feet	Replacement Cost
Animal Care Center	12,726	$3,817,800
TOTAL	**12,726**	**$3,817,800**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	100%	0%
Share of Facility Square Feet	12,726	0
2022 Peak Uninc. Population/Nonres. Trips	398,675	199,966
Square Feet per Person/Nonres. Trip	**0.032**	**0.000**

Cost Analysis	Residential	Nonresidential
Square Feet per Person/Nonres. Trip	0.032	0.000
Cost per Square Foot	$300	$300
Cost Per Person or Nonres. Trip	**$9.60**	**$0**

Credit for Future Debt Payments

To ensure fee-payers avoid potential double payment for annual debt service, TischlerBise included a credit in the development impact fee calculations for the bonds to be issued to construct animal shelter expansions. Following the same methodology as the level of service analysis, annual debt service for the animal shelter is attributed entirely to residential development and then divided by annual service units (population) to yield payments per person. To account for the time value of money, annual payments are discounted using a net present value formula based on the applicable discount (interest) rate. This results in a credit of $0.67 per person.

Figure 20. Credit for Future Animal Shelter Debt Payments

Fiscal Year	Principal Payment	Residential 100%	Nonresidential 0%
2022	$0	$0	$0
2023	$1,856	$1,856	$0
2024	$29,700	$29,700	$0
2025	$52,422	$52,422	$0
2026	$52,422	$52,422	$0
2027	$76,611	$76,611	$0
2028	$76,611	$76,611	$0
2029	$95,464	$95,464	$0
Total	**$385,087**	**$385,086**	**$0**

Residential

Fiscal Year	Payment	Projected Uninc. Peak Population	Payment/ Capita
2022	$0	398,675	$0.00
2023	$1,856	409,398	$0.00
2024	$29,700	420,121	$0.07
2025	$52,422	430,845	$0.12
2026	$52,422	441,570	$0.12
2027	$76,611	452,296	$0.17
2028	$76,611	463,023	$0.17
2029	$95,464	473,751	$0.20
Total	**$385,086**		**$0.85**
		Discount Rate	4.00%
		Total Credit	**$0.67**

Nonresidential

Fiscal Year	Payment	Projected Uninc. Peak Nonres. Trips	Payment/ Trip
2022	$0	199,966	$0.00
2023	$0	203,169	$0.00
2024	$0	206,372	$0.00
2025	$0	209,575	$0.00
2026	$0	212,779	$0.00
2027	$0	215,982	$0.00
2028	$0	219,114	$0.00
2029	$0	222,291	$0.00
Total	**$0**		**$0.00**
		Discount Rate	4.00%
		Total Credit	**$0.00**

Projection of Police Facility Growth-Related Facility Needs

Section 6-1-960(5) of the South Carolina Development Impact Fee Act requires:

> *"a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration."*

Section 6-1-960(7) of the South Carolina Development Impact Fee Act requires:

> *"the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years."*

To estimate the 10-year growth needs for police station, animal shelter, and training center space, current levels of service are applied to the residential and nonresidential growth projected for unincorporated Horry County. Growth-related needs and costs are highlighted at the bottom of the figures.

Figure 21. 10-Year Police Station Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Cost/Sq. Ft.
Police Station	Residential	0.075	Square Feet	per persons	$300
	Nonresidential	0.047		per vehicle trips	

Growth-Related Need for Police Station Space						
Year		Uninc. Peak Population	Uninc. Peak Nonres. Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2022	398,675	199,966	29,900	9,398	39,298
Year 1	2023	409,398	203,169	30,704	9,549	40,253
Year 2	2024	420,121	206,372	31,509	9,699	41,208
Year 3	2025	430,845	209,575	32,313	9,850	42,163
Year 4	2026	441,570	212,779	33,117	10,001	43,118
Year 5	2027	452,296	215,982	33,922	10,151	44,073
Year 6	2028	463,023	219,114	34,726	10,298	45,024
Year 7	2029	473,751	222,291	35,531	10,448	45,979
Year 8	2030	484,481	225,514	36,336	10,599	46,935
Year 9	2031	497,374	228,784	37,303	10,753	48,056
Year 10	2032	510,268	232,101	38,270	10,909	49,179
Ten-Year Increase		111,592	32,135	**8,370**	**1,511**	**9,881**
			Projected Expenditure	**$2,511,000**	**$453,300**	**$2,964,300**

Growth-Related Expenditures for Police Station Facilities	**$2,964,300**

Figure 22. 10-Year Animal Shelter Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Cost/Sq. Ft.
Animal Shelter	Residential	0.03	Square Feet	per persons	$300
	Nonresidential	0.00		per vehicle trips	

Growth-Related Need for Animal Shelter Space						
Year		Uninc. Peak Population	Uninc. Peak Nonres. Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2022	398,675	199,966	12,757	0	12,757
Year 1	2023	409,398	203,169	13,100	0	13,100
Year 2	2024	420,121	206,372	13,443	0	13,443
Year 3	2025	430,845	209,575	13,787	0	13,787
Year 4	2026	441,570	212,779	14,130	0	14,130
Year 5	2027	452,296	215,982	14,473	0	14,473
Year 6	2028	463,023	219,114	14,816	0	14,816
Year 7	2029	473,751	222,291	15,160	0	15,160
Year 8	2030	484,481	225,514	15,503	0	15,503
Year 9	2031	497,374	228,784	15,915	0	15,915
Year 10	2032	510,268	232,101	16,328	0	16,328
Ten-Year Increase		111,592	32,135	**3,571**	**0**	**3,571**
			Projected Expenditure	**$1,071,300**	**$0**	**$1,071,300**

Growth-Related Expenditures for Animal Shelter Facilities	**$1,071,300**

Maximum Supportable Police Development Impact Fee

Figure 23 shows the maximum supportable Police Development Impact Fee for Horry County. Development impact fees for Police facilities are assessed on residential and nonresidential development with the Animal Shelter component only assessed on residential development. Police development impact fees are based on household size for residential development and vehicle trips per 1,000 square feet for nonresidential development. Differentiating the fee by housing size allows the results to be proportional to the level of demand (persons per household) a residential development will place on the current infrastructure based on level of service standards. For residential development, the total cost per person is multiplied by the household size to calculate the proposed fee. For nonresidential development, the total cost per vehicle trip is multiplied by the trips per 1,000 square feet to calculate the proposed fee.

The results of the 2019 Development Impact Fee Study are included in the figure to illustrate potential changes in impact fee, if adopted at the maximum supportable level.

The fees represent the highest amount supportable for each type of development, which represents new growth's fair share of the cost for capital facilities. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 23. Maximum Supportable Police Development Impact Fee (Unincorporated County)

Fee Component	Cost per Person	Cost per Nonres. Vehicle Trip
Police Station	$22.50	$14.10
Animal Shelter	$9.60	$0.00
Credit for Debt Payments	($0.67)	$0.00
Total	**$31.43**	**$14.10**

Residential

Sq. Ft. Range	Demand Unit	Persons per Demand Unit	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
1,000 or less	DU	1.19	**$37**	$63	($26)
1,001 to 1,500	DU	1.93	**$61**	$63	($2)
1,501 to 2,000	DU	2.45	**$77**	$63	$14
2,001 to 2,500	DU	2.86	**$90**	$76	$14
2,501 to 3,000	DU	3.19	**$100**	$76	$24
3,001 to 3,500	DU	3.47	**$109**	$76	$33
3,501 or more	DU	3.71	**$117**	$76	$41

Nonresidential

Development Type	Demand Unit	Trips per Demand Unit*	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
Retail	1,000 Sq. Ft.	10.89	**$154**	$187	($33)
Office	1,000 Sq. Ft.	4.89	**$69**	$73	($4)
Industrial	1,000 Sq. Ft.	1.45	**$20**	$30	($10)
Institutional	1,000 Sq. Ft.	11.30	**$159**	$146	$13
Lodging	Room	3.26	**$46**	$63	($17)

**Local vehicle trip generation rates from the GSATS Traffic Model*

Revenue from Police Development Impact Fee

Revenue from the Police Development Impact Fee is projected in Figure 24, if the fee were implemented at the maximum supportable level and growth occurs as projected. To estimate single family revenue the 2,001 square feet to 2,500 square feet fee is used, and for multi-family the 1,001 square feet to 1,500 square feet fee is used.

Based on the growth projections shown below and at the maximum development impact fee amount shown below, development impact fee revenue over the next ten years is projected at approximately $4.1 million. Based on the actual mix of future residential construction, the projected police fee revenue shown below may change.

Figure 24. Projected Revenue from the Police Development Impact Fee (Unincorporated County)

Infrastructure Costs for Police Facilities

	Total Cost	Growth Cost
Police Station	$2,964,300	$2,964,300
Animal Shelter	$1,071,300	$1,071,300
Total Expenditures	**$4,035,600**	**$4,035,600**

Projected Development Impact Fee Revenue

		Single Family $90 per unit	Multifamily $61 per unit	Retail $154 per KSF	Office $69 per KSF	Industrial $20 per KSF	Institutional $159 per KSF	Lodging $46 per room
Year		**Housing Units**	**Housing Units**	**KSF**	**KSF**	**KSF**	**KSF**	**Rooms**
Base	2022	115,529	37,588	13,086	6,304	9,986	1,083	10,667
Year 1	2023	118,685	38,615	13,296	6,405	10,146	1,100	10,773
Year 2	2024	121,841	39,642	13,506	6,506	10,306	1,117	10,881
Year 3	2025	124,998	40,669	13,715	6,607	10,466	1,135	10,990
Year 4	2026	128,154	41,696	13,925	6,708	10,626	1,152	11,100
Year 5	2027	131,310	42,723	14,135	6,809	10,786	1,169	11,211
Year 6	2028	134,466	43,749	14,340	6,908	10,942	1,186	11,323
Year 7	2029	137,622	44,776	14,547	7,008	11,101	1,204	11,436
Year 8	2030	140,778	45,803	14,758	7,109	11,262	1,221	11,550
Year 9	2031	144,576	47,039	14,972	7,212	11,425	1,239	11,666
Year 10	2032	148,375	48,275	15,190	7,317	11,591	1,257	11,783
Ten-Year Increase		32,846	10,687	2,103	1,013	1,605	174	1,116
Projected Revenue =>		$2,956,099	$651,880	$323,869	$69,901	$32,096	$27,666	$51,334
							Projected Revenue =>	**$4,112,845**
							Total Expenditures =>	**$4,035,600**
							Non-Impact Fee Revenues =>	**$0**

Fire and Medic CIP and Development Impact Fee Calculation

Fire and Medic Service Area

The Fire and Medic Development Impact Fee covers the unincorporated County outside the Murrells Inlet-Garden City Fire District. Horry County Fire services are provided in the unincorporated area only and allocated to unincorporated demand base (outside the Horry County portion of the Murrells Inlet-Garden City Fire District). Medic services are provided countywide (both unincorporated (outside the Horry County portion of the Murrells Inlet-Garden City Fire District) and incorporated areas). Levels of service and costs have been allocated to the unincorporated service area of the county in this analysis using calls for service data. See the "Level of Service" section below for further information.

Fire and Medic Service Units

Horry County Fire and Medic Department provided calls for service/incident data for calendar year 2021 for the Horry County Fire and Medic Service Area. Data are shown in Figure 25. As shown, 57 percent of the calls were from residential locations, 43 percent were from nonresidential locations. The figures include traffic calls for service to residential and nonresidential locations, allocated based on vehicle miles of travel in the unincorporated County.

Figure 25. Horry County Fire and Medic Incidents

Land Use	Number of Incidents	% by Land Use
Residential	40,700	63%
Nonresidential	18,700	29%
Traffic	5,367	8%
Total	64,767	100%

Land Use	Vehicle Miles Traveled	% by Land Use
Residential	1,507,804	78%
Nonresidential	435,515	22%
Total	1,943,319	100%

Land Use	Adj. Number of Incidents	% by Land Use
Residential	44,864	**57%**
Nonresidential	33,215	**43%**
Total	78,079	100%

**VMT = Vehicle Miles of Travel. Source: GSATS Traffic Model; ITE Trip Generation*
Source: Horry County Fire/Medic Department, 2021 Calls for Service Database

Fire and Medic Facilities Level of Service and Cost Analysis

The Fire and Medic Development Impact Fee includes the facilities that house the County's Fire and Medic services. Identified by County staff, additional expansion will be necessary to serve future growth. The inventory includes current station space as well as those facilities that are included for expansions in the County's 5-Year Capital Improvement Plan and assumed to be operational by 2024. Furthermore, the training center is included in the station 44 floor area. The level of service is based on the projected demand base of 2024 population and nonresidential vehicle trips for the unincorporated County less the Horry County portion of the Murrells Inlet-Garden City Fire District.

Detail of the facilities are shown in Figure 27. Some County Fire Stations are Fire service only while others are both Fire and Medic. Those joint Fire and Medic stations are allocated to Fire and Medic space based on calls for service by station. Fire services are provided in the unincorporated area only (outside the Murrells Inlet-Garden City Fire District) and allocated to unincorporated demand base reflective of the service area boundaries. Medic services are provided countywide (outside the Murrells Inlet-Garden City Fire District in both unincorporated and incorporated areas) and therefore levels of service and costs are adjusted to reflect the share provided to the applicable demand base, namely to the unincorporated County outside municipalities.[2] See Figure 26.

Figure 26. Unincorporated County Share of Countywide Medic Service Area Population and Employment

Horry County, SC	Countywide (2022)	Countywide Medic Service Area^ (2022)	Unincorporated County (2022)
Peak Population	603,446	584,302	398,675
Peak Jobs	141,531	137,588	58,067
Total Peak Population and Jobs	**744,977**	**721,890**	**456,743**
		Uninc. % of Countywide Medic Service Area	**63%**

^ Countywide less Horry County portion of Murrells Inlet-Garden City Fire District.
Sources: Horry County; U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates. Bureau of Labor Statistics, SC Dept of Employment & Workforce; Horry County Comprehsive Plan; Trip Generation, Institute of Transportation Engineers, 10th Edition (2017).

Also included in the inventory are costs for planned expansions. The weighted cost per square foot is used in the development impact fee calculation.

[2] It should be noted that Horry County Medic does not serve Murrells Inlet-Garden City Fire District as a first responder, therefore the allocation uses an adjusted Countywide population and employment total (Countywide minus Horry County portion of the Fire District) to determine unincorporated County share of Medic facilities and apparatus.

Figure 27. Fire and Medic Station Inventory

Station #	Station Name	Current Square Feet	Planned New Square Feet	Total Current and New Square Feet	Fire Only	Fire/ Medic* >>	FIRE/MEDIC ALLOCATION**				CIP Cost	Planned Sq. Ft. to be Improved	Planned Cost per Sq. Ft.
							Fire %	Medic %	Fire SF	Medic SF			
1	Socastee	6,192	3,000	9,192		9,192	78%	22%	7,150	2,042	$971,750	3,000	$324
2	Little River	8,342		8,342		8,342	67%	33%	5,562	2,780			
3	Bucksport	4,809		4,809		4,809	67%	33%	3,206	1,603			
4	Forestbrook	5,620	1,441	7,061		7,061	67%	33%	4,708	2,353	$3,249,900	7,061	$460
5	Wampee (consolidated with	3,640	3,860	7,500		7,500	67%	33%	5,000	2,500	$2,966,000	7,500	$307
6	Finklea	7,061		7,061	7,061		100%	0%					
7	Lake Arrowhead	7,061		7,061		7,061	70%	30%	4,943	2,118			
8	Juniper Bay	7,400		7,400		7,400	67%	33%	4,934	2,466			
9	Antioch	2,000	3,000	5,000	5,000		100%	0%			$1,446,080	3,000	$368
10	Ketchup Town	1,640	3,360	5,000	5,000		100%	0%			$2,471,500	5,000	$380
12	Nixonville (consolidated with #5)												
13	Longs	1,640	3,360	5,000		5,000	67%	33%	3,334	1,667	$2,415,000	5,000	$483
*14^*	*Shell (new)*		*5,000*	*5,000*		5,000	67%	33%	3,334	1,667	*$2,346,900*	*5,000*	*$357*
15	Bayboro	6,337		6,337		6,337	67%	33%	4,225	2,112			
16	Cates Bay	4,003		4,003	4,003		100%	0%					
17	Mount Vernon	2,000		2,000	2,000		100%	0%					
18	Stephen's Crossroads	3,105		3,105		3,105	67%	33%	2,070	1,035			
19	Cherry Hill	2,000	3,000	5,000		5,000	100%	0%	5,000	0	$1,287,300	3,000	$326
20	Scipio	5,620		5,620		5,620	67%	33%	3,747	1,873			
21	Maple	2,000	3,000	5,000	5,000		100%	0%			$1,287,300	3,000	$326
*22^*	*Prestwick (new)*		*5,000*	*5,000*		5,000	*67%*	33%	3,334	1,667	*$3,256,300*	*5,000*	*$483*
23	University	9,470		9,470		9,470	67%	33%	6,314	3,156			
24	Aynor	3,422	2,198	5,620		5,620	67%	33%	3,747	1,873	$1,967,000	5,620	$350
25	Mt. Olive	2,387		2,387		2,387	0%	100%		2,387			
26	Goretown	2,000	3,000	5,000		5,000	*100%*	0%	5,000	0	$1,104,000	3,000	$368
27	Allens	7,573		7,573	7,573		100%	0%					
28	Joyner Swamp	2,000	3,000	5,000		5,000	100%	0%	5,000	0	$1,446,080	3,000	$368
29	Conway	7,300		7,300		7,300	0%	100%	0	7,300			
30	Myrtle Beach/21st	1,620		1,620		1,620	0%	100%	0	1,620			
31	Surfside Beach	13,500		13,500		13,500	0%	100%	0	13,500			
32	North Myrtle Beach	4,490		4,490		4,490	0%	100%	0	4,490			
34	Red Bluff	3,000		3,000		3,000	67%	33%	2,000	1,000			
35	Loris	1,537		1,537		1,537	0%	100%	0	1,537			
36	South Myrtle Beach	10,255		10,255		10,255	0%	100%	0	10,255			
38	Floyds	2,000		2,000	2,000		100%	0%					
39	Carolina Forest	5,620		5,620		5,620	67%	33%	3,747	1,873			
40	Hickory Grove	5,620		5,620	5,620		100%	0%					
41	Iron Springs	5,620		5,620	5,620		67%	33%					
43	Lee's Landing	5,620		5,620	5,620		80%	20%					
44	Fire Training Facility and Station	5,000		5,000	5,000		100%	0%					
45	Carolina Bays	5,620		5,620	5,620		67%	33%					
46	Pitch Landing	5,701		5,701	5,701		67%	33%					
TBD	*Atlantic Beach (new)*		*5,000*	5,000		5,000	*0%*	100%	1,000	4,000	*$3,246,300*	*5,000*	*$426*
34F	Red Bluff (Fire Apparatus Bay)	800		800	800		0%	100%					
	TOTAL	**190,625**	**47,219**	**237,844**	**71,618**	**166,226**	>>>>>>>>>>>>>>>>>		**87,351**	**78,875**	**$29,461,410**	**63,181**	**$466**

Fire and Medic Station Level of Service and Cost Factors

Figure 28 summarizes the existing and planned square footage of fire stations in stand-alone stations and joint stations with medic units. In total, by 2024 the County plans to have 158,969 square feet of fire station space and the average construction cost is $466 per square foot. To determine the level of service factors for the development impact fee, Fire/Medic calls for service percentages are used to allocate the facility floor area in the figure. Of the total square feet, 90,612 is allocated to residential development and 68,357 is allocated to nonresidential development.

The allocated floor area of is divided by the 2024 residential and nonresidential service units (population and nonresidential vehicle trips) to find the planned level of service for Fire stations in the County. Specifically, 0.232 square feet of per person and 0.359 square feet per nonresidential vehicle trip.

To find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost per square foot. For example, the residential cost per person is $108.11 (0.232 square feet per person x $466 per square foot = $108.11 per person, rounded).

Figure 28. Fire Station Level of Service and Cost Factors

Horry County, SC	Fire Station Square Feet	Fire Portion of Joint Stations	Planned Total (2024)	Construction Cost per Square Foot
Total Fire Stations	71,618	87,351	158,969	$466

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	57.0%	43.0%
Share of Facility Square Feet	90,612	68,357
2024 Peak Uninc. Fire and EMS Population/Nonres. Trips*	390,712	190,166
Square Feet per Person/Nonres. Trip	**0.232**	**0.359**

Cost Analysis	Residential	Nonresidential
Square Feet per Person/Nonres. Trips	0.232	0.359
Cost per Square Foot	$466	$466
Cost Per Person/Nonres. Trip	**$108.11**	**$167.29**

** Fire and EMS population and nonres. trips are peak Uninc. County less the Horry Co. portion of Murrells Inlet-Garden City Fire District*

Figure 29 summarizes the planned square footage of medic stations. Furthermore, the unincorporated County is attributed 63 percent of the floor area, and the average construction cost is $466 per square foot. Of the total square feet, 28,324 is allocated to residential development and 21,367 is allocated to nonresidential development.

The allocated floor area of is divided by the 2024 residential and nonresidential service units (population and nonresidential vehicle trips) to find the planned level of service for Medic stations in the County. Specifically, 0.072 square feet of per person and 0.112 square feet per nonresidential vehicle trip.

To find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost per square foot. For example, the residential cost per person is $33.55 (0.072 square feet per person x $466 per square foot = $33.55 per person, rounded).

Figure 29. Medic Station level of Service and Cost Factors

Horry County, SC	2024 Medic Station Square Feet	Unincorporated Share	Unincorporated Square Feet	Construction Cost per Square Foot
Total Medic Stations	78,875	63%	49,691	$466

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	57.0%	43.0%
Share of Facility Square Feet	28,324	21,367
2024 Peak Uninc. Fire and EMS Population/Nonres. Trips*	390,712	190,166
Square Feet per Person/Nonres. Trip	**0.072**	**0.112**

Cost Analysis	Residential	Nonresidential
Square Feet per Person/Nonres. Trips	0.072	0.112
Cost per Square Foot	$466	$466
Cost Per Person/Nonres. Trip	**$33.55**	**$52.19**

** Fire and EMS population and nonres. trips are peak Uninc. County less the Horry Co. portion of Murrells Inlet-Garden City Fire District*

Fire Vehicle Level of Service and Cost Factors

Horry County Fire Department has 79 vehicles in its fleet to conduct operations. As shown in Figure 30, to determine the level of service factors for the development impact fee, calls for service percentages are used to allocate the fleet. As a result, 45.03 units are allocated to residential development and 33.97 units are allocated to nonresidential development.

The allocated fleet is divided by the 2022 residential and nonresidential service units (population and nonresidential vehicle trips) to find the current level of service. Specifically, 0.121 units per 1,000 persons and 0.184 units per 1,000 nonresidential vehicle trips.

The average unit cost of the fleet is $756,000 and to find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost. For example, the residential cost per person is $91.48 (0.121 per 1,000 persons x $756,000 per unit = $91.48 per person, rounded).

Figure 30. Fire Vehicle Level of Service and Cost Factors

Type of Apparatus	# of Units	Current Cost per Vehicle	Total Cost
Brush Trucks	9	$300,000	$2,700,000
Heavy Rescues	4	$950,000	$3,800,000
Ladder Trucks	7	$1,700,000	$11,900,000
Pumpers	47	$780,000	$36,660,000
Tankers	10	$360,000	$3,600,000
Air Trucks	2	$550,000	$1,100,000
Total	**79**		**$59,760,000**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	57.0%	43.0%
Share of Fire Apparatus	45.03	33.97
2022 Peak Uninc. Fire and EMS Population/Nonres. Trips*	370,768	184,263
Units per 1,000 Persons/Nonres. Trips	**0.121**	**0.184**

Cost Analysis	Residential	Nonresidential
Units per 1,000 Persons/Nonres. Trips	0.121	0.184
Cost per Unit	$756,000	$756,000
Cost Per Person or Nonres. Trip	**$91.48**	**$139.10**

** Fire and EMS population and nonres. trips are peak Uninc. County less the Horry Co. portion of Murrells Inlet-Garden City Fire District*

Medic Vehicle Level of Service and Cost Factors

Horry County Medic Department has 32 medic units and based on unincorporated demand, 20.16 units (63 percent) are attributed to unincorporated demand. As shown in Figure 31, to determine the level of service factors for the development impact fee, calls for service percentages are used to allocate the fleet. As a result, 11.49 units are allocated to residential development and 8.67 units are allocated to nonresidential development.

The allocated fleet is divided by the 2022 residential and nonresidential service units (population and nonresidential vehicle trips) to find the current level of service. Specifically, 0.031 units per 1,000 persons and 0.047 units per 1,000 nonresidential vehicle trips.

The average unit cost of a medic unit is $350,000 and to find the capital cost per person or per nonresidential vehicle trip, the level of service standards are applied to the average cost. For example, the residential cost per person is $10.85 (0.031 per 1,000 persons x $350,000 per unit = $10.85 per person, rounded).

Figure 31. Medic Vehicle Level of Service and Cost Factors

EMS Vehicles	# of Units	Uninc. Share	Uninc. EMS Vehicles	Current Cost per Vehicle	Total Cost
Medic Units	32	63%	20.16	$350,000	$7,056,000
		Total	**20.16**		**$7,056,000**

Level-of-Service Standards	**Residential**	**Nonresidential**
Proportionate Share	57.0%	43.0%
Share of Ambulances	11.49	8.67
2022 Peak Uninc. Fire and EMS Population/Nonres. Trips*	370,768	184,263
Square Feet per 1,000 Person/Nonres. Trip	**0.031**	**0.047**

Cost Analysis	**Residential**	**Nonresidential**
Units per 1,000 Persons/Nonres. Trips	0.031	0.047
Cost per Unit	$350,000	$350,000
Cost Per Person or Nonres. Trip	**$10.85**	**$16.45**

** Fire and EMS population and nonres. trips are peak Uninc. County less the Horry Co. portion of Murrells Inlet-Garden City Fire District*

Credit for Future Debt Payments

To ensure fee-payers avoid potential double payment for annual debt service, TischlerBise included a credit in the development impact fee calculations for the bonds to be issued to construct station expansions. Following the same methodology as the level of service analysis, annual debt service was split between residential and nonresidential development and then divided by annual service units (population and nonresidential vehicle trips) to yield payments per person or vehicle trip. To account for the time value of money, annual payments are discounted using a net present value formula based on the applicable discount (interest) rate. This results in a credit of $4.59 per person and $7.25 per nonresidential vehicle trip rounded.

Figure 32. Credit for Future Fire and Medic Debt Payments

Fiscal Year	Principal Payment	Residential 57%	Nonresidential 43%
2022	$136,372	$77,732	$58,640
2023	$390,003	$222,302	$167,701
2024	$402,637	$229,503	$173,134
2025	$505,282	$288,011	$217,271
2026	$527,380	$300,607	$226,773
2027	$631,580	$360,001	$271,580
2028	$631,950	$360,211	$271,738
2029	$832,881	$474,742	$358,139
Total	**$4,058,085**	**$2,313,109**	**$1,744,976**

Residential

Fiscal Year	Principal Payment	Projected Uninc. Peak Fire and EMS Population	Payment/ Capita
2022	$77,732	370,768	$0.21
2023	$222,302	380,740	$0.58
2024	$229,503	390,712	$0.59
2025	$288,011	400,686	$0.72
2026	$300,607	410,660	$0.73
2027	$360,001	420,635	$0.86
2028	$360,211	430,612	$0.84
2029	$474,742	440,589	$1.08
Total	**$2,313,109**		**$5.61**
		Discount Rate	4.00%
		Total Credit	**$4.59**

Nonresidential

Fiscal Year	Principal Payment	Projected Uninc. Peak Fire and EMS Nonres. Trips	Payment/ Trip
2022	$58,640	184,263	$0.32
2023	$167,701	187,214	$0.90
2024	$173,134	190,166	$0.91
2025	$217,271	193,118	$1.13
2026	$226,773	196,069	$1.16
2027	$271,580	199,021	$1.36
2028	$271,738	201,907	$1.35
2029	$358,139	204,834	$1.75
Total	**$1,744,976**		**$8.88**
		Discount Rate	4.00%
		Total Credit	**$7.25**

Projection of Fire/Medic Facility Growth-Related Facility Needs

Section 6-1-960(5) of the South Carolina Development Impact Fee Act requires:

> *"a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration."*

Section 6-1-960(7) of the South Carolina Development Impact Fee Act requires:

> *"the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years."*

To estimate the 10-year growth needs for Fire/Medic stations and vehicles, planned levels of service are applied to the residential and nonresidential growth projected for unincorporated Horry County. The following series of figures show the growth-related needs for Fire/Medic facilities and vehicles to maintain current levels of service. Growth-related needs and costs are highlighted at the bottom of the figures.

Figure 33. 10-Year Fire Station Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Cost / Sq. Ft.
Fire Stations	Residential	0.232	Square Feet	per persons	$466
	Nonresidential	0.359		per vehicle trip	

Growth-Related Need for Fire Stations						
Year		Projected Uninc. Peak Fire and EMS Population	Projected Uninc. Peak Fire and EMS Nonres. Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2022	370,768	184,263	86,018	66,150	152,168
Year 1	2023	380,740	187,214	88,332	67,210	155,542
Year 2	2024	390,712	190,166	90,645	68,270	158,915
Year 3	2025	400,686	193,118	92,959	69,329	162,288
Year 4	2026	410,660	196,069	95,273	70,389	165,662
Year 5	2027	420,635	199,021	97,587	71,449	169,036
Year 6	2028	430,612	201,907	99,902	72,485	172,387
Year 7	2029	440,589	204,834	102,217	73,536	175,753
Year 8	2030	450,567	207,805	104,532	74,602	179,134
Year 9	2031	462,558	210,818	107,313	75,684	182,997
Year 10	2032	474,549	213,875	110,095	76,781	186,876
Ten-Year Increase		103,781	29,612	**24,077**	**10,631**	**34,708**
			Projected Expenditure	**$11,219,882**	**$4,954,046**	**$16,173,928**

Growth-Related Expenditures for Fire Stations	**$16,173,928**

Figure 34. 10-Year Medic Station Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Cost / Sq. Ft.
Medic Stations (Uninc. Share)	Residential	0.072	Square Feet	per persons	$466
	Nonresidential	0.112		per vehicle trip	

Growth-Related Need for Medic Facilities						
Year		Projected Uninc. Peak Fire and EMS Population	Projected Uninc. Peak Fire and EMS Nonres. Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2022	370,768	184,263	26,695	20,637	47,332
Year 1	2023	380,740	187,214	27,413	20,968	48,381
Year 2	2024	390,712	190,166	28,131	21,299	49,430
Year 3	2025	400,686	193,118	28,849	21,629	50,478
Year 4	2026	410,660	196,069	29,568	21,960	51,528
Year 5	2027	420,635	199,021	30,286	22,290	52,576
Year 6	2028	430,612	201,907	31,004	22,614	53,618
Year 7	2029	440,589	204,834	31,722	22,941	54,663
Year 8	2030	450,567	207,805	32,441	23,274	55,715
Year 9	2031	462,558	210,818	33,304	23,612	56,916
Year 10	2032	474,549	213,875	34,168	23,954	58,122
Ten-Year Increase		103,781	29,612	**7,473**	**3,317**	**10,790**
			Projected Expenditure	**$3,482,418**	**$1,545,722**	**$5,028,140**

Growth-Related Expenditures for Medic Stations	**$5,028,140**

Figure 35. 10-Year Fire Vehicles and Apparatus Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Unit Cost
Fire Vehicles and Apparatus	Residential	0.121	Units	per 1,000 persons	$756,000
	Nonresidential	0.184		per 1,000 vehicle trips	

Growth-Related Need for Fire Vehicles and Apparatus						
Year		Projected Uninc. Peak Fire and EMS Population	Projected Uninc. Peak Fire and EMS Nonres. Trips	Residential Units	Nonresidential Units	Total Units
Base	2022	370,768	184,263	44.86	33.90	78.76
Year 1	2023	380,740	187,214	46.07	34.45	80.52
Year 2	2024	390,712	190,166	47.28	34.99	82.27
Year 3	2025	400,686	193,118	48.48	35.53	84.01
Year 4	2026	410,660	196,069	49.69	36.08	85.77
Year 5	2027	420,635	199,021	50.90	36.62	87.52
Year 6	2028	430,612	201,907	52.10	37.15	89.25
Year 7	2029	440,589	204,834	53.31	37.69	91.00
Year 8	2030	450,567	207,805	54.52	38.24	92.76
Year 9	2031	462,558	210,818	55.97	38.79	94.76
Year 10	2032	474,549	213,875	57.42	39.35	96.77
Ten-Year Increase		103,781	29,612	**12.56**	**5.45**	**18.01**
			Projected Expenditure	**$9,495,360**	**$4,120,200**	**$13,615,560**

Growth-Related Expenditures for Fire Vehicles and Apparatus	**$13,615,560**

Figure 36. 10-Year Medic/Medic Vehicles and Apparatus Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Unit Cost
Ambulances (Uninc. Share)	Residential	0.031	Units	per 1,000 persons	$350,000
	Nonresidential	0.047		per 1,000 vehicle trips	

Growth-Related Need for Ambulances						
Year		Projected Uninc. Peak Fire and EMS Population	Projected Uninc. Peak Fire and EMS Nonres. Trips	Residential Units	Nonresidential Units	Total Units
Base	2022	370,768	184,263	11.49	8.66	20.15
Year 1	2023	380,740	187,214	11.80	8.80	20.60
Year 2	2024	390,712	190,166	12.11	8.94	21.05
Year 3	2025	400,686	193,118	12.42	9.08	21.50
Year 4	2026	410,660	196,069	12.73	9.22	21.95
Year 5	2027	420,635	199,021	13.04	9.35	22.39
Year 6	2028	430,612	201,907	13.35	9.49	22.84
Year 7	2029	440,589	204,834	13.66	9.63	23.29
Year 8	2030	450,567	207,805	13.97	9.77	23.74
Year 9	2031	462,558	210,818	14.34	9.91	24.25
Year 10	2032	474,549	213,875	14.71	10.05	24.76
Ten-Year Increase		103,781	29,612	**3.22**	**1.39**	**4.61**
			Projected Expenditure	**$1,127,000**	**$486,500**	**$1,613,500**

Growth-Related Expenditures for Ambulances (Uninc. Share)	**$1,613,500**

Maximum Supportable Fire and Medic Development Impact Fee

The following figure shows the maximum supportable Fire and Medic Development Impact Fee. Development impact fees for Public Safety are based on household size for residential development and vehicle trips per 1,000 square feet for nonresidential development. Differentiating the fee by housing size allows the results to be proportional to the level of demand (persons per household) a residential development will place on the current infrastructure based on level of service standards. For residential development, the total cost per person is multiplied by the household size to calculate the proposed fee. For nonresidential development, the total cost per vehicle trip is multiplied by the trips per 1,000 square feet to calculate the proposed fee. The results of the 2019 Development Impact Fee Study are included in the figure to illustrate potential changes in impact fee, if adopted at the maximum supportable level.

The fees represent the highest amount supportable for each type of development, which represents new growth's fair share of the cost for capital facilities. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 37. Maximum Supportable Fire and Medic Development Impact Fee (Unincorporated County)

Fee Component	Cost per Person	Cost per Nonres. Vehicle Trip
Fire Station	$108.11	$167.29
Medic Station	$33.55	$52.19
Fire Apparatus	$91.48	$139.10
Medic Apparatus	$10.85	$16.45
Credit for Debt Payments	($4.59)	($7.25)
Total	**$239.40**	**$367.78**

Residential

Sq. Ft. Range	Demand Unit	Persons per Demand Unit	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
1,000 or less	DU	1.19	**$285**	$437	($152)
1,001 to 1,500	DU	1.93	**$462**	$437	$25
1,501 to 2,000	DU	2.45	**$587**	$437	$150
2,001 to 2,500	DU	2.86	**$685**	$524	$161
2,501 to 3,000	DU	3.19	**$764**	$524	$240
3,001 to 3,500	DU	3.47	**$831**	$524	$307
3,501 or more	DU	3.71	**$888**	$524	$364

Nonresidential

Development Type	Demand Unit	Trips per Demand Unit*	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
Retail	1,000 Sq. Ft.	10.89	**$4,005**	$2,035	$1,970
Office	1,000 Sq. Ft.	4.89	**$1,798**	$795	$1,003
Industrial	1,000 Sq. Ft.	1.45	**$533**	$322	$211
Institutional	1,000 Sq. Ft.	11.30	**$4,156**	$1,594	$2,562
Lodging	Room	3.26	**$1,199**	$683	$516

**Local vehicle trip generation rates from the GSATS Traffic Model*

Revenue from Fire and Medic Development Impact Fee

Revenue from the Fire/Medic Development Impact Fee is estimated in Figure 38, if the fee were implemented at the maximum supportable level and growth occurs as projected. To estimate single family revenue the 2,001 square feet to 2,500 square feet fee is used, and for multi-family the 1,001 square feet to 1,500 square feet fee is used.

Based on the growth projections shown below and at the maximum development impact fee amount shown below, development impact fee revenue over the next ten years is projected at approximately $37

million. Based on the actual mix of future residential construction, the projected fire and medic fee revenue shown below may change.

Figure 38. Projected Revenue from Fire and Medic Development Impact Fee (Unincorporated County)

Infrastructure Costs for Fire and Medic Facilities

	Total Cost	Growth Cost
Fire Station	$16,173,928	$16,173,928
Medic Station	$5,028,140	$5,028,140
Fire Apparatus	$13,615,560	$13,615,560
Medic Apparatus	$1,613,500	$1,613,500
Total Expenditures	**$36,431,128**	**$36,431,128**

Projected Development Impact Fee Revenue

		Residential $685 per unit	Multifamily $462 per unit	Retail $4,005 per KSF	Office $1,798 per KSF	Industrial $533 per KSF	Institutional $4,156 per KSF	Lodging $1,199 per room
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF	Rooms
Base	2022	105,664	32,506	11,909	5,863	9,487	1,083	10,667
Year 1	2023	108,550	33,394	12,099	5,957	9,639	1,100	10,773
Year 2	2024	111,437	34,282	12,290	6,050	9,791	1,117	10,881
Year 3	2025	114,323	35,170	12,481	6,144	9,943	1,135	10,990
Year 4	2026	117,210	36,058	12,672	6,238	10,095	1,152	11,100
Year 5	2027	120,096	36,946	12,862	6,332	10,247	1,169	11,211
Year 6	2028	122,983	37,834	13,049	6,424	10,395	1,186	11,323
Year 7	2029	125,870	38,722	13,238	6,517	10,546	1,204	11,436
Year 8	2030	128,756	39,610	13,430	6,612	10,699	1,221	11,550
Year 9	2031	132,230	40,679	13,625	6,708	10,854	1,239	11,666
Year 10	2032	135,704	41,748	13,822	6,805	11,011	1,257	11,783
Ten-Year Increase		30,041	9,242	1,914	942	1,525	174	1,116
Projected Revenue =>		$20,577,874	$4,269,634	$7,664,666	$1,693,986	$812,601	$723,152	$1,338,039

Projected Revenue =>	**$37,079,952**
Total Expenditures =>	**$36,431,128**
Non-Impact Fee Revenues =>	**$0**

Emergency Operations Center (EOC) CIP and Development Impact Fee Calculation

EOC Service Area

Horry County is currently building an Emergency Operations Center to serve current and future growth in the County. It will house 911 services as well as a central location for Emergency Management functions (e.g., hurricane evacuations) for the unincorporated county and is based on demand from the unincorporated County. The resulting fee reflects new development's share of the cost to provide capacity in the EOC.

EOC Service Units

To allocate to residential and nonresidential development, a weighted average of both Police and Fire/Medic calls for service is calculated using calls for service data provided by the Horry County respective departments. The combined proportionate share percentage is shown below in Figure 39.

Figure 39. Horry County Proportionate Share

	Police Incidents	*Fire/Medic Incidents*	*Total Incidents*	*% by Land Use*
Residential	94,329	44,864	139,193	**69%**
Nonresidential	29,250	33,215	62,465	**31%**
Total	*123,579*	*78,079*	201,658	100%

Sources: Horry County Police Department; Horry County Fire and EMS Department

EOC Facilities Level of Service and Cost Analysis

The EOC component of the Public Safety Development Impact Fee includes the planned EOC and the data systems necessary for operations. The facility is anticipated to serve unincorporated county growth through 2039. Detail is shown in Figure 40.

Figure 40. EOC Level of Service and Cost Factors (Unincorporated County)

Project	Year Planned	Square Feet	Total Cost
Emergency Operations Center (EOC)	FY2022	39,000	$26,000,000
PS CAD and Records System	FY2020/FY2021		$5,250,000
	Total	39,000	$31,250,000

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	69.0%	31.0%
Share of Facility Square Feet	26,910	12,090
2039 Peak Uninc. Population/Nonres. Trips	600,557	256,710
Square Feet per Person/Nonres. Trip	**0.045**	**0.047**

Cost Analysis	Residential	Nonresidential
Square Feet per Person/Nonres. Trip	0.045	0.047
Cost per Square Foot	$801	$801
Cost Per Person or Nonres. Trip	**$36.05**	**$37.65**

Projection of EOC Facility Growth-Related Facility Needs

Section 6-1-960(5) of the South Carolina Development Impact Fee Act requires:

> *"a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration."*

Section 6-1-960(7) of the South Carolina Development Impact Fee Act requires:

> *"the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years."*

To estimate the 10-year growth needs for the EOC space, planned levels of service are applied to the residential and nonresidential growth projected for unincorporated Horry County. Figure 41 shows the growth-related needs for EOC facilities. Growth-related needs and costs are highlighted at the bottom of the figure. Because this is a facility anticipated to serve 20 years into the future as well as the existing base, the projected growth-related portion of the facility is only approximately 17 percent of the total facility (6,533 square feet / 39,000 square feet = 17 percent).

Figure 41. 10-Year EOC Needs to Accommodate Growth

Type of Infrastructure	Level of Service			Demand Unit	Cost/Sq. Ft.
Emergency Operations Center	Residential	0.045	Square Feet	per person	$801
	Nonresidential	0.047		per vehicle trip	

Growth-Related Need for Emergency Operations Center						
Year		Projected Uninc. Peak Population	Projected Uninc. Peak Nonres. Trips	Residential Square Feet	Nonresidential Square Feet	Total Square Feet
Base	2022	398,675	199,966	17,940	9,398	27,338
Year 1	2023	409,398	203,169	18,423	9,549	27,972
Year 2	2024	420,121	206,372	18,905	9,699	28,604
Year 3	2025	430,845	209,575	19,388	9,850	29,238
Year 4	2026	441,570	212,779	19,871	10,001	29,872
Year 5	2027	452,296	215,982	20,353	10,151	30,504
Year 6	2028	463,023	219,114	20,836	10,298	31,134
Year 7	2029	473,751	222,291	21,319	10,448	31,767
Year 8	2030	484,481	225,514	21,802	10,599	32,401
Year 9	2031	497,374	228,784	22,382	10,753	33,135
Year 10	2032	510,268	232,101	22,962	10,909	33,871
Ten-Year Increase		111,592	32,135	**5,022**	**1,511**	**6,533**
			Projected Expenditure	**$4,022,622**	**$1,210,311**	**$5,232,933**

Growth-Related Expenditures for Emergency Operations Center	$5,232,933

Credit for Future Debt Payments

To ensure fee-payers avoid potential double payment for annual debt service, TischlerBise included a credit in the development impact fee calculations for the debt issued to fund the EOC. Following the same methodology as the level of service analysis, annual debt service was split between residential and nonresidential development and then divided by annual service units (population and nonresidential vehicle trips) to yield payments per person or vehicle trip. Even though the debt is anticipated to be paid through a countywide millage, the credit is allocated to projected growth in the unincorporated County to take a conservative approach (i.e., higher credit) and establish the nexus between the fee and taxpayer and beneficiary of the facility. To account for the time value of money, annual payments are discounted using a net present value formula based on the applicable discount (interest) rate. This results in a credit of $1.99 per person and $1.86 per nonresidential vehicle trip rounded.

Figure 42. Credit for Future EOC Debt Payments

Fiscal Year	Principal Payment	Residential 69%	Nonresidential 31%
2022	$0	$0	$0
2023	$221,312	$152,705	$68,607
2024	$221,092	$152,553	$68,539
2025	$219,123	$151,195	$67,928
2026	$219,862	$151,705	$68,157
2027	$220,918	$152,433	$68,485
2028	$221,426	$152,784	$68,642
2029	$222,531	$153,546	$68,985
Total	**$1,546,264**	**$1,066,921**	**$479,343**

Residential

Fiscal Year	Payment	Projected Uninc. Peak Population	Payment/ Capita
2022	$0	398,675	$0.00
2023	$152,705	409,398	$0.37
2024	$152,553	420,121	$0.36
2025	$151,195	430,845	$0.35
2026	$151,705	441,570	$0.34
2027	$152,433	452,296	$0.34
2028	$152,784	463,023	$0.33
2029	$153,546	473,751	$0.32
Total	**$1,066,921**		**$2.41**
		Discount Rate	4.00%
		Total Credit	**$1.99**

Nonresidential

Fiscal Year	Payment	Projected Uninc. Peak Nonres. Trips	Payment/ Trip
2022	$0	199,966	$0.00
2023	$68,607	203,169	$0.34
2024	$68,539	206,372	$0.33
2025	$67,928	209,575	$0.32
2026	$68,157	212,779	$0.32
2027	$68,485	215,982	$0.32
2028	$68,642	219,114	$0.31
2029	$68,985	222,291	$0.31
Total	**$479,343**		**$2.25**
		Discount Rate	4.00%
		Total Credit	**$1.86**

Maximum Supportable EOC Development Impact Fee

Figure 43 shows the maximum supportable EOC Development Impact Fee for Horry County. Development impact fees for the EOC component are assessed on residential and nonresidential development.

The fees represent the highest amount supportable for each type of development, which represents new growth's fair share of the cost for capital facilities. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 43. Maximum Supportable EOC Development Impact Fee (Unincorporated County)

Fee Component	Cost per Person	Cost per Nonres. Vehicle Trip
Emergency Operations Center (EOC)	$36.05	$37.65
Credit for Debt Payments	($1.99)	($1.86)
Total	**$34.06**	**$35.79**

Residential

Sq. Ft. Range	Demand Unit	Persons per Demand Unit	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
1,000 or less	DU	1.19	**$41**	$31	$10
1,001 to 1,500	DU	1.93	**$66**	$31	$35
1,501 to 2,000	DU	2.45	**$83**	$31	$52
2,001 to 2,500	DU	2.86	**$97**	$38	$59
2,501 to 3,000	DU	3.19	**$109**	$38	$71
3,001 to 3,500	DU	3.47	**$118**	$38	$80
3,501 or more	DU	3.71	**$126**	$38	$88

Nonresidential

Development Type	Demand Unit	Trips per Demand Unit*	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
Retail	1,000 Sq. Ft.	10.89	**$390**	$183	$207
Office	1,000 Sq. Ft.	4.89	**$175**	$71	$104
Industrial	1,000 Sq. Ft.	1.45	**$52**	$29	$23
Institutional	1,000 Sq. Ft.	11.30	**$404**	$143	$261
Lodging	Room	3.26	**$117**	$61	$56

Revenue from EOC Development Impact Fee

Revenue from the EOC Development Impact Fee is projected in Figure 44, if the fee were implemented at the maximum allowable level and growth occurs as projected. To estimate single family revenue the 2,001 square feet to 2,500 square feet fee is used, and for multi-family the 1,001 square feet to 1,500 square feet fee is used.

Based on the growth projections shown below and at the maximum development impact fee amount shown below, development impact fee revenue over the next ten years is projected at $5.2 million. Only a portion of the total cost would be funded from development impact fees over the next 10 years as it is a facility that will serve existing development and is a 20-year planned facility. Based on the actual mix of future residential construction, the projected EOC fee revenue shown below may change.

Figure 44. Projected Revenue from the EOC Development Impact Fee (Unincorporated County)

Infrastructure Costs for Emergency Operations Center

	Total Cost	Growth Cost
EOC Facility	$31,250,000	$5,232,933
Total Expenditures	**$31,250,000**	**$5,232,933**

Projected Development Impact Fee Revenue

		Single Family $97 per unit	Multifamily $66 per unit	Retail $390 per KSF	Office $175 per KSF	Industrial $52 per KSF	Institutional $404 per KSF	Lodging $117 per room
Year		**Housing Units**	**Housing Units**	**KSF**	**KSF**	**KSF**	**KSF**	**Rooms**
Base	2022	115,529	37,588	13,086	6,304	9,986	1,083	10,667
Year 1	2023	118,685	38,615	13,296	6,405	10,146	1,100	10,773
Year 2	2024	121,841	39,642	13,506	6,506	10,306	1,117	10,881
Year 3	2025	124,998	40,669	13,715	6,607	10,466	1,135	10,990
Year 4	2026	128,154	41,696	13,925	6,708	10,626	1,152	11,100
Year 5	2027	131,310	42,723	14,135	6,809	10,786	1,169	11,211
Year 6	2028	134,466	43,749	14,340	6,908	10,942	1,186	11,323
Year 7	2029	137,622	44,776	14,547	7,008	11,101	1,204	11,436
Year 8	2030	140,778	45,803	14,758	7,109	11,262	1,221	11,550
Year 9	2031	144,576	47,039	14,972	7,212	11,425	1,239	11,666
Year 10	2032	148,375	48,275	15,190	7,317	11,591	1,257	11,783
Ten-Year Increase		32,846	10,687	2,103	1,013	1,605	174	1,116
Projected Revenue =>		$3,186,018	$705,313	$820,189	$177,286	$83,451	$70,297	$130,568

Projected Revenue =>	**$5,173,122**
Total Expenditures =>	**$31,250,000**
Non-Impact Fee Revenues =>	**$26,076,878**

TRANSPORTATION CIP AND DEVELOPMENT IMPACT FEE

Methodology

Section 6-1-920(18d) of the South Carolina Development Impact Fee Act states that a development impact fee may be imposed on public facilities including:

> *"…roads, streets, and bridges including, but not limited to, rights-of-way and traffic signals."*

To determine the Horry County Transportation Development Impact Fee, an incremental expansion approach methodology is used. The fee amounts for residential and nonresidential development are calculated by multiplying the vehicle miles traveled (VMT) generation rates by the capital cost per VMT based on the 10-year need for arterial and collector roadways to continue the County's current level of service. Additionally, the amount of lane miles in the impact fee analysis is reduced to ensure there is not a double payment from the one-cent sales tax under the RIDE III program and potential RIDE IV program. The methodology includes trip adjustment for pass-by trips, average trip length, and trip length adjustment factors.

Section 6-1-960(1) of the South Carolina Development Impact Fee Act requires:

> *"a general description of all existing facilities and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage."*

Section 6-1-960(2) of the South Carolina Development Impact Fee Act requires:

> *"an analysis of total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by qualified a professional using generally accepted principles and professional standards."*

Residential and nonresidential development impact fees are calculated on a per vehicle miles traveled (VMT) basis. Vehicle trip generation rates for different development types are based off of information provided by the Grand Strand Area Transportation Study (GSATS) Traffic Model. Necessary factors are applied to vehicle trip rates to calculate the VMT generation for each land use from the Institute of Transportation Engineers (ITE) data.

Importantly, the Transportation Development Impact Fee analysis excludes RIDE III projects and the revenues from that program. Also, considerations have been made regarding the potential for a RIDE IV program. The projects under these programs are fully funded by the one-cent sales tax. Thus, the impact fee analysis will be based on and fund non-RIDE III/IV road projects. In this case, the RIDE programs and the impact fee program will be held separately, so a credit is not needed to offset any double payments.

Transportation Service Area

The Transportation Development Impact Fee covers transportation improvements in the unincorporated County or the portion of a regional project serving the unincorporated County. The analysis is limited to capacity and demand on system-level transportation facilities (i.e., arterials and collectors) in the unincorporated area and allocated to the unincorporated demand base. Transportation improvement costs are based on the County's share to provide additional capacity in the unincorporated County.

Transportation Service Units

Section 6-1-960(4) of the South Carolina Development Impact Fee Act requires:

> *"a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate."*

The "service unit" used in the analysis of the Transportation fee for residential and nonresidential development is average weekday vehicle miles of travel (VMT). The analysis includes adjustments for commuting patterns, pass-by trips, and average trip lengths by type of development. Trip generation rates are from the Grand Strand Area Transportation Study (GSATS) Traffic Model. A vehicle trip end represents a vehicle either entering or exiting a development (as if a traffic counter were placed across a driveway). To avoid double counting a single vehicle trip at both the origin and destination points, the basic trip adjustment factor is 50 percent, to reflect the allocation of the trip to either the origin or destination point. As discussed in Appendix B, the development fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

Service Units

The appropriate service unit for the Transportation development impact fees is vehicle miles of travel (VMT). VMT creates the link between supply (roadway capacity) and demand (traffic generated by new development). Components used to determine VMT include: trip generation rates, adjustments for commuting patterns and pass-by trips, and trip length weighting factors, are discussed further in this section.

Figure 45. Summary of Service Units

Development Type	ITE Code	Weekday VTE[1]	Dev Unit	Trip Adj	2022 Trips	Avg Trip Length[2]	Vehicle Miles of Travel
Single Family	210	7.16	HU	52%	430,139	2.92	1,257,041
Multifamily	220	4.39	HU	52%	85,807	2.92	250,763
Households by Size VMT Factors							
1,000 or less	-	2.35	HU	52%	-	2.92	-
1,001 to 1,500	-	4.32	HU	52%	-	2.92	-
1,501 to 2,000	-	5.71	HU	52%	-	2.92	-
2,001 to 2,500	-	6.79	HU	52%	-	2.92	-
2,501 to 3,000	-	7.68	HU	52%	-	2.92	-
3,001 to 3,500	-	8.42	HU	52%	-	2.92	-
3,501 or more	-	9.07	HU	52%	-	2.92	-
Retail	820	33.00	KSF	33%	142,512	1.87	267,060
Office	710	9.77	KSF	50%	30,795	1.83	56,247
Industrial	140	2.89	KSF	50%	14,430	1.83	26,356
Institutional	730	22.59	KSF	50%	12,230	1.83	22,338
Lodging	310	6.52	Room	50%	34,773	1.83	63,513
				Total	**750,686**	**2.01**	**1,507,804**

1. Local vehicle trip generation rates from the GSATS Traffic Model, for housing units by size trip rates are calibrated based off of GSATS residential trip generation rates
2. Derived using local traffic counts and Federal Highway Administration, 2017 National Household Travel Survey .

Trip Generation Rates

The GSATS Traffic Model provides weekday vehicle trip end rates specific to Horry County residential and nonresidential development types. These trip rates are adjusted to fit into the housing unit size thresholds used throughout the report. Shown in Figure 46, cells with yellow shading indicate the survey results, which yield the unadjusted number of persons and vehicles available per housing unit. Unadjusted persons per housing unit estimates, derived from PUMS data, are adjusted to match the control totals for unincorporated Horry County – 2.54 persons per housing unit. For the purpose of transportation fees, unadjusted vehicles per housing unit are adjusted to control totals in unincorporated Horry County – 1.83 vehicles per unit.

Figure 46. Countywide Vehicle Trip Ends and Persons by Bedroom Range

Bedroom Range	Persons[1]	Vehicles Available[1]	Housing Units[1]	Housing Mix	Unadjusted PPHU	Adjusted PPHU[2]	Unadjusted VPHU	Adjusted VPHU[2]
0-1	97	52	73	1%	1.33	**1.59**	0.71	0.73
2	334	258	249	4%	1.34	**1.60**	1.04	1.07
3	2,797	2,237	1,530	23%	1.83	**2.18**	1.46	1.50
4	8,077	6,946	3,717	57%	2.17	**2.60**	1.87	1.92
5+	2,612	2,162	967	15%	2.70	**3.23**	2.24	2.30
Total	13,917	11,655	6,536	100%	2.13	**2.54**	1.78	1.83

ITE Code	AWVTE per Person	AWVTE per Vehicle	AWVTE per HU	Housing Mix	Persons per Household	Vehicles per Household
210 SFD	2.01	4.83	7.16	75%	3.56	1.48
221 Apt	3.20	4.93	4.39	25%	1.37	0.89
Weighted Avg	2.30	4.85	6.48	100%	3.02	1.34

AWVTE per Housing Unit

Bedroom Range	AWVTE per HU Based on Persons[3]	AWVTE per HU Based on Vehicles[4]	AWVTE per Housing Unit[5]
0-1	3.66	3.54	**3.60**
2	3.68	5.19	**4.44**
3	5.01	7.28	**6.15**
4	5.98	9.31	**7.65**
5+	7.43	11.16	**9.30**
Average	5.84	8.88	**7.36**

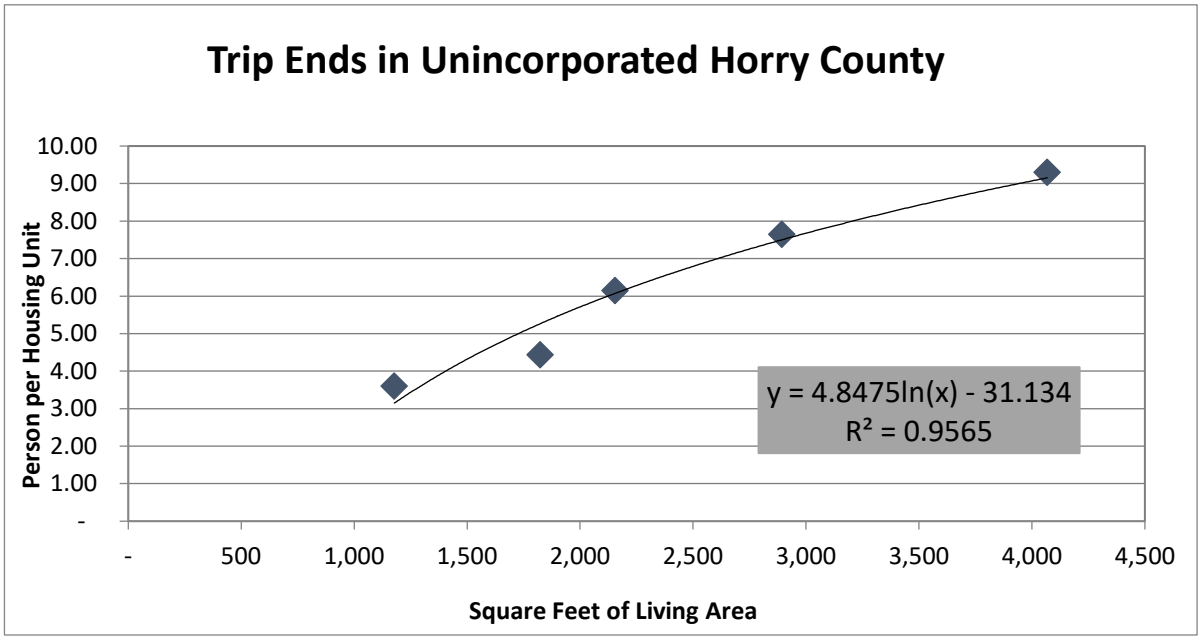
1. American Community Survey, Public Use Microdata Sample for South Carolina PUMAs 1101 and 1102 (2016-2020 5-Year unweighted data).
2. Adjusted multipliers are scaled to make the average PUMS values match control totals for unincorporated Horry County based on 2016-2020 American Community Survey 5-Year Estimates.
3. Adjusted persons per housing unit multiplied by GSATS adjusted weighted average trip rate per person.
4. Adjusted vehicles available per housing unit multiplied by GSATS adjusted average trip rate per vehicle.
5. Average trip rates based on persons and vehicles per housing unit.

To derive average weekday vehicle trip ends by dwelling size, TischlerBise uses 2020 U.S. Census Bureau data for housing units constructed in the South Atlantic region. Average floor area and weekday vehicle trip ends, by bedroom range, are plotted in Figure 47, with a logarithmic trend line derived from the four averages in unincorporated Horry County. TischlerBise used the trend line formula to derive estimated trip ends by housing unit size, in 500 square feet intervals

Figure 47. Unincorporated County Vehicle Trip Ends by Square Feet of Living Space

Average weekday trips derived from 2016-2020 ACS PUMS data for unincorporated Horry County. Unit size from the 2020 U.S. Census Bureau average for units constructed in the Census South Atlantic region.

Average per Household			Fitted-Curve Values	
Bedrooms	Square Feet	Trip Ends	Sq Ft Range	Trip Ends
0-1	1,178	3.60	1,000 or less	2.35
2	1,824	4.44	1,001 to 1,500	4.32
3	2,155	6.15	1,501 to 2,000	5.71
4	2,893	7.65	2,001 to 2,500	6.79
5+	4,068	9.30	2,501 to 3,000	7.68
			3,001 to 3,500	8.42
			3,501 or more	9.07



Adjustments for Commuting Patterns and Pass-By Trips

To calculate Transportation Development Impact Fees, trip generation rates require an adjustment factor to avoid double counting each trip at both the origin and destination points. Therefore, the basic trip adjustment factor is 50 percent. As discussed further below, the development fee methodology includes additional adjustments to make the fees proportionate to the infrastructure demand for particular types of development.

Residential development has a larger trip adjustment factor of 52 percent to account for commuters leaving unincorporated Horry County for work. According to the 2009 National Household Travel Survey, weekday work trips are typically 31 percent of production trips (i.e., all out-bound trips, which are 50 percent of all trips). As shown in the figure, the Census Bureau's web application OnTheMap indicates that 10 percent of unincorporated County resident workers traveled outside the unincorporated County

for work in 2019. In combination, these factors (0.31 X 0.50 X 0.10 = .02) support the additional 2 percent allocation of trips to residential development (50 percent plus 2 percent).

Figure 48. Inflow/Outflow Analysis (Unincorporated County)

Trip Adjustment Factor for Commuters: Unincorporated County

Employed Horry County Uninc. Residents (2019)	86,597
Uninc. Residents Working in Uninc. County (2019)	77,795
Uninc. Residents Commuting Outside of the Uninc. County for Work	8,802
Percent Commuting Out of the County	10%
Additional Production Trips	**2%**

Standard Trip Adjustment Factor	**50%**
Residential Trip Adjustment Factor	**52%**

Source: U.S. Census, OnTheMap Application, 2019

For commercial development, the trip adjustment factor is less than 50 percent because retail development and some services attract vehicles as they pass by on arterial and collector roads. For example, when someone stops at a convenience store on the way home from work, the convenience store is not the primary destination. For the average shopping center, the ITE data indicates that 34 percent of the vehicles that enter are passing by on their way to some other primary destination. The remaining 66 percent of attraction trips have the commercial site as their primary destination. Because attraction trips are half of all trips, the trip adjustment factor is 66 percent multiplied by 50 percent, or approximately 33 percent of the trips. These factors are shown to derive inbound vehicle trips for each type of nonresidential land use.

Vehicle Trips

Figure 49 shows the calculation of vehicle trips generated by existing development in unincorporated Horry County. When the average weekday VTE and Trip Adjustment percentages (discussed above) are multiplied by the development unit quantities for unincorporated Horry County from the Land Use Assumption in Appendix B (housing units and nonresidential square feet), the total number of vehicle trips generated by existing development is determined. As shown in Figure 49, this totals 750,686 adjusted vehicle trips.

Figure 49. Vehicle Trips (Unincorporated County)

Development Type	ITE Code	Weekday VTE[1]	Dev Unit	Trip Adj	2022 Trips
Single Family	210	7.16	HU	52%	430,139
Multifamily	220	4.39	HU	52%	85,807
Retail	820	33.00	KSF	33%	142,512
Office	710	9.77	KSF	50%	30,795
Industrial	140	2.89	KSF	50%	14,430
Institutional	730	22.59	KSF	50%	12,230
Lodging	310	6.52	Room	50%	34,773
				Total	**750,686**

1. Local vehicle trip generation rates from the GSATS Traffic Model
2. Derived using local traffic counts and Federal Highway Administration, 2017 National Household Travel Survey .

Average Trip Length

For the incremental expansion methodology, it is necessary to determine the average trip length on the unincorporated County's arterial and collector network. To do this, national trip generation rates and average trip lengths from the *2017 National Household Travel Survey* are used to determine *expected* VMT on the unincorporated County's transportation network. Figure 50 shows average trip lengths from the *National Household Travel Survey (2017).*

Figure 50. National Average Trip Lengths

Land Use	National Avg Trip Length (miles)
Residential	12.32
Retail	7.90
Office and Other	7.70
Industrial	7.70
Institutional	7.70
Lodging	7.70

** U.S. Department of Transportation, Federal Highway Administration, 2017 National Household Transportation Survey, adjusted for land use*

The national average trip length needs to be adjusted to reflect existing local demand on the unincorporated County's network. To do this, TischlerBise first determines expected demand (VMT) on the unincorporated County's complete transportation network using the above national travel demand characteristics. Average daily trips from existing development in each land use category are multiplied by the applicable average trip lengths.

Figure 51. Expected VMT in Unincorporated Horry County

Land Use	Average Daily Trips	National Avg Trip Length (miles)	Expected VMT
Single Family	430,139	12.32	5,299,312
Multifamily	85,807	12.32	1,057,142
Retail	142,512	7.90	1,125,845
Office	30,795	7.70	237,122
Industrial	14,430	7.70	111,111
Institutional	12,230	7.70	94,171
Lodging	34,773	7.70	267,752
Total	**750,686**		**8,192,455**

Because expected VMT reflects anticipated travel demand from unincorporated County development on the unincorporated County roadway system, it is therefore higher than existing VMT on the arterial system in the unincorporated County. To calibrate demand on the arterial system, expected travel demand is compared to existing estimated VMT determined from the County's street segment database (all reflecting unincorporated County). The ratio between existing and expected VMT provides a local adjustment factor that can be applied to national average trip lengths by type of land use. The local adjustment factor is shown in Figure 52.

Figure 52. Local Trip Length Adjustment Factor

Horry County Transportation Network	
Estimated Local VMT on System Level Roads*	1,943,318
Expected Local VMT on All Roads^	8,192,455
Actual to Expected VMT on System Roads	**23.7%**

**Assumed LOS D on arterials and collectors*
^ See Figure 55.

As shown in Figure 53, the national average trips lengths are adjusted to reflect local conditions.

Figure 53. Local Average Trip Lengths by Land Use

Land Use	National Avg Trip Length (miles)	Local Adj. Factor	Local Trip Length
Residential	12.32	23.7%	2.92
Retail	7.90	23.7%	1.87
Office	7.70	23.7%	1.83
Industrial	7.70	23.7%	1.83
Institutional	7.70	23.7%	1.83
Lodging	7.70	23.7%	1.83

Sources: National trip length from 2017 NHTS and TischlerBise; with local adjustment.

Using the above factors, VMT per service unit is calculated, shown below in Figure 54.

Figure 54. VMT per Development Unit on System Network (Unincorporated County)

Development Type	ITE Code	Weekday VTE[1]	Trip Adj	Adj Trip Rate	Local Trip Length[1]	VMT per Development Unit
Single Family	210	7.16	52%	3.72	2.92	10.88
Multifamily	220	4.39	52%	2.28	2.92	6.67
Households by Size VMT Factors						
1,000 or less	-	*2.35*	*52%*	*1.22*	*2.92*	*3.57*
1,001 to 1,500	-	*4.32*	*52%*	*2.25*	*2.92*	*6.56*
1,501 to 2,000	-	*5.71*	*52%*	*2.97*	*2.92*	*8.68*
2,001 to 2,500	-	*6.79*	*52%*	*3.53*	*2.92*	*10.32*
2,501 to 3,000	-	*7.68*	*52%*	*3.99*	*2.92*	*11.67*
3,001 to 3,500	-	*8.42*	*52%*	*4.38*	*2.92*	*12.80*
3,501 or more	-	*9.07*	*52%*	*4.72*	*2.92*	*13.78*
Retail	820	33.00	33%	10.89	20.41	222.24
Office	710	9.77	50%	4.89	8.92	43.59
Industrial	140	2.89	50%	1.45	2.64	3.81
Institutional	730	22.59	50%	11.30	20.63	233.02
Lodging	310	6.52	50%	3.26	5.95	19.41

1. Local vehicle trip generation rates from the GSATS Traffic Model, for housing units by size trip rates are calibrated based off of GSATS residential trip generation rates

2. Derived using local traffic counts and Federal Highway Administration, 2017 National Household Travel Survey .

Analysis of Current Demand

Horry County Engineering Department provided an inventory of existing arterial and collector road segments, including segment lengths and number of lanes. Multiplying each segment's length by the number of lanes yields the number of lane miles per segment. The County's arterial and collector road network consists of 229 lane miles. Generally, the County's arterial and collector streets operate at a Level of Service D, and the average number of lanes for arterials is 2 to 4 lanes. On average, a lane mile can accommodate 8,500 vehicles per lane mile over a 24-hour period. This means that the total daily lane mile capacity of the City's arterial and collector road network of 229 lane miles is almost 2 million vehicle miles of capacity. See Figure 55.

Figure 55. Vehicle Miles of Capacity

Vehicle Lane Miles (Uninc. Co. System Roads)	229
Capacity per Lane*	8,500
Vehicle Miles of Capacity (Uninc. Co. System Roads)	1,943,318

** SCDOT and FLDOT LOS D, via Horry County*

Lane Mile Projection Based on Current Level of Service

The vehicle trip factors are combined with development projections to estimate the 10-year increase in VMT in unincorporated Horry County. Shown in Figure 56, there is an estimated 1.9 million VMT in unincorporated county and there is a 495,000 projected increase in VMT over the next 10 years. As mentioned, there are 229 arterial and collector existing lane miles in the unincorporated county road network.

Further illustrated at the bottom of Figure 56 are the needed arterial and collector lane miles needed to continue the County's current level of service based on the growth of VMT. Over the next ten years, the unincorporated county road network will need to grow by 58.2 lane miles to accommodate projected growth and continue servicing at the existing levels.

Figure 56. 10-Year Vehicle Miles Traveled Projection and Lane Mile Need (Unincorporated County)

Multi-year intervals

Unincorporated Peak		2022	2023	2024	2025	2026	2027	2032	10-Year
		Base	1	2	3	4	5	10	Increase
Development	Single Family Units	115,529	118,685	121,841	124,998	128,154	131,310	148,375	**32,846**
	Multifamily Units	37,588	38,615	39,642	40,669	41,696	42,723	48,275	**10,687**
	Retail	13,086	13,296	13,506	13,715	13,925	14,135	15,190	**2,103**
	Office/Service	6,304	6,405	6,506	6,607	6,708	6,809	7,317	**1,013**
	Industrial	9,986	10,146	10,306	10,466	10,626	10,786	11,591	**1,605**
	Institutional	1,083	1,100	1,117	1,135	1,152	1,169	1,257	**174**
	Lodging (Rooms/Sites)	10,667	10,773	10,881	10,990	11,100	11,211	11,783	**1,116**
Average Weekday Vehicle Trips	Single Family Trips	430,139	441,889	453,640	465,391	477,141	488,892	552,429	**122,290**
	Multifamily Trips	85,807	88,151	90,495	92,839	95,183	97,527	110,202	**24,395**
	Retail Trips	142,512	144,794	147,077	149,360	151,643	153,926	165,414	**22,902**
	Office/Service Trips	30,795	31,288	31,781	32,274	32,768	33,261	35,743	**4,948**
	Industrial Trips	14,430	14,661	14,892	15,123	15,355	15,586	16,749	**2,319**
	Institutional Trips	12,230	12,426	12,621	12,817	13,013	13,209	14,195	**1,965**
	Lodging Trips	34,773	35,121	35,472	35,827	36,185	36,547	38,411	**3,638**
	Total Vehicle Trips	**750,686**	**768,330**	**785,978**	**803,631**	**821,288**	**838,948**	**933,143**	**182,457**
VMT	**Vehicle Miles of Travel**	**1,943,318**	**1,991,099**	**2,038,888**	**2,086,687**	**2,134,491**	**2,182,302**	**2,438,416**	**495,098**
NEED	**Arterial & Collector Lane Miles**	**228.6**	**234.2**	**239.9**	**245.5**	**251.1**	**256.7**	**286.9**	**58.2**
	Additional Lane Miles		5.6	5.6	5.6	5.6	5.6	6.6	**58.2**

Potential Impact Fee Eligible Transportation Projects and Average Cost per Lane Mile

To understand the construction cost per lane mile in Horry County, staff provided a list of future road projects that includes the lane miles and cost of the project. Furthermore, the list of projects in Figure 57 are currently not to be funded by the one-cent sales tax collected in Horry County for roadway improvements. Thus, these projects are eligible for impact fee funding. Importantly, the County is not committed to constructing these projects, rather the list is used to determine current road construction costs and as an example of future projects that would be impact fee eligible. Shown at the bottom of the figure, the average cost for current impact fee eligible projects is $7.1 million per lane mile.

Figure 57. Potential Impact Fee Eligible Transportation Projects

Project Location	Yr. of Construction	Total Lane Miles	Cost (2022 $)	Cost/ Lane Mile
Big Block Road Improvements - and Scipio Extension	2032	4.3	$50,000,000	$11,627,907
SC 90 widening - Section A - 1 of 4 sections covering entire length of SC 90 (501 Bus to US 17 Little River)	2042	18.0	$100,000,000	$5,555,556
SC 90 widening - Section B - 1 of 4 sections covering entire length of SC 90 (501 Bus to US 17 Little River)	2042	18.0	$100,000,000	$5,555,556
Myrtle Ridge Drive	2032	2.4	$35,000,000	$14,522,822
SC 57	2042	13.5	$80,000,000	$5,925,926
River Oaks Drive	2032	11.4	$65,000,000	$5,701,754
US 17 Bypass Widening - Hwy 544 to Holmestown / Glenns Bay Interchange	2032	3.6	$45,000,000	$12,500,000
US 17 Bypass Widening - Holmestown / Glenns Bay Interchange to Horry County Line (17 Bus interchange)	2042	7.4	$70,000,000	$9,459,459
SC 179	2042	1.5	$7,000,000	$4,545,455
Mt. Zion Road (SC 90 to SC 57)	2042	1.4	$5,000,000	$3,703,704
Hwy 544 and Myrtle Ridge Rd	2032	1.5	$15,000,000	$10,000,000
Middle Ridge Extension 2	2042	1.6	$15,000,000	$9,375,000
Chestnut Rd and Kings Rd Intersection	2042	0.4	$2,500,000	$6,756,757
Cultra Road Widening	2042	5.3	$18,000,000	$3,377,111
Hwy 111	2042	10.5	$50,000,000	$4,761,905
Hwy 319 - improvements; turn lanes	2042	5.8	$50,000,000	$8,695,652
Four Mile Rd - improvements; turn lanes	2042	3.0	$25,000,000	$8,333,333
McDowell Shortcut Rd Widening	2042	2.7	$35,000,000	$12,962,963
Tournament Blvd - McDowell Shortcut to SC 707	2042	2.8	$25,000,000	$8,928,571
Gardner Lacy Extension	2042	7.2	$75,000,000	$10,416,667
	Total	**122.3**	**$867,500,000**	**$7,096,115**

10-Year Capital Cost per VMT

The previous sections are summarized below in Figure 58. Indicated at the top of the figure, of the 58.2 growth-related lane miles needed over the next ten years 39.1 lane miles are anticipated to be constructed by the RIDE III/IV program. As mentioned, the RIDE programs and impact fee program are to operate separately and fund separate projects. Thus, the impact fee program is anticipated to fund 19.1 lane miles over the next ten years.

Based on the average cost of road construction ($7.1 million per lane mile) the 19.1 lane miles eligible for impact fees will cost $135.6 million over the next ten years. At the bottom of the figure, the ten-year cost is compared to the ten-year increase in VMT. As a result, there is a capital cost per VMT of $273.91 ($135,610,000 / 495,098 VMT = $273.91 per VMT, rounded).

Figure 58. Capital Cost per VMT

Horry County	Lane Miles
Total 10-Year Growth-Related Need	58.2
Ride III/IV 10-Year Growth-Related Projects	39.1
Impact Fee Eligible Projects	**19.1**

Impact Fee Eligible Lane Miles	19.1
Cost per Lane Mile	$7,100,000
10-Year Impact Fee Eligible Project Cost	**$135,610,000**

10-Year Impact Fee Eligible Project Cost	$135,610,000
10-Year Increase in Vehicle Miles Traveled	495,098
Capital Cost per Vehicle Miles Traveled	**$273.91**

Credit for Future Debt Payments

Credits are included in development impact fee calculations to ensure fee-payers avoid potential double payment for other revenues generated for capital expenditures. However, in this case, the one-cent sales tax that is being collected countywide in Horry County under the RIDE program is funding road projects that will not be funded by the impact fee program. As shown above, the impact fee analysis has excluded the anticipated growth-related construction by the RIDE III and, potential, RIDE IV programs. Thus, no credit is necessary in the Transportation Development Impact Fee.

Maximum Supportable Transportation Development Impact Fee

The cost factors for each component of Horry County's Transportation Development Impact Fee are listed in the following figure. The development impact fees for transportation projects are based on vehicle miles traveled (VMT) per household for residential development and VMT per 1,000 square feet for nonresidential development.

The fee components are calculated per VMT: the maximum supportable fee is calculated by multiplying the total net cost per VMT by the VMT generation factor for each land use. For example, the maximum supportable fee for a housing unit that is 1,000 square foot or less is $978 ($273.91 per VMT x 3.57 = $978, rounded).

The results of the 2019 Development Impact Fee Study are included in the figure to illustrate potential changes in impact fee, if adopted at the maximum supportable level. Compared to the 2019 study, local trip factors have been included in the fee calculation from the GSATS Traffic Model. The local traffic analysis found that Horry County nonresidential development has higher trip generation than nation averages, which were used in the 2019 impact fee study. Thus, the nonresidential maximum supportable fees are higher in this updated study.

The fees represent the highest amount allowable for residential and nonresidential development, reflecting new growth's share of capital facilities' costs. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 59. Maximum Supportable Transportation Development Impact Fee (Unincorporated County)

Fee Component	Cost per VMT
Impact Fee Eligible Projects	$273.91
Total	**$273.91**

Residential

Housing Type	Demand Unit	Avg Wkdy VMT*	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
1,000 or less	DU	3.57	**$978**	$1,836	($858)
1,001 to 1,500	DU	6.56	**$1,797**	$1,836	($39)
1,501 to 2,000	DU	8.68	**$2,378**	$1,836	$542
2,001 to 2,500	DU	10.32	**$2,827**	$3,113	($286)
2,501 to 3,000	DU	11.67	**$3,197**	$3,113	$84
3,001 to 3,500	DU	12.80	**$3,506**	$3,113	$393
3,501 or more	DU	13.78	**$3,774**	$3,113	$661

Nonresidential

Development Type	Demand Unit	Avg Wkdy VMT*	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
Retail	1,000 Sq. Ft.	20.41	**$5,591**	$5,034	$557
Office	1,000 Sq. Ft.	8.92	**$2,443**	$1,918	$525
Industrial	1,000 Sq. Ft.	2.64	**$723**	$774	($51)
Institutional	1,000 Sq. Ft.	20.63	**$5,651**	$3,845	$1,806
Lodging	Room	5.95	**$1,630**	$1,645	($15)

**Product of local vehicle trip generation rates from the GSATS Traffic Model and TischlerBise calculations*

Revenue from Transportation Development Impact Fee

The total transportation capital costs for impact fee eligible projects and estimated revenue from the Transportation Development Impact Fee is listed below in Figure 60. To estimate single family revenue the 2,001 square feet to 2,500 square feet fee is used, and for multi-family the 1,001 square feet to 1,500 square feet fee is used. Not listed are the road projects that are under the RIDE III and, potential, RIDE IV programs. Those programs include non-growth-related projects and are funded through a one-cent sales tax.

Revenue generated from development impact fees is derived by multiplying projected growth in the unincorporated County by the respective development impact fee. The maximum supportable impact fees are projected to generate $130.3 million over the next ten years. Based on the actual mix of future residential construction, the projected transportation fee revenue shown below may change.

Figure 60. Estimated Revenue from Transportation Development Impact Fee

Infrastructure Costs for Transportation

	Total Cost	Growth Cost
Impact Fee Eligible Projects	$135,610,000	$135,610,000
Total Expenditures	**$135,610,000**	**$135,610,000**

Projected Development Impact Fee Revenue

		Single Family $2,827 per unit	Multifamily $1,797 per unit	Retail $5,591 per KSF	Office $2,443 per KSF	Industrial $723 per KSF	Institutional $5,651 per KSF	Lodging $1,630 per room
Year		Housing Units	Housing Units	KSF	KSF	KSF	KSF	Rooms
Base	2022	115,529	37,588	13,086	6,304	9,986	1,083	10,667
Year 1	2023	118,685	38,615	13,296	6,405	10,146	1,100	10,773
Year 2	2024	121,841	39,642	13,506	6,506	10,306	1,117	10,881
Year 3	2025	124,998	40,669	13,715	6,607	10,466	1,135	10,990
Year 4	2026	128,154	41,696	13,925	6,708	10,626	1,152	11,100
Year 5	2027	131,310	42,723	14,135	6,809	10,786	1,169	11,211
Year 6	2028	134,466	43,749	14,340	6,908	10,942	1,186	11,323
Year 7	2029	137,622	44,776	14,547	7,008	11,101	1,204	11,436
Year 8	2030	140,778	45,803	14,758	7,109	11,262	1,221	11,550
Year 9	2031	144,576	47,039	14,972	7,212	11,425	1,239	11,666
Year 10	2032	148,375	48,275	15,190	7,317	11,591	1,257	11,783
10-Year Increase		32,846	10,687	2,103	1,013	1,605	174	1,116
Projected Revenue =>		$92,854,359	$19,203,745	$11,758,145	$2,474,917	$1,160,285	$983,285	$1,819,019

Projected Revenue =>	**$130,254,000**
Total Expenditures =>	**$135,610,000**
Non-Impact Fee Revenues =>	**$5,356,000**

SOLID WASTE CIP AND DEVELOPMENT IMPACT FEE

Methodology

Section 6-1-920(18c) of the South Carolina Development Impact Fee Act states that a development impact fee may be imposed on public facilities including:

> *"…solid waste and recycling collection, treatment, and disposal facilities."*

The Solid Waste Development Impact Fee is calculated only for residential development and on a per capita basis. The incremental expansion methodology is used to calculate the current level of service for:

- Convenience centers: Land and facilities, including heavy machinery/equipment at the center, serving unincorporated County

Section 6-1-960(1) of the South Carolina Development Impact Fee Act requires:

> *"a general description of all existing facilities and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage."*

Section 6-1-960(2) of the South Carolina Development Impact Fee Act requires:

> *"an analysis of total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by qualified a professional using generally accepted principles and professional standards."*

Residential development impact fees are calculated on a per housing unit basis using persons per household factors by type of housing unit. Based on the services and facilities being provided by Horry County, it has been determined that the current level of service will be calculated based on the unincorporated population of Horry County because the municipalities provide solid waste services or contract a third-party to provide the services.

Solid Waste Service Area

The service area for solid waste is the unincorporated County. Horry County plans and develops convenience center facilities to serve the unincorporated County.

Solid Waste Service Units

Section 6-1-960(4) of the South Carolina Development Impact Fee Act requires:

> *"a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate."*

The "service unit" used for residential development is persons per household (PPHH). This is a measure of the average number of persons residing in each occupied housing unit (see Figure 61). Factors have been calculated based on data obtained from the U.S. Census Bureau's 2020 ACS PUMS 5-year estimates (further discussed in Appendix B).

Figure 61. Residential Service Units (Unincorporated Horry County)

Development Type	Persons per Household[1]
1,001 to 1,500	1.19
1,501 to 2,000	1.93
2,001 to 2,500	2.45
2,501 to 3,000	2.86
3,001 to 3,500	3.19
3,501 or more	3.47

[1] See Land Use Assumptions

Solid Waste Facilities Level of Service & Cost Analysis

The Solid Waste Development Impact Fee includes County convenience centers, where County residents can bring waste and recycling. Additional expansion will be necessary to serve future growth to maintain current levels of service. An incremental methodology is used with 2022 unincorporated peak population as the base year demand factor. Lodging establishments typically provide hauling service and are therefore not included in the demand base.

Horry County convenience centers are shown in Figure 62. The County is currently served by 24 facilities on 53.1 acres. A new convenience center with required equipment is estimated at $1,904,000 per facility (see Figure 63). To calculate the current level of service, the number of facilities is divided by current unincorporated residential peak population (peak population without lodging population). This results in 0.0617 facilities per 1,000 persons (24 facilities / 388,919 residents = 0.0617 facilities per 1,000 persons, rounded).

The cost per person of $117.48 for facility space is calculated by multiplying 0.0617 facilities per 1,000 persons x $1,904,000 per facility = $117.48 per person.

Figure 62. Convenience Center Level of Service and Cost Factors

Center	Site #	Site Acreage	Office Building	Self-Contained Compactors	Stationary Compactor	Open Top Roll-Off	Recycling Roll-Off	Total Units	Total Value
North Myrtle Beach	1	1.9	1	5	1	4	3	14	$1,465,500
Loris Swap Shop	2	1.0	1	3	0	6	2	12	$1,338,000
Mount Olive	3	2.0	1	1	0	6	2	10	$1,352,000
McDowell Shortcut	4	8.4	1	8	2	8	3	22	$1,924,000
Aynor	5	2.0	1	2	0	6	2	11	$1,372,500
Socastee	6	4.1	1	8	2	8	3	22	$1,710,000
Homewood Swap Shop	7	3.2	1	3	0	7	2	13	$1,453,000
Landfill	8	1.1	1	2	0	5	2	10	$1,318,500
Ketchuptown	9	1.4	1	1	0	4	2	8	$1,311,000
Recycle Road	10	1.0	1	1	0	6	2	10	$1,304,000
Red Bluff	11	1.5	1	1	0	6	2	10	$1,329,000
Jackson Bluff Swap Shop	12	1.0	1	5	0	5	2	13	$1,364,500
Longs	13	1.3	1	1	0	6	2	10	$1,321,000
Kates Bay Road	14	2.4	1	2	0	6	2	11	$1,390,000
Browntown	15	1.6	1	2	0	6	3	12	$1,368,000
Sarvis	16	2.8	1	1	0	6	3	11	$1,412,000
Toddville	17	1.1	1	1	0	6	2	10	$1,309,000
Brooksville	18	1.2	1	3	0	6	2	12	$1,345,500
Dorman's Swap Shop	19	2.0	1	1	0	6	2	10	$1,354,000
Bucksport	20	1.5	1	1	0	6	2	10	$1,328,000
Duford	21	2.0	1	1	0	6	2	10	$1,354,000
Dog Bluff	22	1.1	1	1	0	6	2	10	$1,307,500
Scipio Lane	23	1.5	1	6	1	7	3	18	$1,485,000
Carolina Forest	24	6.2	1	5	1	6	3	16	$1,695,500
	Totals	53.1	24	65	7	144	55	295	$33,911,500

Level-of-Service Standards	Centers
Residential Share	100%
Number of Facilities	24
2022 Uninc. Peak Population in Hsg Units (excl. hotels, camping, etc)	388,919
Convenience Centers per 1,000 Persons	**0.0617**

Cost Analysis	Centers
Convenience Centers per 1,000 Persons	0.0617
2022 Anticipated Cost for Prototypical Facility	$1,904,000
Capital Cost Per Person	**$117.48**

Average cost per facility is based on recent construction of the McDowell Shortcut Convenience Center. Cost estimates were provided by Horry County from 2017. TischlerBise adjusted the costs to 2022 dollars using the Engineering News Record Construction Cost Index national average, resulting in an 18 percent increase from 2017 to 2022 (3.6 percent annually).

Figure 63. Prototype Convenience Center Construction Cost

	2017	*2022 Adjusted**
Contractor Cost	$1,044,880	$1,233,673
Land (avg site of 2.2 ac.)	$110,000	$129,875
Building	$22,000	$25,975
Electric	$19,000	$22,433
Water/Sewer	$20,000	$23,614
Wiring	$17,000	$20,072
Other	$36,000	$42,505
Stationary Compactor	$100,000	$118,068
Self-Contained Compactors	$136,000	$160,573
Recycling Roll-Off	$48,000	$56,673
Open Top Roll-Off	$60,000	$70,841
Total	**$1,612,880**	**$1,904,301**
Total Rounded	**$1,613,000**	**$1,904,000**

** Adjusted to 2022 dollars using ENR Construction Cost Index at 3.6% annual increase*

Source: Horry County

Projection of Solid Waste Growth-Related Facility Needs

Section 6-1-960(5) of the South Carolina Development Impact Fee Act requires:

> *"a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration."*

Section 6-1-960(7) of the South Carolina Development Impact Fee Act requires:

> *"the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years."*

To estimate the 10-year growth needs for convenience centers in the unincorporated County, the current level of service (0.0617 facilities per 1,000 persons) is applied to the residential growth projected for Unincorporated Horry County.

The Unincorporated County population (peak in Housing Units) is projected to increase by 110,572 residents over the next ten years (see Appendix B). Shown in Figure 64, a total of 6.8 facilities are needed to accommodate growth. By applying average costs per facility, total expenditures to serve growth is projected at approximately $13 million.

Figure 64. 10-Year Convenience Center Needs to Accommodate Growth

Type of Infrastructure	Level of Service		Demand Unit	Unit Cost
Convenience Center	Residential	0.0617	per 1,000 persons	$1,904,000

Growth-Related Need for Solid Waste Facilities			
Year		Uninc. Peak Pop. in Hsg Units	Total Convenience Ctrs.
Base	2022	388,919	24.0
Year 1	2023	399,544	24.7
Year 2	2024	410,168	25.3
Year 3	2025	420,793	26.0
Year 4	2026	431,417	26.6
Year 5	2027	442,042	27.3
Year 6	2028	452,667	27.9
Year 7	2029	463,291	28.6
Year 8	2030	473,916	29.2
Year 9	2031	486,703	30.0
Year 10	2032	499,490	30.8
Ten-Year Increase		110,572	6.8

Growth-Related Expenditures for Convenience Centers	$12,947,200

The County has identified the following seven locations for future expansion of facility space:

Figure 65. Horry County Planned Convenience Center Locations

Expansion of Existing Facility

1. Holmestown Road – Current site (Scipio Lane) is at maximum capacity.
2. Wampee – Current site (North Myrtle Beach) will soon be at maximum capacity.
3. Buck Creek – Current site (Longs) will soon be at maximum capacity.
4. Coastal – Current site (Jackson Bluff) will soon be at maximum capacity.

New Facility Location

5. Forestbrook – Highway 501 Corridor Between Forestbrook Road and Carolina Forest
6. Mount Vernon – Along Redbluff Road between 905 and Daisy
7. Veterans Highway – Highway 90 Corridor Near Highway 22 Interchange

Source: Horry County

Maximum Supportable Solid Waste Development Impact Fee

Figure 66 shows the maximum supportable Solid Waste Development Impact Fee for the unincorporated County. Development impact fees for solid waste facilities are based on household size (i.e., persons per household) for residential development. The fee is only assessed on residential development as nonresidential and lodging land uses procure solid waste services from private haulers. Differentiating the fee by housing size allows the results to be proportional to the level of demand (persons per household) that a residential development will place on the need for infrastructure based on level of service standards. For residential development, the total cost per person is multiplied by the household size to calculate the proposed fee by type of housing unit.

The results of the 2019 Development Impact Fee Study are included in the figure to illustrate potential changes in impact fee, if adopted at the maximum supportable level.

The fees represent the highest amount supportable for each type of development, which represents new growth's fair share of the cost for capital facilities. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 66. Maximum Supportable Solid Waste Development Impact Fee

Fee Component	Cost per Person
Convenience Centers Facilities	$117.48
Total	**$117.48**

Residential

Sq. Ft. Range	Demand Unit	Persons per Household	Maximum Supportable Fee	2019 TischlerBise Study Results	Increase/ (Decrease)
1,000 or less	Dwelling Unit	1.19	**$140**	$228	($88)
1,001 to 1,500	Dwelling Unit	1.93	**$227**	$228	($1)
1,501 to 2,000	Dwelling Unit	2.45	**$288**	$228	$60
2,001 to 2,500	Dwelling Unit	2.86	**$336**	$273	$63
2,501 to 3,000	Dwelling Unit	3.19	**$375**	$273	$102
3,001 to 3,500	Dwelling Unit	3.47	**$408**	$273	$135
3,501 or more	Dwelling Unit	3.71	**$436**	$273	$163

Revenue from Solid Waste Development Impact Fee

Revenue from the Solid Waste Development Impact Fee is estimated in Figure 67, if the fee were implemented at the maximum allowable level and growth occurs as projected. To estimate single family revenue the 2,001 square feet to 2,500 square feet fee is used, and for multi-family the 1,001 square feet to 1,500 square feet fee is used.

Based on the growth projections shown below and at the maximum development impact fee amount shown below, development impact fee revenue over the next ten years is projected at approximately $13.4 million. Based on the actual mix of future residential construction, the projected solid waste fee revenue shown below may change.

Figure 67. Estimated Revenue from Solid Waste Development Impact Fee

Infrastructure Costs for Solid Waste Facilities

	Total Cost	Growth Cost
Convenience Centers	$12,947,200	$12,947,200
Total Expenditures	**$12,947,200**	**$12,947,200**

Projected Development Impact Fee Revenue

		Single Family $336 per unit	Multifamily $227 per unit
Year		**Housing Units**	**Housing Units**
Base	2022	115,529	37,588
Year 1	2023	118,685	38,615
Year 2	2024	121,841	39,642
Year 3	2025	124,998	40,669
Year 4	2026	128,154	41,696
Year 5	2027	131,310	42,723
Year 6	2028	134,466	43,749
Year 7	2029	137,622	44,776
Year 8	2030	140,778	45,803
Year 9	2031	144,576	47,039
Year 10	2032	148,375	48,275
Ten-Year Increase		32,846	10,687
Projected Revenue =>		*$11,036,103*	*$2,425,849*
		Projected Revenue =>	**$13,461,952**
		Total Expenditures =>	**$12,947,200**
		Non-Impact Fee Revenues =>	**$0**

STORM WATER CIP AND DEVELOPMENT IMPACT FEE

Methodology

Section 6-1-920(18e) of the South Carolina Development Impact Fee Act states that a development impact fee may be imposed on public facilities including:

> *". . . storm water transmission, retention, detention, treatment, and disposal facilities and flood control facilities."*

Storm Water Development Impact Fees are derived using a plan-based methodology. Horry County staff identified storm water system improvements necessary to serve growth in the unincorporated County. The Storm Water Capital Improvement Plan for Development Impact Fees identified in this report reflects a subset of total Horry County Stormwater Capital Improvement projects planned to serve both existing and future development. (See *Horry County Financial Plan FY2020*.)

The cost of growth-related storm water system improvements is allocated to the acreage expected to be developed based on Horry County analysis of current and projected development by watershed along with dwelling units by acre, floor area ratios (FAR) by nonresidential land use type, and average impervious surface percentages (from Horry County). FAR is the ratio of a building's total floor area to the size of the piece of land on which it is situated. For instance, a 5,000 square foot building on a 20,000 square foot parcel has a FAR of 0.25.

Section 6-1-960(1) of the South Carolina Development Impact Fee Act requires:

> *"a general description of all existing facilities and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage."*

Section 6-1-960(2) of the South Carolina Development Impact Fee Act requires:

> *"an analysis of total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by qualified a professional using generally accepted principles and professional standards."*

To calculate the Storm Water Development Impact Fee, the capital cost for storm water improvement projects by watershed is multiplied by proportionate share factors for each type of land use and then divided by the amount of total land area developed by general type of land use. Residential fees per housing unit are based on gross densities by type of housing unit by watershed. For nonresidential development impact fees, the capital cost per acre for nonresidential land uses is converted to a fee per 1,000 square feet (KSF) using average FARs by type of land use for each watershed. Nonresidential land uses are consolidated into larger categories based on the impervious surface percentages. It is preferable

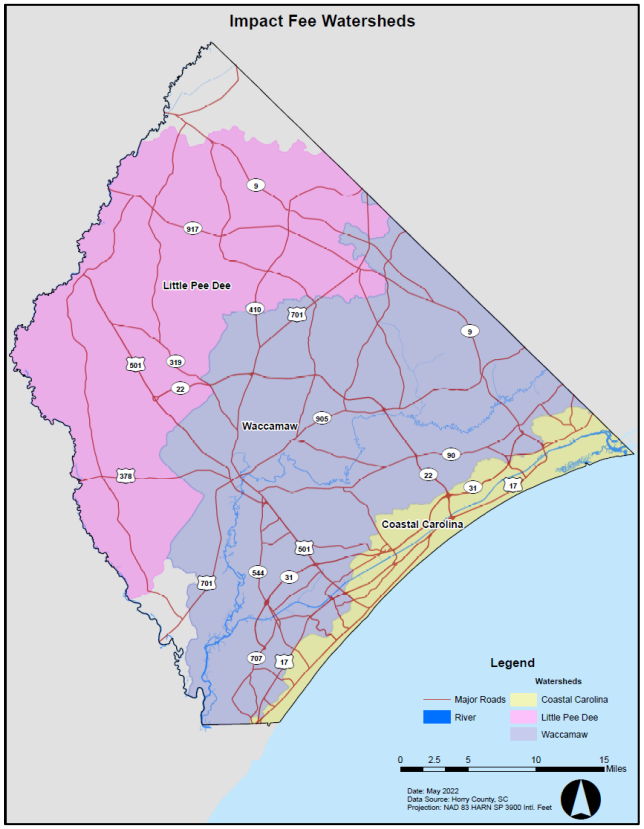
to base the nonresidential fees on floor area rather than use a per acre basis because the fee will increase or decrease according to the intensity of an individual project.

Storm Water Service Area

The Storm Water Development Impact Fee covers storm water improvements in the unincorporated County and is organized into five watersheds (at the hydrologic unit code (HUC) level 8)[3]. The improvements serve development in the unincorporated County only.

Furthermore, only Coastal Carolina, Little Pee Dee, and Waccamaw watersheds are included in the analysis. These watersheds make up nearly the entire developed areas of Horry County and planned projects to accommodate future growth are located in these three watersheds. Thus, the Carolina Coastal-Sampit and Lumber watersheds are excluded from the impact fees.

Figure 68. Storm Water Service Areas: Horry County HUC 8 Watershed Map



[3] Hydrologic unit hierarchy is indicated by the number of digits in groups of two (such as HUC 2, HUC 4, and HUC 6) within the HUC code. For example, HUC 4 represents the subregion level, delineating large river basins; HUC 8 maps the subbasin level, analogous to medium-sized river basins. (Source: www.epa.gov/EnviroAtlas.)

Storm Water Service Units

Section 6-1-960(4) of the South Carolina Development Impact Fee Act requires:

> *"a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate."*

The "service unit" used in Storm Water Development Impact Fees is developed acres for both residential and nonresidential development. Average density per housing unit for residential development and floor area ratios for nonresidential development, which varies by watershed, are used to convert land area to projected development in each watershed over the next ten years (see Figure 69).

Figure 69. Average Densities and Floor Area Ratios by Watershed

Horry County Watersheds	Coastal Carolina	Little Pee Dee	Waccamaw
Densities (DU/Acre)			
Single Family	3.08	0.57	1.10
Multifamily	14.74	9.85	11.43
Gross Acres per Unit			
Single Family	0.32	1.76	0.91
Multifamily	0.07	0.10	0.09
Floor Area Ratios*			
Retail/Office/Lodging	0.129	0.015	0.067
Industrial	0.014	0.011	0.014
Institutional	0.016	0.014	0.018

**FAR is the ratio of a building's total floor area to the size of the piece of land on which it is situated. For instance, a 5,000 sq.ft. building on a 20,000 sq. ft. parcel has an FAR of 0.25.*

Analysis of Current Demand and Projected Growth by Watershed

An analysis of current development, undeveloped land, and projected growth by watershed was conducted by Horry County staff. A summary is provided in Figure 70.

Figure 70. Current Development and 10-Year Projected Growth by Watershed

Unincorporated Housing Type by HUC 8 Watershed					
		Coastal Carolina	Little Pee Dee	Waccamaw	10-Year Projected Total*
Single Family	2017 building footprints	22,856	14,448	70,434	**107,738**
	Existing Units	22,738	14,373	70,070	**107,182**
	10-Year Increase	6,366	1,372	23,279	**31,017**
Multifamily	Existing Units	16,124	154	22,562	**38,840**
	10-Year Increase	3,677	0	7,468	**11,145**
Total Housing Units		48,905	15,900	123,379	**188,183**

Lodging (Hotel Rooms & Campground Sites)	Existing Units	9,421	0	1,246	**10,667**
	10-Year Increase	290	0	816	**1,116**
Total Lodging Units		9,711	0	2,062	**11,783**

	Floor Area (1,000 sq ft)	Coastal Carolina	Little Pee Dee	Waccamaw	10-Year Projected Total*
Retail	Existing	3,040	304	6,216	**9,560**
	10-Year Increase	430	11	1,120	**1,561**
Office/Service	Existing	1,960	5	3,264	**5,229**
	10-Year Increase	382	7	462	**850**
Industrial	Existing	681	624	5,887	**7,192**
	10-Year Increase	117	468	585	**1,169**
Institutional	Existing	932	867	3,987	**5,786**
	10-Year Increase	279	11	656	**946**
Total		**7,820**	**2,296**	**22,177**	**32,293**

**Horry County unincorporated projections; see Appendix B.*

Future growth in the unincorporated County was projected for each watershed by Horry County staff. Projected development by type of land use in each watershed is used in the development impact fee calculation to allocate a proportionate share of capital costs for storm water capacity improvements by land use. The amount of development identified (in housing units and square footage in Figure 70) is converted to acres using the densities and FARs discussed above (see Figure 72). A summary is provided below in Figure 71. (Further detail is provided in each watershed section.)

Figure 71. Current and Future Developed Acres by Watershed

Horry County Watersheds	Current Dev. Acres	% by Watershed	Future Dev. Acres	% by Watershed
Coastal Carolina	13,520	11%	16,704	11%
Little Pee Dee	28,576	23%	32,040	20%
Waccamaw	84,158	67%	108,434	69%
Total	**126,254**	**100%**	**157,178**	**100%**

Source: Horry County; TischlerBise

The projected growth requires additional system capacity improvements. The projects are planned by watershed with development impact fees to be spent within the watershed in which it was collected.

Storm Water Facilities Level of Service and Cost Analysis

The Storm Water Development Impact Fee includes planned improvements as shown in Figure 72. Specific projects by watershed are identified in the watersheds requiring growth-related capacity improvements. Additional planned expenditures for major vehicles and equipment are to serve the watersheds.

Figure 72. Storm Water Capacity Improvements Capital Improvement Plan to Accommodate Growth (Unincorporated County)

Watershed	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Little Pee Dee Watershed											
HUC 14 Watershed Studies		$800,000									$800,000
Brunson Swamp & Little Pee Dee Basin Flood Control				$500,000		$500,000		$500,000			$1,500,000
Subtotal	*$0*	*$800,000*	*$0*	*$500,000*	*$0*	*$500,000*	*$0*	*$500,000*	*$0*	*$0*	*$2,300,000*
Waccamaw Watershed											
HUC 14 Watershed Studies	$800,000		$800,000								$1,600,000
Simpson Creek Flood Control						$1,000,000					$1,000,000
Buck Creek Flood Control				$1,000,000	$1,000,000						$2,000,000
Crabtree Flood Flood Control				$600,000	$550,000			$650,000			$1,800,000
Subtotal	*$800,000*	*$0*	*$800,000*	*$1,600,000*	*$1,550,000*	*$1,000,000*	*$0*	*$650,000*	*$0*	*$0*	*$6,400,000*
Coastal Carolina Watershed											
Raccoon Run Watershed Study			450000								$450,000
Raccoon Run Flood Control								$1,000,000			$1,000,000
Subtotal	*$0*	*$0*	*$450,000*	*$0*	*$0*	*$0*	*$0*	*$1,000,000*	*$0*	*$0*	*$1,450,000*
Various Watersheds											
Excavators	$1,080,000	$490,000	$620,000	$255,000							$2,445,000
Tractor w/side cutter & mower	$400,000										$400,000
Truck & Lowboy Trailer	$275,000										$275,000
Pipe Camera	$300,000										$300,000
Off Road Truck		$350,000	$350,000	$380,000							$1,080,000
Mats (200)		$300,000									$300,000
Marshmaster		$350,000									$350,000
Vac Truck			$350,000								$350,000
Subtotal	*$2,055,000*	*$1,490,000*	*$1,320,000*	*$635,000*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*	*$5,500,000*
Grand Total	**$2,855,000**	**$2,290,000**	**$2,570,000**	**$2,735,000**	**$1,550,000**	**$1,500,000**	**$0**	**$2,150,000**	**$0**	**$0**	**$15,650,000**

Storm Water Equipment Levels of Service

Horry County has a current inventory of 26 pieces of major equipment and vehicles with an average of $270,000 per unit to serve Unincorporated County Storm Water services. The fleet is attributed to residential and nonresidential demand based on the share of developed acres in the county. As a result, residential demand is attributed 17.73 units and nonresidential demand is attributed 8.27 units.

The current level of service is found by comparing the attributed units to the current peak population and jobs in unincorporated Horry County. Specifically, there are 0.044 units per 1,000 persons and 0.142 units per 1,000 jobs.

The capital cost per demand factor is found by combining the level of service with the average cost per unit resulting in $11.88 per person and $38.34 per job.

Figure 73. Storm Water Major Equipment and Vehicles Level of Service

Equipment Type	Units	Unit Cost	Total Cost
Tractor with mower	7	$187,000	$1,309,000
Excavator	14	$320,000	$4,480,000
On-Road Dump Truck	2	$141,000	$282,000
Off-Road Dump Truck	1	$379,000	$379,000
Vac Truck	1	$300,000	$300,000
Wooden Mats	1	$260,000	$260,000
Total	**26**		**$7,010,000**

Level-of-Service Standards	Residential	Nonresidential
Proportionate Share	68.2%	31.8%
Share of Equipment Fleet	17.73	8.27
2022 Peak Uninc. Population/Jobs	398,675	58,067
Units per 1,000 Persons/Jobs	**0.044**	**0.142**

Cost Analysis	Residential	Nonresidential
Units 1,000 Persons/Jobs	0.044	0.142
Average Cost per Unit	$270,000	$270,000
Cost Per Person/Job	**$11.88**	**$38.34**

The average demand units per acre are combined in Figure 74 to find the cost per acre of each development type.

Figure 74. Storm Water Major Equipment and Vehicles Cost per Acre

Development Type	Demand Unit	Demand Unit per Acre	Cost per Demand Unit	Cost per Acre
Single Family	Persons	2.88	$11.88	**$34**
Multifamily	Persons	25.31	$11.88	**$301**
Retail	Jobs	4.16	$38.34	**$160**
Industrial	Jobs	0.48	$38.34	**$19**
Institutional	Jobs	2.25	$38.34	**$86**

Proportionate Share Factors

Proportionate share factors for storm water development impact fees are derived from impervious acres. To determine proportionate share factors by land use, weighting factors are used that represent the percentage of impervious surface area created in the drainage area by each type of land use. For future growth, industry averages should be used, per Horry County. The standards are shown in Figure 75. For more information, see the *Horry County Stormwater Design Manual, July 2017.*

Figure 75. Average Impervious Surface Percentages for Future Development

Industry Standards for % Impervious Surface	
Single Family	
10,000 sq ft lot or less*	65%
14,500 sq ft lot**	38%
> 14,500 sq ft lot***	25%
Mobile Home	38%
Multifamily	65%
Lodging	85%
Retail	85%
Office	85%
Industrial	72%
Institutional	60%

**Majority of new units in Coastal Carolina and Waccamaw Watersheds will be 10,000 sq foot lots or smaller*
***More likely in Waccamaw Watershed than others*
****Majority of new units in Little Pee Dee Watershed will be 14,500 or greater in lot size.*
Source: Horry County

The remainder of this chapter is organized by watershed.

Coastal Carolina Watershed

Proportionate Share Factors

Capital costs for storm water system improvements in Coastal Carolina Watershed are allocated to the land area served by the improvements. To determine the land area served by the storm water system improvements, TischlerBise applied average residential density and nonresidential FAR factors to projected development through the year 2032. See Figure 76.

Figure 76. Projected Increase in Acreage by Land Use to 2032: Coastal Carolina Watershed

		Current			Future (Net New 2022-2032)		Future (Net New)	
Coastal Carolina	Demand Unit	*Number of Demand Units*	*Gross Acres*	*Demand Unit per Acre / FAR*	*Number of Demand Units*	*Acres to be Developed*	*Total Demand Units (2032)*	*Total Developed Acres (2032)*
Single Family	DU	22,738	7,387	3.08	6,366	2,068	29,103	9,456
Multifamily	DU	16,124	1,094	14.74	3,677	250	19,801	1,344
Retail/Office/Lodging	1,000 Sq. Ft.	14,421	2,566	0.129	1,102	269	15,523	2,835
Industrial	1,000 Sq. Ft.	681	1,123	0.014	117	192.90	797	1,316
Institutional	1,000 Sq. Ft.	932	1,350	0.016	279	404.05	1,211	1,754
	Total		**13,520**			**3,184**		**16,704**

Source: Horry County

Based on the projected increase in acreage by land use shown in Figure 76, TischlerBise determined proportionate share factors by land use using weighting factors that represent the percentage of impervious surface area created in the drainage area by each type of land use. For example, by 2032 there is projected to be 9,456 acres of land for single family housing development. The percentage of impervious surface for single family housing is estimated at 65 percent in this watershed (see Figure 75), based on Horry County averages, resulting in 6,146 impervious acres (2,068 developed acres x 65 percent). Based on total development in 2032, this represents 53.8 percent of the impervious acreage in this watershed.

The capital cost per acre is based on the capital costs for capacity improvements serving this watershed. The calculation is the total cost multiplied by proportionate share by land use divided by the number of acres projected to be developed over the ten-year time frame. To finish the single family example, the capital cost per acre is $82 ($1,450,000 x 53.8 percent / 9,456 acres = $82 per acre, rounded). The calculations are shown in Figure 77.

Figure 77. Proportionate Share and Capital Cost per Acre: Coastal Carolina Watershed

System Improvements: Unincorporated County	Coastal Carolina
Growth-Related Capital Costs Serving Coastal Carolina	$1,450,000

Proportionate Share	2032 Developed Acres	Percent Impervious**	2032 Impervious Acres	Proportionate Share
Single Family	9,456	65%	6,146	53.8%
Multifamily	1,344	65%	873	7.6%
Retail/Office/Lodging	2,835	85%	2,410	21.1%
Industrial	1,316	72%	947	8.3%
Institutional	1,754	60%	1,052	9.2%
Total	16,704		11,429	100.0%

	Capital Cost per Acre***
Single Family	$82
Multifamily	$82
Retail/Office/Lodging	$108
Industrial	$91
Institutional	$76

*Land use area provided by Horry County.
**Impervious percentages by land use category from Horry County industry averages.
***For each type of development, the level of service standard (expressed in 'terms of capital cost per acre) is equal to the capital cost multiplied by the proportionate share factor, divided by the acreage to be developed.

Maximum Supportable Storm Water Development Impact Fees: Coastal Carolina Watershed

Input variables for the storm water development impact fees are shown in the upper section of Figure 78. Fees are derived using the level-of-service standards shown in the figure (capital cost per acre). For the purposes of the revenue projection analysis, the capital cost per acre is converted to a “prototype” amount per housing unit for residential development. As mentioned above, it is assumed nonresidential

development will be charged on a 1,000 square feet basis to better reflect intensity of use. Conversions are based on the average density and floor area ratio assumptions shown at the top of the figure.

The fees represent the highest amount allowable for residential and nonresidential development, reflecting new growth's share of capital facilities' costs. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 78. Storm Water Development Impact Fees: Coastal Carolina Watershed

Coastal Carolina			
Maximum Supportable Impact Fee Per Acre			
Development Type	Stormwater Infrastructure	Stormwater Equipment	Total Fee per Acre
Single Family	$82	$34	**$116**
Multifamily	$82	$301	**$383**
Retail	$108	$160	**$268**
Industrial	$91	$19	**$110**
Institutional	$76	$86	**$162**

Prototype Impact Fee for Use in Revenue Projection			
Residential	Gross Acreage per Housing Unit	Nonresidential	Floor Area Ratio
Single Family	0.325	Retail	0.129
Multifamily	0.068	Industrial	0.014
		Institutional	0.016

Maximum Supportable Impact Fee Per Development			
Residential Per Housing Unit		Nonresidential Per 1,000 Sq Ft of Floor Area	
Single Family	**$38**	Retail	**$48**
Multifamily	**$26**	Industrial	**$182**
		Institutional	**$235**

Revenue from Storm Water Development Impact Fees: Coastal Carolina Watershed

Storm Water capital costs for Coastal Carolina and projected revenue from the Storm Water Development Impact Fee is listed below in Figure 79. This figure includes projections to the year 2032, reflecting a 10-year time period. The capital cost of future growth is derived from the future growth-related needs above at approximately $451,000.

Revenue generated from development impact fees is derived by multiplying projected growth in the named watershed in the unincorporated County by the respective development impact fee. Revenue from development impact fees at the maximum level is projected at approximately $475,000.

Figure 79. Estimated Revenue from Storm Water Development Impact Fees: Coastal Carolina Watershed

Infrastructure Costs for Storm Water

	Total Cost	Growth Cost to 2032
Improvements for Coastal Carolina Watershed	$1,450,000	$276,402
Storm Water Equipment Needs	$175,144	$175,144
Total Expenditures	**$1,625,144**	**$451,546**

Projected Development Impact Fee Revenue

Coastal Carolina		Single Family $38 per unit	Multifamily $26 per unit	Retail/Ofc/Lodging $48 per KSF	Industrial $182 per KSF	Institutional $235 per KSF
Year		**Housing Units**	**Housing Units**	**KSF**	**KSF**	**KSF**
Base	2022	22,738	16,124	14,421	681	932
Year 10	2032	29,103	19,801	15,523	797	1,211
10-Year Increase		6,366	3,677	1,102	117	279
Projected Revenue =>		*$239,903*	*$95,572*	*$52,523*	*$21,219*	*$65,457*

Projected Revenue =>	**$474,675**
Total Expenditures =>	**$1,625,144**
Non-Impact Fee Revenues =>	**$1,150,469**

Little Pee Dee Watershed

Proportionate Share Factors

Capital costs for storm water system improvements in Little Pee Dee Watershed are allocated to the land area served by the improvements. To determine the land area served by the storm water system improvements, TischlerBise applied average residential density and nonresidential FAR factors to projected development through the year 2032. See Figure 80.

Figure 80. Projected Increase in Acreage by Land Use to 2032: Little Pee Dee Watershed

		Current			Future (Net New 2022-2032)		Future (Net New)	
Little Pee Dee	Demand Unit	*Number of Demand Units*	*Gross Acres*	*Demand Unit per Acre / FAR*	*Number of Demand Units*	*Acres to be Developed*	*Total Demand Units (2032)*	*Total Developed Acres (2032)*
Single Family	DU	14,373	25,298	0.57	1,372	2,416	15,746	27,713
Multifamily	DU	154	16	9.85	0	0	154	16
Retail/Office/Lodging	1,000 Sq. Ft.	308	470	0.015	18	31	326	501
Industrial	1,000 Sq. Ft.	624	1,335	0.011	468	999.73	1,092	2,335
Institutional	1,000 Sq. Ft.	867	1,457	0.014	11	18.30	877	1,476
	Total		**28,576**			**3,464**		**32,040**

Source: Horry County

Based on the projected increase in acreage by land use shown in Figure 81, TischlerBise determined proportionate share factors by land use using weighting factors that represent the percentage of impervious surface area created in the drainage area by each type of land use. For example, by 2032 there is projected to be 27,713 acres of land for single family housing development. The percentage of impervious surface for single family housing is estimated at 25 percent in this watershed (see Figure 75), based on Horry County averages, resulting in 6,928 impervious acres (27,713 developed acres x 25 percent). Based on total development in 2032, this represents 69.8 percent of the impervious acreage in this watershed.

The capital cost per acre is based on the capital costs for capacity improvements serving this watershed. The calculation is the total cost multiplied by proportionate share by land use divided by the number of acres projected to be developed over the ten-year time frame. To finish the single family example, the capital cost per acre is $58 ($2,300,000 x 69.8 percent / 27,713 acres = $58 per acre, rounded).

Figure 81. Proportionate Share and Capital Cost per Acre: Little Pee Dee Watershed

System Improvements: Unincorporated County	Little Pee Dee
Growth-Related Capital Costs Serving Little Pee Dee	$2,300,000

Proportionate Share	2032 Developed Acres	Percent Impervious**	2032 Impervious Acres	Proportionate Share
Single Family	27,713	25%	6,928	69.8%
Multifamily	16	65%	10	0.1%
Retail/Office/Lodging	501	85%	426	4.3%
Industrial	2,335	72%	1,681	16.9%
Institutional	1,476	60%	885	8.9%
Total	32,040		9,931	100.0%

	Capital Cost per Acre***
Single Family	$58
Multifamily	$151
Retail/Office/Lodging	$197
Industrial	$167
Institutional	$139

*Land use area provided by Horry County.
**Impervious percentages by land use category from Horry County industry averages.
***For each type of development, the level of service standard (expressed in 'terms of capital cost per acre) is equal to the capital cost multiplied by the proportionate share factor, divided by the acreage to be developed.

Maximum Supportable Storm Water Development Impact Fees: Little Pee Dee Watershed

Input variables for the storm water development impact fees are shown in the upper section of Figure 82. Fees are derived using the level-of-service standards shown in the figure (capital cost per acre). For the purposes of the revenue projection analysis, the capital cost per acre is converted to a "prototype" amount per housing unit for residential development. As mentioned above, it is assumed nonresidential development will be charged on a 1,000 square feet basis to better reflect intensity of use. Conversions are based on the average density and floor area ratio assumptions shown at the top of the figure.

The fees represent the highest amount allowable for residential and nonresidential development, reflecting new growth's share of capital facilities' costs. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 82. Storm Water Development Impact Fees: Little Pee Dee Watershed

Little Pee Dee			
Maximum Supportable Impact Fee Per Acre			
Development Type	Stormwater Infrastructure	Stormwater Equipment	Total Fee per Acre
Single Family	$58	$34	**$92**
Multifamily	$151	$301	**$452**
Retail/Office/Lodging	$197	$160	**$357**
Industrial	$167	$19	**$186**
Institutional	$139	$86	**$225**

Prototype Impact Fee for Use in Revenue Projection			
Residential	Gross Acreage per Housing Unit	Nonresidential	Floor Area Ratio
Single Family	1.760	Retail/Office/Lodging	0.015
Multifamily	0.102	Industrial	0.011
		Institutional	0.014

Maximum Supportable Impact Fee Per Development			
Residential Per Housing Unit		Nonresidential Per 1,000 Sq Ft of Floor Area	
Single Family	**$162**	Retail/Office/Lodging	**$544**
Multifamily	**$46**	Industrial	**$398**
		Institutional	**$378**

Revenue from Storm Water Development Impact Fees: Little Pee Dee Watershed

Storm Water capital costs for Little Pee Dee Watershed and projected revenue from the Storm Water Development Impact Fee is listed below in Figure 83. This figure includes projections to the year 2032, reflecting a 10-year time period. The capital cost of future growth is derived from the future growth-related needs above at approximately $440,000.

Revenue generated from development impact fees is derived by multiplying projected growth in the respective watershed in the unincorporated County by the respective development impact fee. Revenue from development impact fees at the maximum level is projected at approximately $422,000.

Figure 83. Estimated Revenue from Storm Water Development Impact Fees: Little Pee Dee Watershed

Infrastructure Costs for Storm Water

	Total Cost	Growth Cost to 2032
Improvements for Little Pee Dee Watershed	$2,300,000	$248,683
Storm Water Equipment Needs	$190,554	$190,554
Total Expenditures	**$2,490,554**	**$439,236**

Projected Development Impact Fee Revenue

Little Pee Dee		Single Family $162 per unit	Multifamily $46 per unit	Retail/Ofc/Lodging $544 per KSF	Industrial $398 per KSF	Institutional $378 per KSF
Year		Housing Units	Housing Units	KSF	KSF	KSF
Base	2022	14,373	154	308	624	867
Year 10	2032	15,746	154	326	1,092	877
10-Year Increase		1,372	0	18	468	11
Projected Revenue =>		*$222,228*	*$0*	*$9,645*	*$185,949*	*$4,117*
					Projected Revenue =>	**$421,939**
					Total Expenditures =>	**$2,490,554**
					Non-Impact Fee Revenues =>	**$2,068,615**

Waccamaw Watershed

Proportionate Share Factors

The capital costs for storm water system improvements in the Waccamaw Watershed are allocated to the land area served by the improvements. To determine the land area served by the storm water system improvements, TischlerBise applied average residential density and nonresidential FAR factors to projected development through the year 2032. See Figure 84.

Figure 84. Projected Increase in Acreage by Land Use to 2030: Waccamaw Watershed

		Current			Future (Net New 2021-2030)		Future (Net New)	
Waccamaw	Demand Unit	*Number of Demand Units*	*Gross Acres*	*Demand Unit per Acre / FAR*	*Number of Demand Units*	*Acres to be Developed*	*Total Demand Units (2031)*	*Total Developed Acres (2031)*
Single Family	DU	70,070	63,709	1.10	23,279	21,165	93,349	84,874
Multifamily	DU	22,562	1,974	11.43	7,468	653	30,030	2,628
Retail/Office/Lodging	1,000 Sq. Ft.	10,726	3,672	0.067	2,398	663	13,124	4,336
Industrial	1,000 Sq. Ft.	5887	9,841	0.014	585	977.11	6,471	10,818
Institutional	1,000 Sq. Ft.	3987	4,962	0.018	656	816.48	4,643	5,778
	Total		**84,158**			**24,276**		**108,434**

Source: Horry County

Based on the projected increase in acreage by land use shown in Figure 85, TischlerBise determined proportionate share factors by land use using weighting factors that represent the percentage of impervious surface area created in the drainage area by each type of land use. For example, by 2032 there is projected to be 84,874 acres of land for single family housing development. The percentage of impervious surface for single family housing is estimated at 38 percent in this watershed (see Figure 75), based on Horry County averages, resulting in 32,252 impervious acres (84,874 developed acres x 38 percent). Based on total development in 2032, this represents 66.0 percent of the impervious acreage in this watershed.

The capital cost per acre is based on the capital costs for capacity improvements serving this watershed. The calculation is the total cost multiplied by proportionate share by land use divided by the number of acres projected to be developed over the ten-year time frame. To finish the single family example, the capital cost per acre is $50 ($6,400,000 x 66.0 percent / 84,874 acres = $50 per acre, rounded).

Figure 85. Proportionate Share and Capital Cost per Acre: Waccamaw Watershed

System Improvements: Unincorporated County	Waccamaw
Growth-Related Capital Costs Serving Waccamaw	$6,400,000

Proportionate Share	2032 Developed Acres	Percent Impervious**	2032 Impervious Acres	Proportionate Share
Single Family	84,874	38%	32,252	66.0%
Multifamily	2,628	65%	1,708	3.5%
Retail/Office/Lodging	4,336	85%	3,685	7.5%
Industrial	10,818	72%	7,789	15.9%
Institutional	5,778	60%	3,467	7.1%
Total	108,434		48,902	100.0%

	Capital Cost per Acre***
Single Family	$50
Multifamily	$85
Retail/Office/Lodging	$111
Industrial	$94
Institutional	$79

*Land use area provided by Horry County.

**Impervious percentages by land use category from Horry County industry averages.

***For each type of development, the level of service standard (expressed in 'terms of capital cost per acre) is equal to the capital cost multiplied by the proportionate share factor, divided by the acreage to be developed.

Maximum Supportable Storm Water Development Impact Fees: Waccamaw Watershed

Input variables for the storm water development impact fees are shown in the upper section of Figure 86. Fees are derived using the level-of-service standards shown in the figure (capital cost per acre). For the purposes of the revenue projection analysis, the capital cost per acre is converted to a "prototype" amount per housing unit for residential development. As mentioned above, it is assumed nonresidential development will be charged on a 1,000 square feet basis to better reflect intensity of use. Conversions are based on the average density and floor area ratio assumptions shown at the top of the figure.

The fees represent the highest amount allowable for residential and nonresidential development, reflecting new growth's share of capital facilities' costs. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

Figure 86. Storm Water Development Impact Fees: Waccamaw Watershed

Waccamaw			
Maximum Supportable Impact Fee Per Acre			
Development Type	**Stormwater Infrastructure**	**Stormwater Equipment**	**Total Fee per Acre**
Single Family	$50	$34	**$84**
Multifamily	$85	$301	**$386**
Retail	$111	$160	**$271**
Industrial	$94	$19	**$113**
Institutional	$79	$86	**$165**

Prototype Impact Fee for Use in Revenue Projection			
Residential	**Gross Acreage per Housing Unit**	**Nonresidential**	**Floor Area Ratio**
Single Family	0.909	Retail	0.0671
Multifamily	0.088	Industrial	0.0137
		Institutional	0.0184

Maximum Supportable Impact Fee Per Development			
Residential Per Housing Unit		**Nonresidential Per 1,000 Sq Ft of Floor Area**	
Single Family	**$76**	Retail	**$93**
Multifamily	**$34**	Industrial	**$189**
		Institutional	**$205**

Revenue from Storm Water Development Impact Fees: Waccamaw Watershed

Storm Water capital costs for Waccamaw Watershed and projected revenue from the Storm Water Development Impact Fee is listed below in Figure 87. This figure includes projections to the year 2032, reflecting a 10-year time period. The capital cost of future growth is derived from the future growth-related needs above at approximately $2.8 million.

Revenue generated from development impact fees is derived by multiplying projected growth in the watershed in the unincorporated County by the respective development impact fee. Revenue from development impact fees at the maximum level is projected at approximately $2.5 million.

Figure 87. Estimated Revenue from Storm Water Development Impact Fees: Waccamaw Watershed

Infrastructure Costs for Storm Water

	Total Cost	Growth Cost to 2032
Improvements for Waccamaw Watershed	$6,400,000	$1,432,810
Storm Water Equipment Needs	$1,335,302	$1,335,302
Total Expenditures	**$7,735,302**	**$2,768,113**

Projected Development Impact Fee Revenue

Waccamaw		Single Family $76 per unit	Multifamily $34 per unit	Retail/Ofc/Lodging $93 per KSF	Industrial $189 per KSF	Institutional $205 per KSF
Year		Housing Units	Housing Units	KSF	KSF	KSF
Base	2022	70,070	22,562	10,726	5,887	3,987
Year 10	2032	93,349	30,030	13,124	6,471	4,643
10-Year Increase		23,279	7,468	2,398	585	656
Projected Revenue =>		*$1,777,894*	*$252,248*	*$222,486*	*$110,414*	*$134,719*
					Projected Revenue =>	**$2,497,760**
					Total Expenditures =>	**$7,735,302**
					Non-Impact Fee Revenues =>	**$5,237,542**

SUMMARY OF DEVELOPMENT IMPACT FEES

All infrastructure categories are combined in Figure 88 for the study's Maximum Supportable Fee. The residential fee is assessed per housing unit, while the nonresidential fee is assessed per 1,000 square feet of floor area or per room for lodging land uses. Storm Water Development Impact Fees are summarized separately below.

Figure 88. Development Impact Fee Summary (Unincorporated County)

			PUBLIC SAFETY						
Development Type	Demand Unit	Parks & Recreation	Public Safety: Police	Public Safety: Fire/Medic	Public Safety: EOC	Transportation	Solid Waste	Storm Water	Maximum Supportable Impact Fee
Residential (per Demand Unit)									
1,000 or less	DU	$702	$37	$285	$41	$978	$140	*See Separate Figure*	**$2,183**
1,001 to 1,500	DU	$1,139	$61	$462	$66	$1,797	$227		**$3,752**
1,501 to 2,000	DU	$1,446	$77	$587	$83	$2,378	$288		**$4,859**
2,001 to 2,500	DU	$1,687	$90	$685	$97	$2,827	$336		**$5,722**
2,501 to 3,000	DU	$1,882	$100	$764	$109	$3,197	$375		**$6,427**
3,001 to 3,500	DU	$2,047	$109	$831	$118	$3,506	$408		**$7,019**
3,501 or more	DU	$2,189	$117	$888	$126	$3,774	$436		**$7,530**
Nonresidential (per Demand Unit)									
Retail	1,000 Sq. Ft.	n/a	$154	$4,005	$390	$5,591	n/a	*See Separate Figure*	**$10,140**
Office	1,000 Sq. Ft.	n/a	$69	$1,798	$175	$2,443	n/a		**$4,485**
Industrial	1,000 Sq. Ft.	n/a	$20	$533	$52	$723	n/a		**$1,328**
Institutional	1,000 Sq. Ft.	n/a	$159	$4,156	$404	$5,651	n/a		**$10,370**
Lodging	Room	$425	$46	$1,199	$117	$1,630	n/a		**$3,417**

Figure 89. Development Impact Fee Summary (Unincorporated County): Storm Water

		Watershed		
Development Type	**Demand Unit**	**Little Pee Dee**	**Waccamaw**	**Coastal Carolina**
Residential (per Demand Unit)				
Single Family	DU	$162	$76	$38
Multifamily	DU	$46	$34	$26
Nonresidential (per Demand Unit)				
Retail/Office/Lodgi	1,000 Sq. Ft.	$544	$93	$48
Industrial	1,000 Sq. Ft.	$398	$189	$182
Institutional	1,000 Sq. Ft.	$378	$205	$235

CAPITAL IMPROVEMENT PROGRAM

Section 6-1-960(9) of the South Carolina Development Impact Fee Act requires:

> *"a schedule setting forth estimated dates for commencing and completing construction of all improvements identified in the capital improvements plan."*

Horry County prepares a five-year Capital Improvement Program as part of its annual budget process. Capital projects that will provide additional capacity to serve growth are included in the County's existing CIP. A summary of current projects anticipated to be built to serve growth are listed below. The collection of development impact fees will mitigate the needs for a portion of these facilities.

As noted on the below figure, the County's long-term transportation plan for capacity improvements is shown in the body of this report at Figure 57 including those projects anticipated to be funded with other than impact fee funds such as RIDE III funding. County's long-term storm water plan for capacity improvements is shown in the body of this report at Figure 72.

Figure 90. Capital Improvement Plan Summary

Project	Timeframe
Parks and Recreation	
Green Sea Floyds Lighting	FY22
Michael Morris Graham Lighting	FY22
Carolina Forest Soccer Fields	FY22
Aynor Soccer Field	FY22
Capacity Projects Currently Unfunded (see FY22 CIP)	FY22-FY27
Public Safety: Fire and Medic	
Shell Fire Station Rebuild	FY22
Nixonville/Wampee Fire Consolidation	FY22
Joyner Swamp Fire Addition	FY22
Prestwick Fire/Medic Station	FY22-FY27
Antioch Fire Addition	FY22-FY29
Ketchuptown Fire Replacement	FY22-FY29
Finklea Fire/Medic Relocation	FY22-FY25
Capacity Projects Currently Unfunded (see FY22 CIP)	FY22-FY27
Public Safety: Police	
Animal Care Center Barn	FY22
5th Police Precinct - Central Coast Complex	FY22
Capacity Projects Currently Unfunded (see FY22 CIP)	FY22-FY27
Public Safety: EOC	
Emergency Operations Center (EOC)	FY22
PS CAD and Records System	FY22
Transportation	
Transportation Projects--see Report Figure 54	FY22-42
Storm Water	
Storm Water Projects--see Report Figure 71	FY22-32
Solid Waste	
Holmestown Road – Expansion at/near current site	FY22-27
Wampee – Expansion at/near current site	FY22-27
Buck Creek – Expansion at/near current site	FY22-27
Coastal – Expansion at/near current site	FY22-27
Forestbrook – New Facility	FY22-27
Mount Vernon – New Facility	FY22-27
Veterans Highway – New Facility	FY22-27

Sources: Horry County Finance Dept.; Horry County FY22 Capital Improvement Program; Horry County Depts.

IMPLEMENTATION AND ADMINISTRATION

Development impact fees should be periodically evaluated and updated to reflect recent data. Horry County should adjust development impact fees for inflation using a construction cost index such as Engineering News Record or Marshall Swift. If cost estimates or demand indicators change significantly, the County should redo the fee calculations. South Carolina's enabling legislation exempts a project from development impact fees if it is determined to create affordable housing.

Credits and Reimbursements

A general requirement that is common to development impact fee methodologies is the evaluation of credits. A revenue credit may be necessary to avoid potential double payment situations arising from one-time development impact fees plus on-going payment of other revenues that may also fund growth-related capital improvements. The determination of revenue credits is dependent upon the development impact fee methodology used in the cost analysis and local government policies.

Policies and procedures related to site-specific credits should be addressed in the resolution or ordinance that establishes the development impact fees. Project-level improvements, required as part of the development approval process, are not eligible for credits against development impact fees. If a developer constructs a system improvement included in the fee calculations, it will be necessary to either reimburse the developer or provide a credit against the fees due from that particular development. The latter option is more difficult to administer because it creates unique fees for specific geographic areas.

Service Area

A development impact fee service area is a region in which a defined set of improvements provide benefit to an identifiable amount of new development. Within a service area, all new development of a type (single family, commercial, etc.) is assessed at the same development impact fee rate. Land use assumptions and development impact fees are each defined in terms of this geography, so that capital facility demand, projects needed to meet that demand, and capital facility cost are all quantified in the same terms. Development impact fee revenue collected within a service area is required to be spent within that service area.

Implementation of a large number of small service areas is problematic. Administration is complicated and, because funds collected within the service area must be spent within that area multiple service areas may make it impossible to accumulate sufficient revenue to fund any projects within the time allowed.

As part of our analysis of the County and the type of facilities and improvements included in the development impact fee calculation, TischlerBise has determined that an **unincorporated County service area is appropriate for all categories except Fire/Medic and Storm Water. For Fire/Medic, the service area is unincorporated County minus the Horry County portion of the Murrells Inlet-Garden City Fire District**. **Storm Water service areas are the three watersheds at the hydrologic unit code (HUC) level 8**.

APPENDIX A: HOUSING AFFORDABILITY ANALYSIS

Section 6-1-930(2) of the South Carolina Development Impact Fee Act requires:

> *"Before imposing a development impact fee on residential units, a governmental entity shall prepare a report which estimates the effect of recovering capital costs through impact fees on the availability of affordable housing within the political jurisdiction of the governmental entity."*

In accordance with South Carolina Development Impact Fee Act, this chapter estimates the potential effects of imposing the maximum calculated development impact fees on the affordability of housing in Horry County. The analysis examines current household income and housing expenses that burden an average household in the County. Then, the maximum calculated development impact fee is included in a cost burden analysis to identify the potential effect of the proposed development impact fees on the cost of housing in the County.

It should be noted that the South Carolina Development Impact Fee Act requires an analysis of an impact fee's potential effect on the cost of housing **but does not affect the calculation of the development impact fee itself**. Nor does the Act prescribe the methodology by which the affordable housing analysis is conducted.

South Carolina Development Impact Fee Act

Affordable housing is defined in South Carolina Development Impact Fee Act as housing to families whose incomes do not exceed 80 percent of the median income for the service area or areas within the jurisdiction of the governmental entity. The Act does not mention a preferred methodology to examine the household's whose income does not exceed 80 percent of the median income. Therefore, the analysis identifies the U.S. Housing and Urban Development's (HUD) criteria that housing should be 30 percent or less of a household's income. The cost of housing is "moderately burdensome" if its cost burden is over 30 percent and "severely burdensome" if the ratio is over 50 percent.

Maximum Supportable Development Impact Fee

The development impact fees found in Figure 91 represent the highest amount supportable for each type of development, which represents new growth's fair share of the cost for capital facilities. The County may adopt fees that are less than the amounts shown. However, a reduction in development impact fee revenue will necessitate an increase in other revenues, a decrease in planned capital expenditures, and/or a decrease in levels of service.

The housing affordability analysis assumes the maximum supportable development impact fee amount. If the County Council were to adopt a lower development impact fee amount, the results presented in this report would improve.

Figure 91. Maximum Supportable Development Impact Fees (Unincorporated County): All Categories Except Storm Water

			PUBLIC SAFETY						
Development Type	Demand Unit	Parks & Recreation	Public Safety: Police	Public Safety: Fire/Medic	Public Safety: EOC	Transportation	Solid Waste	Storm Water	Maximum Supportable Impact Fee
Residential (per Demand Unit)									
1,000 or less	DU	$702	$37	$285	$41	$978	$140	*See Separate Figure*	**$2,183**
1,001 to 1,500	DU	$1,139	$61	$462	$66	$1,797	$227		**$3,752**
1,501 to 2,000	DU	$1,446	$77	$587	$83	$2,378	$288		**$4,859**
2,001 to 2,500	DU	$1,687	$90	$685	$97	$2,827	$336		**$5,722**
2,501 to 3,000	DU	$1,882	$100	$764	$109	$3,197	$375		**$6,427**
3,001 to 3,500	DU	$2,047	$109	$831	$118	$3,506	$408		**$7,019**
3,501 or more	DU	$2,189	$117	$888	$126	$3,774	$436		**$7,530**
Nonresidential (per Demand Unit)									
Retail	1,000 Sq. Ft.	n/a	$154	$4,005	$390	$5,591	n/a	*See Separate Figure*	**$10,140**
Office	1,000 Sq. Ft.	n/a	$69	$1,798	$175	$2,443	n/a		**$4,485**
Industrial	1,000 Sq. Ft.	n/a	$20	$533	$52	$723	n/a		**$1,328**
Institutional	1,000 Sq. Ft.	n/a	$159	$4,156	$404	$5,651	n/a		**$10,370**
Lodging	Room	$425	$46	$1,199	$117	$1,630	n/a		**$3,417**

Figure 92. Development Impact Fee Summary (Unincorporated County): Storm Water

		Watershed		
Development Type	**Demand Unit**	**Little Pee Dee**	**Waccamaw**	**Coastal Carolina**
Residential (per Demand Unit)				
Single Family	DU	$162	$76	$38
Multifamily	DU	$46	$34	$26
Nonresidential (per Demand Unit)				
Retail/Office/Lodgi	1,000 Sq. Ft.	$544	$93	$48
Industrial	1,000 Sq. Ft.	$398	$189	$182
Institutional	1,000 Sq. Ft.	$378	$205	$235

Household Income

The purchasing power of residents to secure housing is represented by personal income. Personal income includes all wages, tips, and bonuses from employment, as well as retirement income earned from a pension plan or retirement account. In the analysis, household income represents all residents living in the housing unit, no matter relationship. From the U.S. Census Bureau American Community Survey, in 2020 the median annual household income for residents in Horry County[4] was $57,965 for owner-occupied units and $36,685 for renter-occupied units. By using the U.S. Bureau of Labor Statistics' CPI Calculator, the current household income by tenure is adjusted to be $64,644 and $40,912, respectively. To determine the amount of income available after taxes, a standard assumption for mortgage lending is 80 percent. The annual income for a household making 80 percent of the County's median is estimated at $51,715, or $4,310 per month for an owner-occupied unit and $32,730, or $2,717 per month for a renter-occupied unit.

Figure 93. Median Household Income

Tenure	Median Annual Household Income (2020)	Median Annual Household Income (2022)	80% of Median Annual Income	Monthly Income
Owner-occupied	$57,965	$64,644	$51,715	**$4,310**
Renter-occupied	$36,685	$40,912	$32,730	**$2,727**
Total Average	$51,570	$57,512	$46,010	**$3,834**

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates; U.S. Bureau of Labor Statistics CPI Calculator
Note: American Community Survey data represents income in 2020 inflation-adjusted dollars. CPI calculator adjusts median income to 2022 dollars.

Cost of Homeownership

The analysis uses multiple cost categories to calculate the baseline cost of homeownership in Horry County: purchase price; mortgage payment; property tax; stormwater fee; water and sewer rates; electric utilities; telephone, cable and internet utilities; and homeowners insurance.

Averages are used throughout the analysis. The following section details the costs included.

Purchase Price

The median home value is used to estimate the purchase price of a home. The American Community Survey estimates that the median value of a home in the County in 2020 was $187,800 (U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates). With the U.S. Bureau of Labor Statistics' CPI Calculator, the current home value is estimated to be $209,440. Additionally, Horry County adopted

[4] It should be noted here that a countywide analysis is conducted due to data availability. The data reflect averages of housing choices, income levels, and communities across the County.

development impact fees in 2020 which is considered to not yet be included in the median value estimate. Thus, the current single family impact fee of $1,236 is included in the estimated 2022 home value.

Mortgage Payment

A conventional, fixed-rate 30-year mortgage is assumed to estimate monthly costs of principal and interest on a home loan. The down payment for a loan is assumed to be 20 percent of the purchase price ($42,135). The loan amount for the mortgage is determined by subtracting the down payment from the purchase price ($209,440 - $42,135 = $168,541). An interest rate of 4.65 percent is assumed for the home purchase based on a survey of competitive interest rates (and rounded up) as of May 2022 in Horry County (www.bankrate.com). The average monthly mortgage payment is estimated at $878.

Property Tax

To calculate annual property tax, homes in Horry County that are permanent residences are subject to 4 percent assessment ratio and a property tax millage rate. Residents in the unincorporated County are subject to a millage rate for Countywide services that includes General Fund, Debt Retirement, County Recreation, Horry-Georgetown Technical College, Higher Education, and Senior Citizens Fund; an additional millage rate is assumed for most residents in the unincorporated County for Waste Management, Fire District, and Fire Apparatus Replacement. A separate millage rate is included for schools, however, only the debt service millage rate is included following the permanent resident exemption in South Carolina. The average total millage rate of the taxing entities is $0.0946. Assumed in the analysis, annual property tax for the average valued home is $797 ($210,676 x 4 percent x 0.0946 = $797).

Stormwater Utility Fee

The County assesses an annual Stormwater Utility Fee for all land uses; the single family residential monthly fee $7.40 (or $89.40 per year).

Water, Sewer, and Electric Utilities

Water and sewer services are provided by the Grand Strand Water and Sewer Authority (GSWSA). Per the 2019 GSWSA Annual Report, an average monthly residential bill is $47.89 for both water and sewer.

An average monthly household electricity bill per Horry Electric Cooperative is $203.

Telephone, Cable, and Internet Utilities

Spectrum is a provider of telephone, cable, and internet in Horry County. From their website, the three services costs approximately $100 per month.

Homeowner's Insurance

Homeowner's insurance provides protection for the home and is generally required when a home has a mortgage. The average cost for homeowner's insurance in Horry County is approximately 10 percent of the mortgage payment, estimated at $87.75 per month.

Monthly Payment

Total monthly cost for homeownership is $1,390. Detail on the above monthly costs are listed in Figure 96 at the end of this chapter.

Cost of Renting

The cost of renting a home in the County is estimated with data provided by the U.S. Census Bureau. In 2020, the median gross rent (including all utilities and rental insurance) is estimated to be $975. With the U.S. Bureau of Labor Statistics' CPI Calculator, the current cost of renting is estimated to be $1,087 per month.

Cost Burden Analysis

The cost burden for affordable housing is measured as the ratio between monthly payments for housing (including property tax, fee, utilities, and insurance) and monthly gross household income. This section compares the current/baseline housing cost burden of owning or renting a home in Horry County to the housing cost burden if development impact fees were to be implemented at the maximum supportable level.

Scenario 1: Baseline Conditions

Figure 94 summarizes the current cost burden for residents purchasing or renting a median valued home without the proposed maximum supportable development impact fee included in the cost of the house. Based on the results, both owner-occupied and renter-occupied housing costs are currently above the limit considered for affordability for households whose income is 80 percent of the County's median income.

Figure 94. Scenario 1: Cost Burden Analysis without Proposed Development Impact Fee

Condition	Monthly Income	Monthly Cost	Cost Burden
Owner-Occupied	$4,310	$1,390	**32.3%**
Renter-Occupied	$2,727	$1,090	**40.0%**

Scenario 2: Baseline Condition + Proposed Development Impact Fee

In the second scenario, the maximum supportable development impact fee is included into the cost burden analysis to highlight the effects the fee has on housing affordability. Because the development impact fee is calculated by housing type, an owner-occupied housing unit is assumed to be assessed the increase in the impact based on maximum supportable fee (per this report) for a 2,001 to 2,500 square

foot unit and the single family stormwater impact fee ($5,884) and the renter-occupied housing unit is assumed to be assessed the maximum supportable fee (per this report) for a 1,001 to 1,500 square foot unit and the multifamily stormwater impact fee ($3,798). For purposes of this analysis, the housing units are assumed to be located in the Little Pee Dee watershed which has the highest residential Storm Water fee of the three watersheds.

It should be noted that this analysis starts with a conservative approach and assumes that the purchase price of a home is increased by the full amount of the development impact fee. The assumption herein is that the development impact fee ultimately increases the household's mortgage payment (as shown in detail below in Figure 96). For renter-occupied housing units, the analysis assumes that the development impact fee will be recouped by the landlord through an increase in monthly rent. The fee is assumed to be recouped over 30 years.

As shown in Figure 95, the monthly costs for owners and renters only marginally increases with the maximum supportable development impact fee. The increase in costs is low enough that the cost burden ratio is minimally affected (0.3 percent increase).

Figure 95. Scenario 2: Cost Burden Analysis with Proposed Development Impact Fee

Condition	Monthly Income	Monthly Cost	Cost Burden
Owner-Occupied	$4,310	$1,405	**32.6%**
Renter-Occupied	$2,727	$1,098	**40.3%**

Conclusion

The South Carolina Development Impact Fee Act requires preparation of a report that estimates the effect of imposing development impact fees on affordability of housing in the jurisdiction. To analyze the potential effect, a comparison of housing cost burdens is done both without impact fees (status quo) and with impact fees. **This analysis has concluded that the current cost burden in the County is already higher than 30 percent. Implementing the maximum supportable development impact fee results in only a marginal increase to the monthly cost for residents and that the increase is low enough that the existing cost burden is unaffected.** As noted, this analysis takes a conservative approach and assumes that the maximum calculated development impact fees are absorbed entirely by the purchaser. If the County were to adopt a lower development impact fee amount, the results presented in this report would be modified accordingly.

Figure 96. Average Cost of Homeownership

	Monthly Payment Calculation	
	Scenario 1 Baseline Condition	**Scenario 2 Baseline Condition + Impact Fee**
Purchase Price	$210,676	$214,088
Down Payment	$42,135	$42,818
Loan Amount	$168,541	$171,270
Loan Length (Years)	30	30
Loan Length (Months)	360	360
Yearly Interest Rate	4.65%	4.65%
Monthly Interest Rate	0.39%	0.39%
Monthly Payment P&I	$878	$892
Property Tax - County (per month)	$59.41	$60.37
Property Tax - City (per month)	$0.00	$0.00
Property Tax - School Taxes (per month)	$7.02	$7.14
Stormwater Utility Fee	$7.45	$7.45
Water and Sewer	$47.89	$47.89
Electric	$203.00	$203.00
Telephone, Cable & Internet Utilities	$100.00	$100.00
Homeowners Insurance	$87.75	$87.75
Monthly Cost	**$1,390**	**$1,405**

APPENDIX B: LAND USE ASSUMPTIONS

As part of our Work Scope, TischlerBise has prepared documentation on land use assumptions and development projections to be used in the Horry County Development Impact Fee Study. The data estimates and projections are used in the study's calculations and to illustrate the possible future pace of service demands on the County's infrastructure. Furthermore, the memo demonstrates the history of development and base year development levels in the unincorporated and incorporated areas of Horry County. The base year assumptions are used in the impact fee calculations to determine current levels of service.

This chapter includes discussion and findings on:

- Household/housing unit size
- Current population and housing unit estimates
- Residential projections
- Current employment and nonresidential floor area estimates
- Nonresidential projections
- Vehicle trip rates

Note: calculations throughout this technical memo are based on an analysis conducted using Excel software. Results are discussed in the memo using one-and two-digit places (in most cases), which represent rounded figures. However, the analysis itself uses figures carried to their ultimate decimal places; therefore, the sums and products generated in the analysis may not equal the sum or product if the reader replicates the calculation with the factors shown in the report (due to the rounding of figures shown, not in the analysis).

Population and Housing Characteristics

Impact fees often use levels of service standards based on a per capita factor, which is then converted to a per housing unit amount using persons per housing unit or persons per household to derive proportionate share fee amounts. Housing types have varying household sizes and, consequently, a varying demand on County infrastructure and services. Thus, it is important to differentiate between housing types and size.

When persons per housing unit (PPHU) is used in the development impact fee calculations, infrastructure standards are derived using year-round population. In contrast, when persons per household (PPHH) is used in the development impact fee calculations, the fee methodology assumes all housing units will be occupied, thus requiring seasonal or peak population to be used when deriving infrastructure standards. Horry County is a popular tourist destination with Myrtle Beach and North Myrtle Beach located in Horry County. Per *Imagine 2040,* the Horry County Comprehensive Plan (2019), "Horry County's Solid Waste Authority calculates the equivalent full-time tourist population for a six-day stay to be roughly 96.51

percent of the resident population."[5] As a result, it is not just permanent residents occupying housing units. In response, County infrastructure and service levels are sized to accommodate not just permanent residents, but seasonal residents, seasonal workers, and visitors as well. Thus, TischlerBise recommends that fees for residential development in Horry County be imposed according to persons per household (i.e., occupied housing units).

Figure 113 shows the U.S. Census American Community Survey 2020 5-Year Estimates data for (a) Horry County countywide (including municipalities); (b) incorporated Horry County; and (c) unincorporated Horry County. Factors are shown for multiple geographic areas for informational purposes; all impact fees calculated herein are for the unincorporated County.

For Horry County as a whole: Single family units have a household size of 2.55 persons, multifamily units have a household size of 2.02 persons, and mobile homes have a household size of 2.83 persons. For unincorporated Horry County: Single family units have a household size of 2.58 persons, multifamily units have a household size of 2.01 persons, and mobile homes have a household size of 2.55 persons. Thus, the unincorporated portions of the County have slightly more persons/household than the incorporated portions of the County.

[5] *Imagine 2040, Horry County Comprehensive Plan* (Draft 2019), p. 2.5.

Figure 97. Horry County Persons per Household (2020)

Horry County, Countywide

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	229,323	111,663	2.05	89,925	**2.55**	53%
Multifamily/Other [2]	52,624	69,538	0.76	25,999	**2.02**	33%
Mobile Homes	57,399	29,153	1.97	20,295	**2.83**	14%
Total	**339,346**	**210,354**	**1.61**	**136,219**	**2.49**	
Population in Group Qtrs	4,840	*1.4%*				
Grand Total Population	344,186					

Incorporated Horry County

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	54,555	32,241	1.69	22,091	**2.47**	46%
Multifamily/Other [2]	22,084	35,107	0.63	10,836	**2.04**	50%
Mobile Homes	3,507	2,750	1.28	1,373	**2.55**	4%
Total	**80,146**	**70,098**	**1.14**	**34,300**	**2.34**	
Population in Group Qtrs	3,620	*4.3%*				
Grand Total Population	83,766					

Unincorporated Horry County

Housing Type	Persons	Housing Units	Persons per Housing Unit	Households	Persons per Household	Housing Unit Mix
Single Family [1]	174,768	79,422	2.20	67,834	**2.58**	57%
Multifamily/Other [2]	30,540	34,431	0.89	15,163	**2.01**	25%
Mobile Homes	53,892	26,403	2.04	18,922	**2.85**	19%
Total	**259,200**	**140,256**	**1.85**	**101,919**	**2.54**	
Population in Group Qtrs	1,220	*0.5%*				
Grand Total Population	260,420					

[1] Includes attached and detached single family homes

[2] Includes structures with 2+ units; other (boats, RV, van)

Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

Persons by Bedroom Range

Impact fees must be proportionate to the demand for infrastructure. Because averages per housing unit have a strong, positive correlation to the number of bedrooms, TischlerBise recommends a fee schedule where larger units pay higher development fees. Benefits of the proposed methodology include 1) a proportionate assessment of infrastructure demand using local demographic data and 2) a progressive fee structure (i.e., smaller units pay less, and larger units pay more).

Custom tabulations of demographic data by bedroom range can be created from individual survey responses provided by the U.S. Census Bureau in files known as Public Use Microdata Samples (PUMS). PUMS files are only available for areas of at least 100,000 persons, and Horry County is located within two Public Use Microdata Areas (South Carolina PUMA 1101 and 1102).

Shown in Figure 114 below, cells with yellow shading indicate the unweighted survey results, which yield the unadjusted estimate of 2.16 persons per household. Unadjusted persons per household estimates are adjusted to match the control total for unincorporated Horry County – 2.54 persons per household (see

Figure 113). Adjusted persons per household estimates range from 1.57 persons per household for housing units with zero to one bedroom up to 3.76 persons per household for housing units with five or more bedrooms.

Figure 98. Persons by Bedroom Range

Bedroom Range	Persons[1]	Households[1]	Housing Mix	Unadjusted PPHH	Adjusted PPHH[2]
0-1	431	322	5%	1.34	1.57
2	2,797	1,530	23%	1.83	2.15
3	8,077	3,717	55%	2.17	2.56
4	2,612	967	14%	2.70	3.18
5+	623	195	3%	3.19	3.76
Total	14,540	6,731	100%	2.16	2.54

1. American Community Survey, Public Use Microdata Sample for South Carolina PUMA 1101 and 1102 (2016-2020 ACS 5-Year unweighted data).

2. Adjusted multipliers are scaled to make the average PUMS values match control totals for unincorperated Horry County based on 2016-2020 ACS 5-Year Estimates.

Persons by Square Feet of Living Area

To estimate square feet of living area by bedroom range, TischlerBise uses 2020 U.S. Census Bureau data for housing units constructed in the South Atlantic region. Based on 2020 estimates, living area ranges from 1,178 square feet for housing units with zero to one bedroom up to 4,068 square feet for housing units with five or more bedrooms.

Average square feet of living area and persons per household by bedroom range are plotted in

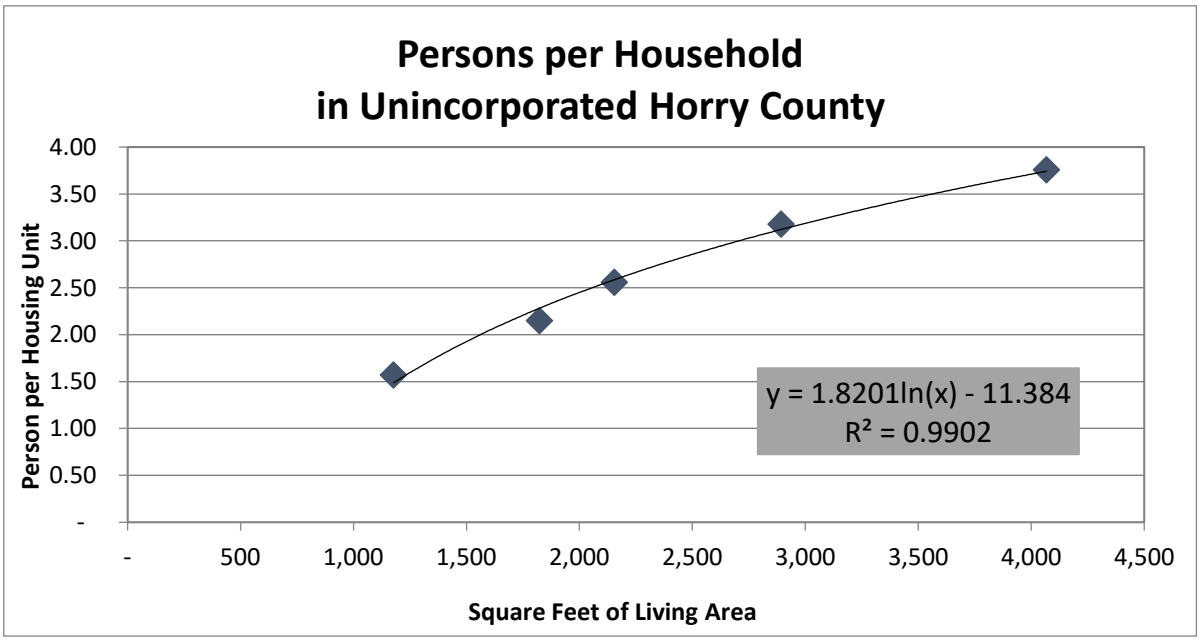
Figure 99 with a logarithmic trend line derived from U.S. Census Bureau estimates discussed in the previous paragraph and adjusted persons per household estimates shown in Figure 98. Using the trend line formula shown in

Figure 99, TischlerBise calculates the number of persons per household, by living area, using intervals of 500 square feet. For the purpose of impact fees, TischlerBise recommends a minimum impact fee based on a unit size of 1,000 square feet and a maximum fee for units 3,501 square feet or more.

Figure 99. Persons by Square Feet of Living Area

Average persons per household derived from 2016-2020 ACS PUMS data for unincorporated Horry County. Unit size from the 2020 U.S. Census Bureau average for units constructed in the Census South Atlantic region.

Average per Household			Fitted-Curve Values	
Bedrooms	Square Feet	PPHH	Sq Ft Range	PPHH
0-1	1,178	1.57	1,000 or less	1.19
2	1,824	2.15	1,001 to 1,500	1.93
3	2,155	2.56	1,501 to 2,000	2.45
4	2,893	3.18	2,001 to 2,500	2.86
5+	4,068	3.76	2,501 to 3,000	3.19
			3,001 to 3,500	3.47
			3,501 or more	3.71



Base Year Population and Housing Units

Two types of population are included in the Horry County development impact fee study:

1) Permanent Population
2) Peak/Seasonal Population

As noted, the County is a destination for vacationers and because of the presence of temporary residents and visitors, County facilities and services can be sized to accommodate additional demand. Seasonal population includes residents who have second homes in the County and the seasonal labor influx during peak tourism months. The visitor population includes overnight and day visitors. This section details the estimates of permanent and seasonal population.

Permanent Population

Population data for 2020 are available from the US Census. In 2020, countywide permanent population was reported at 351,029, compared to the 2010 count of 269,291. From 2010 to 2020, there was an increase of 81,738 permanent residents (351,029 – 269,291 = 81,738), or a 30 percent increase over 10 years.

Figure 100. Horry County Permanent Population

County	July 1, 2010 Estimates	2020 Census	Increase 2010 to 2020	10-yr % increase
Horry County Total Population	269,291	351,029	81,738	30%

Source: US Census, 2010 and 2020

Population for incorporated areas is also reported in the 2020 Census and is used to differentiate demand from incorporated and unincorporated areas. Population counts by incorporated area are shown below.

Figure 101. Horry County Permanent Population by Municipality

Location	2010 Census	2020 Census
Atlantic Beach town	334	195
Aynor town	560	974
Briarcliffe Acres town	457	479
Conway city	17,103	24,849
Loris city	2,396	2,449
Myrtle Beach city	27,109	35,682
North Myrtle Beach city	13,752	18,790
Surfside Beach town	3,837	4,155
Subtotal Incorporated	**65,548**	**87,573**
Unincorporated Population	**203,743**	**263,456**
Countywide Population	**269,291**	**351,029**

Source: US Census, 2010 and 2020

Peak/Seasonal Population

Current peak/seasonal population is determined using data from the 2018 Horry County Accommodations Inventory and County employment data to allocate to the unincorporated County. The annual population growth rate (3.0 percent) is applied to the Hotel Rooms and Campground Sites counts to provide an updated estimate for the 2022 Base Year. This is added to permanent/year-round population figure to derive a peak/seasonal population for unincorporated Horry County.

Figure 102. Seasonal Units

	2018 # of Units / Sites*	Uninc. Share^ 28%	Occupancy %*	Persons per Unit/Site*	Uninc. Total Annual Pop
Hotel & Condotel Rooms/Units	28,034	7,850	55%	1.30	5,612
Campground Sites	10,061	2,817	55%	2.00	3,099
Total	38,095	10,667			8,711

**Horry County Accommodations Inventory, E. F. Hucks Consulting, LLC, March 2018; TischlerBise analysis*

^ TischlerBise analysis of jobs data.

Projection 2018 to 2022 2022

	2022 # of Units / Sites*	Uninc. Share^ 28%	Occupancy %*	Persons per Unit/Site*	Uninc. Total Annual Pop
Hotel & Condotel Rooms/Units	31,398	8,791	55%	1.30	6,286
Campground Sites	11,268	3,155	55%	2.00	3,471
Total	42,666	11,947			9,757

Assumes annual residential growth rate of 3.0% applied to Hotel and Campground Units.

Figure 103. Peak/Seasonal Population

	Base Year 2022
Peak Unincorporated Population in All Types of Units	
Peak Unincorporated Residents in Hsg Units	**388,919**
Grand Total Peak Uninc. Population	**398,675**
	% of Uninc. County
Grand Total Peak Uninc. Fire and EMS Service Area Popu	**93%** **370,768**

Peak Countywide Population in All Types of Units	
Grand Total Peak Countywide Population	**603,405**

** Includes population in group quarters.*

^ Uninc. peak population less Horry County portion of Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)

[1] includes single family detached, single family attached, and mobile homes

[2] Includes structures with 2+ units; other (boats, RV, van)

Source: Horry County; U.S. Census Bureau, 2020 Census and 2020 American Community Survey 5-Year Estimates.

Housing Units

Current housing unit estimates in Horry County are derived from the population figures discussed above, average household sizes, and vacancy rates.

Total permanent population estimates are converted to permanent population in housing units for both the unincorporated and incorporated portions of the County. Then population estimates are converted to housing units using household size (person per household) and year-round vacancy rates. Estimates for both the unincorporated and incorporated portions of the County are derived. It should be noted that the housing unit estimate is for total units (occupied and unoccupied), which reflects those units used for seasonal purposes. It is assumed that peak/seasonal population reflects full occupancy of Countywide housing units as well as additional tourist population.

Figure 104. Base Year Housing Units by Location

			Base Year 2022
Population			
Permanent Unincorp. Residents*	*75.2%*		283,944
Permanent Incorp. Residents*	*24.8%*		93,781
*Total Countywide Permanent Residents**			*377,725*
Population in Housing Units			
Permanent Unincorp. Residents in Hsg Units	*99.5%*		282,613
Permanent Incorp. Residents in Hsg Units	*95.7%*		89,728
Total Countywide Permanent Residents in Hsg Units	*98.6%*		**372,342**
Housing Units		***Vac %***	
Unincorporated Units	*2.54*	*27%*	153,118
Incorporated Units	*2.34*	*51%*	78,365
Total Countywide Housing Units			**231,483**

** Includes population in group quarters.*

^ Uninc. peak population less Horry County portion of Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)

[1] includes single family detached, single family attached, and mobile homes

[2] Includes structures with 2+ units; other (boats, RV, van)

Source: Horry County; U.S. Census Bureau, 2020 Census and 2020 American Community Survey 5-Year Estimates.

Housing unit mix, or distribution, for unincorporated and incorporated areas of the County are applied to the totals to estimate the number of single family and multifamily homes in the County. Figure 105 provides detail on housing unit types by areas of the County.

Figure 105. Housing Unit Mix

Horry County, Countywide

Housing Type	Housing Units	Housing Unit Unit Mix
Single Family [1]	140,816	67%
Multifamily/Other [2]	69,538	33%
Total	**210,354**	**100%**

Incorporated Horry County

Housing Type	Housing Units	Housing Unit Unit Mix
Single Family [1]	34,991	50%
Multifamily/Other [2]	35,107	50%
Total	**70,098**	**100%**

Unincorporated Horry County

Housing Type	Housing Units	Housing Unit Unit Mix
Single Family [1]	105,825	75%
Multifamily/Other [2]	34,431	25%
Total	**140,256**	**100%**

[1] includes mobile homes
[2] Includes structures with 2+ units; other (boats, RV, van)
Source: U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

The above percentages are applied to current housing unit estimates to determine estimates of single family (including mobile homes) and multifamily units. Figure 106 provides further detail.

Figure 106. Base Year Housing Units by Housing Type

			Base Year 2022
Housing Units		*Vac %*	
Unincorporated Units	*2.54*	*27%*	153,118
Incorporated Units	*2.34*	*51%*	78,365
Total Countywide Housing Units			**231,483**

Unincorporated Housing Type	*% by type*	
Single Family [1]	*75.5%*	115,529
Multifamily [2]	*24.5%*	37,588
Total Uninc. Housing Units		**153,118**
Incorporated Housing Type	**% by type**	
Single Family [1]	49.9%	39,118
Multifamily [2]	50.1%	39,248
Total Inc. Housing Units		**78,365**
Countywide Housing		
Single Family [1]		154,647
Multifamily [2]		76,836
Total Countywide Housing Units		**231,483**

** Includes population in group quarters.*

^ Uninc. peak population less Horry County portion of Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)

[1] includes single family detached, single family attached, and mobile homes

[2] Includes structures with 2+ units; other (boats, RV, van)

Source: Horry County; U.S. Census Bureau, 2020 Census and 2020 American Community Survey 5-Year Estimates.

Population and Housing Unit Projections

Residential projections are provided for permanent and peak/seasonal population as well as housing units. Projections are from the 2019 Horry County Comprehensive Plan, which indicates that Horry County permanent population is anticipated to grow to 460,300 by 2030 and 584,500 by the year 2040.

Figure 107 shows projected permanent population in the unincorporated and incorporated areas of the County along with seasonal population. A ten-year projection is shown (and is anticipated to be used in the development impact fee calculations and/or development impact fee revenue projections).

Over the next ten years, total permanent residents are projected to increase by 85,366 (in all types of housing including group quarters), with approximately 75 percent in the unincorporated portion of the county and 25 percent in the incorporated portion.

Housing unit projections are derived from population projections identified in the Horry County Comprehensive Plan. Persons per household and vacancy rates are used to derive housing units. Over the

next ten years, over 65,800 units are projected Countywide with over 43,500 in the unincorporated area of the County and almost 22,300 units in the incorporated areas.

Figure 107. Annual Residential Development Projections

Residential Summary 2022-2032

			Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Population									
Permanent Unincorp. Residents*	*75.2%*		283,944	299,457	314,971	330,485	345,998	364,670	**80,727**
Permanent Incorp. Residents*	*24.8%*		93,802	98,927	104,052	109,177	114,302	120,470	**26,668**
*Total Countywide Permanent Residents**			*377,745*	*398,384*	*419,023*	*439,661*	*460,300*	*485,140*	***107,395***
Additional Tourist Population	*96.5%*		364,524	384,440	404,357	424,273	444,190	468,160	**103,636**
Total Peak Population			**742,269**	**782,824**	**823,379**	**863,934**	**904,490**	**953,300**	**211,031**
Population in Housing Units									
Permanent Unincorp. Residents in Hsg Units	*99.5%*		282,613	298,054	313,495	328,937	344,378	362,962	**80,348**
Permanent Incorp. Residents in Hsg Units	*95.7%*		89,748	94,651	99,555	104,458	109,362	115,264	**25,516**
Total Countywide Permanent Residents in Hsg Units	*98.6%*		**372,361**	**392,706**	**413,050**	**433,395**	**453,739**	**478,225**	**105,864**
Housing Units		***Vac %***							
Unincorporated Units	*2.54*	*27%*	153,118	161,484	169,849	178,215	186,581	196,650	**43,532**
Incorporated Units	*2.34*	*51%*	78,383	82,665	86,948	91,230	95,513	100,667	**22,285**
Total Countywide Housing Units			**231,500**	**244,149**	**256,797**	**269,445**	**282,094**	**297,317**	**65,817**

Unincorporated Housing Type	***% by type***							
Single Family [1]	*75.5%*	115,529	121,841	128,154	134,466	140,778	148,375	**32,846**
Multifamily [2]	*24.5%*	37,588	39,642	41,696	43,749	45,803	48,275	**10,687**
Total Uninc. Housing Units		**153,118**	**161,484**	**169,849**	**178,215**	**186,581**	**196,650**	**43,532**
Total Inc. Housing Units		**78,383**	**82,665**	**86,948**	**91,230**	**95,513**	**100,667**	**22,285**
Total Countywide Housing Units		**231,500**	**244,149**	**256,797**	**269,445**	**282,094**	**297,317**	**65,817**

		Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Peak Unincorporated Population in All Types of Units								
Peak Unincorporated Residents in Hsg Units		**388,919**	**410,168**	**431,417**	**452,667**	**473,916**	**499,490**	**110,572**
Uninc. Hotel Rooms and Campground Sites		10,667	10,881	11,100	11,323	11,550	11,783	**1,116**
Annual Hotel and Campground Uninc. Population	*0.91 Wtd. PPH*	9,757	9,953	10,153	10,357	10,565	10,777	**1,021**
Grand Total Peak Uninc. Population		**398,675**	**420,121**	**441,570**	**463,023**	**484,481**	**510,268**	**111,592**
	% of Uninc. County							
Grand Total Peak Uninc. Fire and EMS Service Area Popu	**93%**	**370,768**	**390,712**	**410,660**	**430,612**	**450,567**	**474,549**	**103,781**

Peak Countywide Population in All Types of Units							
Peak Countywide Residents in Hsg Units	**572,334**	**603,605**	**634,875**	**666,145**	**697,416**	**735,052**	**162,717**
Countywide Hotel Rooms and Campground Sites	38,095	38,861	39,642	40,439	41,251	42,081	**3,986**
Annual Hotel and Campground Countywide Population *0.82 Wtd. PPH*	31,111	31,737	32,375	33,025	33,689	34,366	**3,255**
Grand Total Peak Countywide Population	**603,446**	**635,341**	**667,250**	**699,171**	**731,105**	**769,418**	**165,972**

** Includes population in group quarters.*

^ Uninc. peak population less Horry County portion of Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)

[1] includes single family detached, single family attached, and mobile homes

[2] Includes structures with 2+ units; other (boats, RV, van)

Source: Horry County; U.S. Census Bureau, 2020 Census and 2020 American Community Survey 5-Year Estimates.

Base Year Employment and Nonresidential Floor Area

The impact fee study documents current nonresidential development and employment as well. Employment is analyzed at the Countywide level as well as incorporated and unincorporated areas of the County.

The first step is to pull data for incorporated areas of the County relative to Countywide totals. The best source of at-place employment data at the municipal (place) level is from U.S. Census, OnTheMap (6.1.1 Application) and LEHD Origin-Destination Employment Statistics. The latest available complete dataset from 2019 is used to establish employment shares by location. Figure 108 provides a summary of employment by municipality along with incorporated and unincorporated totals.

Figure 108. Employment by Industry (2019)

	Atlantic Beach town		Aynor town		Briarcliffe Acres town		Conway city	
	2019	%	2019	%	2019	%	2019	%
Retail	84	100%	283	56%	1	2%	3,353	17%
Office	0	0%	168	33%	61	95%	4,789	24%
Industrial	0	0%	44	9%	2	3%	1,935	10%
Institutional	0	0%	13	3%	0	0%	9,549	49%
Total	**84**	**100%**	**508**	**100%**	**64**	**100%**	**19,626**	**100%**

	Loris city		Myrtle Beach city		North Myrtle Beach city		Surfside Beach town	
	2019	%	2019	%	2019	%	2019	%
Retail	543	27%	22,401	58%	7,914	63%	1,473	49%
Office	1,083	53%	11,539	30%	3,651	29%	1,120	37%
Industrial	356	18%	2,972	8%	594	5%	279	9%
Institutional	47	2%	1,615	4%	500	4%	134	4%
Total	**2,029**	**100%**	**38,527**	**100%**	**12,659**	**100%**	**3,006**	**100%**

	INCORP. TTL		UNINCORP. TTL		HORRY CO.	
	2019	%	2019	%	2019	%
Retail	36,052	47%	21,818	41%	57,870	45%
Office	22,411	29%	17,349	33%	39,760	31%
Industrial	6,182	8%	10,543	20%	16,725	13%
Institutional	11,858	16%	3,514	7%	15,372	12%
Total	**76,503**	**100%**	**53,224**	**100%**	**129,727**	**100%**
	59.0%		*41.0%*		*100%*	

Source: U.S. Census Bureau, OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics.

Summarizing employment totals to several industry sectors allows for streamlined implementation of development impact fees and straightforward development projections. The majority of jobs in the

county are considered Retail and Office, while Industrial and Institutional jobs have a smaller portion of the market.

Figure 109. Employment by Industry: Horry County (2020)

Industry Sector	Industry Code	2020 Avg. Employment	%
Agriculture, Forestry, Fishing and Hunting	11	241	0.2%
Mining, Quarrying, and Oil and Gas Extraction	21	63	0.0%
Utilities	22	600	0.5%
Construction	23	7,783	5.9%
Manufacturing	31-33	3,269	2.5%
Wholesale Trade	42	2,331	1.8%
Retail Trade	44-45	24,243	18.3%
Transportation and Warehousing	48-49	2,743	2.1%
Information	51	1,737	1.3%
Finance and Insurance	52	3,202	2.4%
Real Estate and Rental and Leasing	53	4,318	3.3%
Professional and Technical Services	54	4,203	3.2%
Management of Companies and	55	538	0.4%
Administrative and Waste Services	56	7,954	6.0%
Educational Services	61	8,951	6.8%
Health Care and Social Assistance	62	15,008	11.4%
Arts, Entertainment, and Recreation	71	4,827	3.7%
Accommodation and Food Services	72	30,791	23.3%
Other Services, Except Public Administration	81	3,131	2.4%
Public Administration	92	6,191	4.7%
Total, All Industries		**132,124**	**100.0%**

Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce

To bring the employment totals to current, TischlerBise used the 2020 data from the Bureau of Labor Statistics and SC Dept of Employment and Workforce, then applied the expected annual growth rate of 1.5 percent estimated by the Dept of Employment and Workforce. Results are shown in Figure 110.

Figure 110. Employment Estimates: Countywide, Incorporated, and Unincorporated (2022)

			Average Annual Year Round		
			Countywide	Incorp.	Uninc.
	2022	%	2022	2022	2022
Retail	61,657	45%	61,657	37,820	23,837
Office	41,294	30%	41,294	23,510	17,784
Industrial	17,541	13%	17,541	6,485	11,056
Institutional	15,596	11%	15,596	12,439	3,157
Total	**136,088**	**100%**	**136,088**	**80,254**	**55,834**
				59.0%	*41.0%*

Sources: 2020 county-wide estimates from Bureau of Labor Statistics, SC Dept of Employment & Workforce;

2019 estimates for incorporated areas allocated to 2020 county-wide data

OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics.

Base year nonresidential floor area for the industry sectors is calculated with the Institute for Transportation Engineers (ITE) square feet per employee averages, which are shown in Figure 111. **For the Retail industry, Shopping Center factors are used; for Office, the General Office (average size) factors are used; for Industrial, Manufacturing factors are used; and for Institutional, Elementary School factors are used.**

Figure 111. Institute of Transportation Engineers Nonresidential Factors

ITE Code	Land Use	Demand Unit	Emp Per Dmd Unit	Sq Ft Per Emp
820	Shopping Center (avg size)	1,000 Sq Ft	2.12	471
710	General Office (avg size)	1,000 Sq Ft	3.26	307
140	Manufacturing	1,000 Sq Ft	1.89	528
730	Government Office	1,000 Sq Ft	3.03	330

Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

By combining the base year job totals and the ITE square feet per employee factors, nonresidential floor area is calculated and shown in Figure 112. There is an estimated total of 32.6 million square feet of nonresidential floor area in the incorporated areas of Horry County and 23.6 million square feet of floor area in unincorporated Horry County. This results in approximately 56.2 million square feet of floor area countywide. Retail industries account for 52 percent of the total floor area.

Figure 112. Base Year (2022) Nonresidential Floor Area

Countywide 2022

Industry	Jobs	Sq. Ft. / Empl.	Floor Area (Sq. Ft.)	%
Retail	61,657	471	29,020,859	52%
Office	41,294	307	12,685,251	23%
Industrial	17,541	528	9,268,981	17%
Institutional	15,596	330	5,143,521	9%
Total	**136,088**		**56,118,611**	**100%**

Unincorporated County 2022

Industry	Jobs	Sq. Ft. / Empl.	Floor Area (Sq. Ft.)	%
Retail	23,837	471	11,219,776	48%
Office	17,784	307	5,463,141	23%
Industrial	11,056	528	5,842,122	25%
Institutional	3,157	330	1,041,104	4%
Total	**55,834**		**23,566,143**	**100%**

Incorporated County 2022

Industry	Jobs	Sq. Ft. / Empl.	Floor Area (Sq. Ft.)	%
Retail	37,820	471	17,801,083	76%
Office	23,510	307	7,222,110	31%
Industrial	6,485	528	3,426,858	15%
Institutional	12,439	330	4,102,417	17%
Total	**80,254**		**32,552,468**	**100%**

Summary 2022

Industry	Incorp. County Floor Area (sq.	Unincorp. County Floor Area (sq. ft.)	Countywide Floor Area (sq. ft.)	%
Retail	17,801,083	11,219,776	29,020,859	52%
Office	7,222,110	5,463,141	12,685,251	23%
Industrial	3,426,858	5,842,122	9,268,981	17%
Institutional	4,102,417	1,041,104	5,143,521	9%
Total	**32,552,468**	**23,566,143**	**56,118,611**	**100%**

Sources: Bureau of Labor Statistics, SC Dept of Employment & Workforce;

US Census OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics;

Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Peak nonresidential estimates are assumed based on data from South Carolina Department of Workforce and Employment indicating that seasonal employment is 4 percent higher than the year-round average totals. Base year estimates are shown below.

Figure 113. Base Year (2022) Peak Employment and Nonresidential Floor Area

Industry	Base Year 2022
Peak Unincorporated Jobs Fire and EMS Service Area*	
Retail	22,560
Office/Service	17,201
Industrial	10,923
Institutional	3,283
Total	**53,966**

Peak Unincorporated Nonres Floor Area (1,000 sq. ft.) Fire and EMS Service Area^	
Retail	10,618
Office/Service	5,284
Industrial	5,772
Institutional	1,083
Total	**22,757**

** Peak employment is 4 percent over year-round average (SC Dept. of Employment & Workforce).*
Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce; Horry County Comprehsive Plan; Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Nonresidential Floor Area and Employment Projections

According to the Horry County Comprehensive Plan (adopted December 2019), the County anticipates an increase in countywide year-round employment of 10,904 from 2019 to 2024. This figure is added to the Countywide base year total and allocated by industry and to unincorporated and incorporated areas. After 2024, an average growth rate of 1.45 percent, based on historical job growth, is assumed. This results in an average annual increase in year-round employment over 10 years of almost 2,200 jobs. Seasonal population is projected at an increase of 4 percent over year-round employment, per South Carolina Department of Employment and Workforce data.

Nonresidential floor area projections are calculated by applying the ITE square feet per employee factors to the job totals. In the next ten years, the nonresidential floor area countywide is projected to increase by approximately 9 million square feet, with the unincorporated areas accounting for nearly 4 million square feet (44 percent) of that.

Figure 114. Employment and Nonresidential Floor Area Projections

	Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Countywide Jobs							
Retail	61,657	63,632	65,608	67,561	69,534	71,565	**9,909**
Office/Service	41,294	42,617	43,940	45,248	46,570	47,930	**6,636**
Industrial	17,541	18,103	18,665	19,221	19,782	20,360	**2,819**
Institutional	15,596	16,096	16,596	17,090	17,589	18,103	**2,506**
Total	**136,088**	**140,448**	**144,808**	**149,119**	**153,475**	**157,958**	**21,870**
Annual Increase		*2,180*	*2,180*	*2,131*	*2,194*	*2,258*	
Unincorporated County Jobs							
Retail	23,837	24,601	25,365	26,120	26,883	27,668	**3,831**
Office/Service	17,784	18,354	18,923	19,487	20,056	20,642	**2,858**
Industrial	11,056	11,410	11,764	12,114	12,468	12,833	**1,777**
Institutional	3,157	3,258	3,359	3,459	3,560	3,664	**507**
Total	**55,834**	**57,622**	**59,411**	**61,180**	**62,967**	**64,806**	**8,973**
Annual Increase		*894*	*894*	*874*	*900*	*926*	
Incorporated County Jobs							
Retail	37,820	39,031	40,243	41,441	42,652	43,898	**6,078**
Office/Service	23,510	24,263	25,016	25,761	26,514	27,288	**3,778**
Industrial	6,485	6,693	6,901	7,106	7,314	7,527	**1,042**
Institutional	12,439	12,838	13,236	13,631	14,029	14,439	**1,999**
Total	**80,254**	**82,825**	**85,396**	**87,939**	**90,508**	**93,151**	**12,897**
Annual Increase		*1,286*	*1,286*	*1,257*	*1,294*	*1,331*	
Countywide Nonresidential Floor Area (1,000 sq. ft.)							
Retail	29,021	29,951	30,880	31,800	32,729	33,685	**4,664**
Office/Service	12,685	13,092	13,498	13,900	14,306	14,724	**2,039**
Industrial	9,269	9,566	9,863	10,157	10,453	10,759	**1,490**
Institutional	5,144	5,308	5,473	5,636	5,801	5,970	**827**
Total	**56,119**	**57,917**	**59,714**	**61,492**	**63,289**	**65,137**	**9,019**
Annual Increase		*899*	*899*	*879*	*905*	*931*	
Unincorporated County Nonresidential Floor Area (1,000 sq. ft.)							
Retail	11,220	11,579	11,939	12,294	12,653	13,023	**1,803.00**
Office/Service	5,463	5,638	5,813	5,986	6,161	6,341	**878.00**
Industrial	5,842	6,029	6,216	6,402	6,589	6,781	**939.00**
Institutional	1,041	1,074	1,108	1,141	1,174	1,208	**167.00**
Total	**23,566**	**24,321**	**25,076**	**25,823**	**26,577**	**27,353**	**3,787**
Annual Increase		*378*	*378*	*369*	*380*	*391*	
Incorporated County Nonresidential Floor Area (1,000 sq. ft.)							
Retail	17,801	18,371	18,942	19,506	20,075	20,662	**2,861**
Office/Service	7,222	7,454	7,685	7,914	8,145	8,383	**1,161**
Industrial	3,427	3,537	3,646	3,755	3,865	3,978	**551**
Institutional	4,102	4,234	4,365	4,495	4,627	4,762	**659**
Total	**32,552**	**33,595**	**34,638**	**35,670**	**36,712**	**37,784**	**5,231**
Annual Increase		*521*	*521*	*510*	*525*	*540*	

Industry	Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Peak Unincorporated County Demand Base							
Peak Unincorporated Jobs*							
Retail	24,791	25,585	26,379	27,164	27,958	28,775	**3,984**
Office/Service	18,495	19,088	19,680	20,266	20,858	21,468	**2,972**
Industrial	11,498	11,866	12,235	12,599	12,967	13,346	**1,848**
Institutional	3,283	3,388	3,493	3,597	3,703	3,811	**528**
Total	**58,067**	**59,927**	**61,788**	**63,627**	**65,486**	**67,399**	**9,332**
Peak Unincorporated Nonres Floor Area (1,000 sq. ft.)							
Retail	11,669	12,042	12,416	12,786	13,159	13,544	**1,875**
Office/Service	5,682	5,864	6,046	6,226	6,408	6,595	**913**
Industrial	6,076	6,270	6,465	6,658	6,852	7,052	**976**
Institutional	1,083	1,117	1,152	1,186	1,221	1,257	**174**
Total	**24,509**	**25,294**	**26,079**	**26,856**	**27,640**	**28,447**	**3,939**

** Peak employment is 4 percent over year-round average (SC Dept. of Employment & Workforce).*
^ Unincorporated projections less Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)
Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce; Horry County Comprehsive Plan;
Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

Functional Population

Both residential and nonresidential developments increase the demand on County services and facilities. To calculate the proportional share between residential and nonresidential demand on service and facilities, a functional population approach is used. The functional population approach allocates the cost of the facilities to residential and nonresidential development based on the activity of residents and workers in the County through the 24 hours in a day. A countywide approach is necessary for this analysis.

Residents that do not work are assigned 20 hours per day to residential development and 4 hours per day to nonresidential development (annualized averages). Residents that work in Horry County are assigned 14 hours to residential development and 10 hours to nonresidential development. Residents that work outside the County are assigned 14 hours to residential development, the remaining hours in the day are assumed to be spent outside of the County working. Inflow commuters are assigned 10 hours to nonresidential development. Based on 2019 functional population data, residential development accounts for 76 percent of the functional population, while nonresidential development accounts for 24 percent, as shown in Figure 115.

Figure 115. Horry County Functional Population

Demand Units in 2019					
Residential				*Demand Hours/Day*	*Person Hours*
Population*	342,200				
Residents Not Working		235,772		20	4,715,440
Employed Residents		106,428			
Employed in Horry County			75,487	14	1,056,818
Employed outside Horry County			30,941	14	433,174
				Residential Subtotal	6,205,432
				Residential Share =>	**76%**
Nonresidential					
Non-working Residents		235,772		4	943,088
Jobs Located in Horry County		103,543			
Residents Employed in Horry County			75,487	10	754,870
Non-Resident Workers (inflow commuters)			28,056	10	280,560
				Nonresidential Subtotal	1,978,518
				Nonresidential Share =>	**24%**
				TOTAL	8,183,950

Source: U.S. Census Bureau, OnTheMap 6.1.1 Application and LEHD Origin-Destination Employment Statistics.
** Source: U.S. Census Bureau, American Community Survey, 2019 (countywide population)*

Vehicle Trip Projections

The base year vehicle trip totals and vehicle trip projections are calculated by combining the vehicle trip end factors, the trip adjustment factors, and the residential and nonresidential assumptions for housing stock and floor area and are summarized in Figure 116. Countywide, residential land uses account for 718,810 vehicle trips (59 percent of total) and nonresidential land uses account for 503,304 vehicle trips (41 percent of total) in the base year. Through 2032, the projected increase in total vehicle trips is 281,707 (23 percent), with residential trips accounting for approximately 72 percent of the trips increase.

Figure 116. Countywide Total Daily Vehicle Trip Projections

Countywide

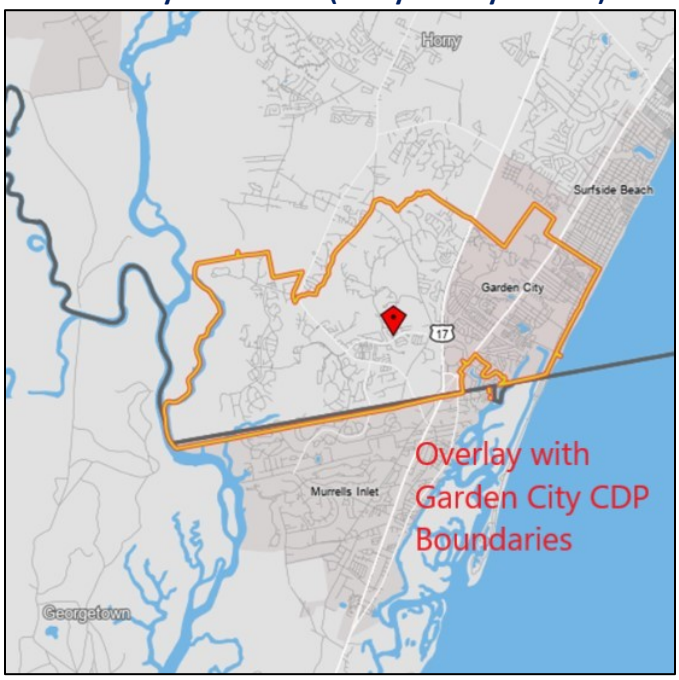
Development Type	Base Year 2022	2024	2026	2028	2030	2032	10-Yr Total Increase
Residential Trips							
Single Family	605,143	638,205	671,268	704,331	737,394	777,188	**172,045**
Multifamily	113,667	119,878	126,088	132,298	138,509	145,983	**32,316**
Subtotal	718,810	758,083	797,356	836,630	875,903	923,171	**204,361**
Nonresidential Trips							
Retail	354,440	365,796	377,152	388,381	399,725	411,401	**56,961**
Office/Service	68,754	70,957	73,160	75,338	77,538	79,803	**11,049**
Industrial	22,014	22,719	23,424	24,122	24,826	25,552	**3,538**
Institutional	58,096	59,957	61,819	63,659	65,519	67,432	**9,336**
Subtotal	503,304	519,429	535,554	551,499	567,609	584,189	**77,346**
Vehicle Trips							
Grand Total	1,222,114	1,277,512	1,332,911	1,388,129	1,443,512	1,507,360	**281,707**

Source: Trip Generation, Institute of Transportation Engineers, 10th Edition (2017); TischlerBise analysis

Horry County Fire and Medic Service Area Projections

For the Fire and Medic Impact Fee, a portion of the unincorporated County, namely the Murrells Inlet-Garden City Fire District area, needs to be netted out of the total to reflect the Fire and Medic service population and employment base. Below is a map of the Horry County portion of the Fire District.

Figure 117. Murrells Inlet-Garden City Fire District (Horry County Portion)



Residential

Horry County provided a base map along with population and housing unit estimates for the Horry County portion of the Fire District. Note that the Horry County portion of the Fire District is larger than the Census Designated Place (CDP) for which data is available. As of 2018, Horry County population of the Fire District was 18,662. Based on County growth projections, the current population estimate served by the Horry County Fire Department is shown below. This reflects 93 percent of unincorporated County population.

Figure 118. Murrells Inlet-Garden City Fire District Population (Horry County Portion)

Location	1-Jul-19	July 1, 2020 Estimate
Unincorporated Population	267,750	**276,534**
Murrells Inlet-Garden City Fire District (Horry Co. Portion)	18,662	19,243
Fire and EMS Total Population		**257,291**
	% Uninc. Served	**93%**

Sources:US Census 100% Count for 2010 Estimate; ACS for 2011-2017 (5-Year Estimates)
Horry County Planning for Fire District population estimate.

The 2018 housing unit estimate in the Horry County portion of the Fire District was 14,572. This reflects approximately 10 percent of the unincorporated County housing stock. County projections are used to project the following population and housing unit projections for the Fire and Medic service area.

Figure 119. Residential Estimate and Projections for Fire and Medic Service Area

			Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Population									
Total Countywide Permanent Residents in Hsg Units	*98.6%*		**372,342**	**356,798**	**378,341**	**399,883**	**453,740**	**478,226**	**105,885**
Housing Units		***Vac %***							
Total Countywide Housing Units			**231,483**	**221,820**	**235,213**	**248,606**	**282,088**	**297,311**	**65,828**

Unincorporated Housing Type	***% by type***							
Single Family [1]	*75.5%*	115,529	110,706	117,391	124,075	140,785	148,383	**32,854**
Multifamily [2]	*24.5%*	37,588	36,019	38,194	40,369	45,806	48,278	**10,689**
Total Uninc. Housing Units		**153,118**	**146,726**	**155,585**	**164,444**	**186,591**	**196,661**	**43,543**
Total Inc. Housing Units		**78,365**	**75,094**	**79,628**	**84,162**	**95,497**	**100,651**	**22,285**
Total Countywide Housing Units		**231,483**	**221,820**	**235,213**	**248,606**	**282,088**	**297,311**	**65,828**

		Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Peak Unincorporated Population in All Types of Units								
Grand Total Peak Uninc. Population		**398,675**	**382,636**	**405,338**	**428,044**	**484,506**	**510,295**	**111,619**
	% of Uninc. County							
Grand Total Peak Uninc. Fire and EMS Service Area Popu	**93%**	**370,768**	**355,851**	**376,964**	**398,081**	**450,591**	**474,574**	**103,806**

Peak Countywide Population in All Types of Units							
Grand Total Peak Countywide Population	**603,405**	**580,140**	**613,889**	**647,651**	**731,094**	**769,406**	**166,001**

** Includes population in group quarters.*

^ Uninc. peak population less Horry County portion of Murrells Inlet-Garden City Fire District (due to existence of separate Fire District)

[1] includes single family detached, single family attached, and mobile homes

[2] Includes structures with 2+ units; other (boats, RV, van)

Source: Horry County; U.S. Census Bureau, 2020 Census and 2020 American Community Survey 5-Year Estimates.

Nonresidential

Current employment estimate for the Horry County portion of the Murrells Inlet-Garden City Fire District was derived from the U.S. Census OnTheMap (6.1.1 Application) and LEHD Origin-Destination Employment Statistics using GIS shapefiles of the Fire District boundary provided by Horry County. The Fire District portions of County Employment were then factored out of County amounts to properly account for population served by County Fire Services.

Figure 120. County Employment by Industry with Murrells Inlet-Garden City Fire District portions factored out

Unincorporated County less Murrells Inlet-Garden City Fire District 2022

Industry	2022 Jobs Est	%
Retail	21,692	42%
Office	16,539	32%
Industrial	10,503	20%
Institutional	3,157	6%
Total	**51,891**	**100%**

Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce; TischlerBise analysis.

Likewise, the percent of Fire District jobs in the unincorporated County was estimated and is netted out of the total unincorporated County to derive the applicable square footage by industry, as shown in Figure 121.

Figure 121. Fire and Medic Service Area Employment Estimate for Base Year 2019

Unincorporated County less Murrells Inlet-Garden City Fire District 2022

Industry	Jobs^	Sq. Ft. / Empl.	Floor Area (Sq. Ft.)	%
Retail	21,692	471	10,209,996	47%
Office	16,539	307	5,080,722	23%
Industrial	10,503	528	5,550,016	25%
Institutional	3,157	330	1,041,104	5%
Total	**51,891**		**21,881,837**	**100%**

Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce; TischlerBise analysis.

Nonresidential projections are provided below for the Fire and Medic Service Area. Projections for the Fire and Medic service area are derived from the share by industry in the unincorporated County (i.e., outside the Murrells Inlet-Garden City Fire District).

Figure 122. Fire and Medic Service Area Nonresidential Projections

Industry	Base Year 2022	2 2024	4 2026	6 2028	8 2030	10 2032	10-Year Total Increase
Peak Unincorporated Jobs Fire and EMS Service Area*							
Retail	22,560	23,282	24,005	24,720	25,442	26,185	**3,625**
Office/Service	17,201	17,752	18,303	18,848	19,398	19,965	**2,764**
Industrial	10,923	11,273	11,623	11,969	12,319	12,679	**1,755**
Institutional	3,283	3,388	3,493	3,597	3,703	3,811	**528**
Total	**53,966**	**55,695**	**57,424**	**59,134**	**60,861**	**62,639**	**8,673**
Peak Unincorporated Nonres Floor Area (1,000 sq. ft.) Fire and EMS Service Area^							
Retail	10,618	10,959	11,299	11,635	11,975	12,325	**1,706**
Office/Service	5,284	5,453	5,623	5,790	5,959	6,133	**849**
Industrial	5,772	5,957	6,142	6,325	6,509	6,700	**928**
Institutional	1,083	1,117	1,152	1,186	1,221	1,257	**174**
Total	**22,757**	**23,486**	**24,215**	**24,936**	**25,665**	**26,414**	**3,657**

** Peak employment is 4 percent over year-round average (SC Dept. of Employment & Workforce).*

Source: Bureau of Labor Statistics, SC Dept of Employment & Workforce; Horry County Comprehsive Plan; Trip Generation, Institute of Transportation Engineers, 11th Edition (2021).

APPENDIX C: LAND USE DEFINITIONS

Residential Development

As discussed below, residential development categories are based on data from the U.S. Census Bureau, American Community Survey. Horry County will collect development fees from all new residential units. One-time development fees are determined by site capacity (i.e., number of residential units). See detail on the next several pages from the Horry County Zoning Ordinance.

Single Family and duplexes/semidetached:

1. Single family detached is a one-unit structure detached from any other house, that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides.
2. Single family attached (townhouse) is a one-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.
3. Mobile home includes both occupied and vacant mobile homes, to which no permanent rooms have been added, are counted in this category. Mobile homes used only for business purposes or for extra sleeping space and mobile homes for sale on a dealer's lot, at the factory, or in storage are not counted in the housing inventory.

Multifamily:

1. Two or more units (apartments) are units in structures containing two or more housing units, further categorized as units in structures with "2, 3 or 4, 5 to 9, 10 to 19, 20 to 49, and 50 or more apartments."

Excerpt from: **Horry County, South Carolina - Code of Ordinances, APPENDIX B. ZONING ARTICLE IV**
https://library.municode.com/sc/horry_county/codes/code_of_ordinances?nodeId=COOR_APXBZO_ARTIVDE_430DWUN

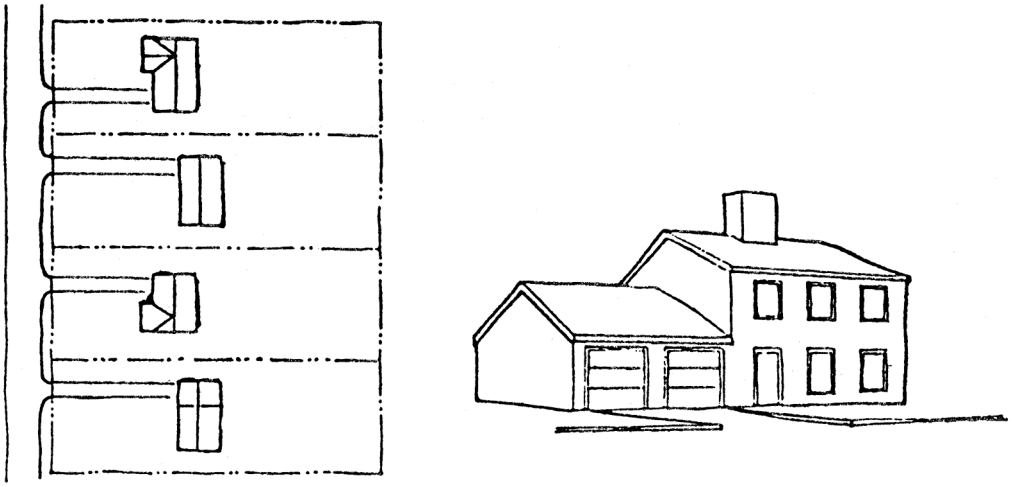
DEFINITIONS

430. Dwelling unit.

A room or suite of two (2) or more rooms that is designed for and not occupied by more than one (1) family doing its own cooking therein and having only one (1) kitchen facility, located within a building.

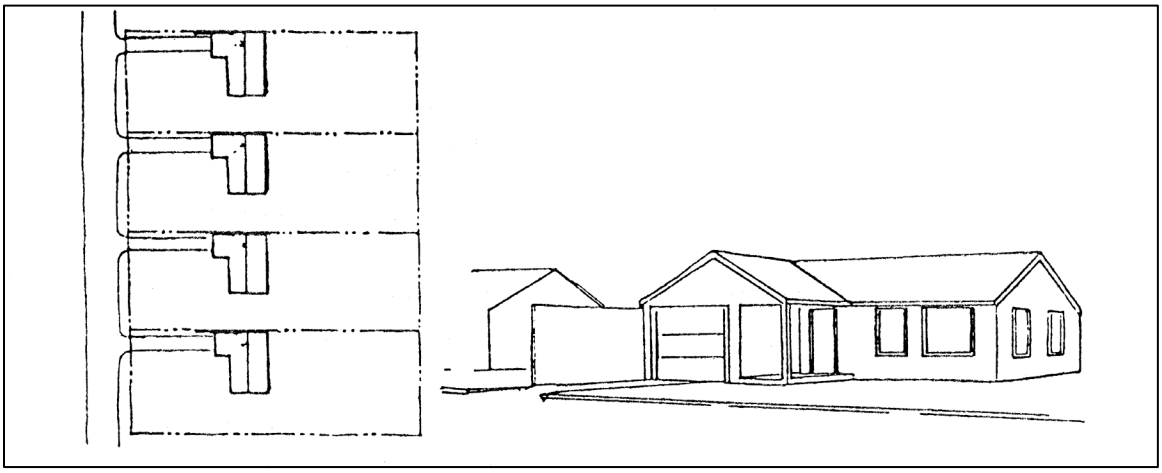
430.1 Dwelling, single-family: A building designed, constructed, and used for one (1) dwelling unit.

Single-Family:



430.2 Dwelling, patio home: A single-family dwelling on an individual lot with open yard setbacks usually on three (3) sides. These are a type of zero lot line dwellings.

Patio Home:

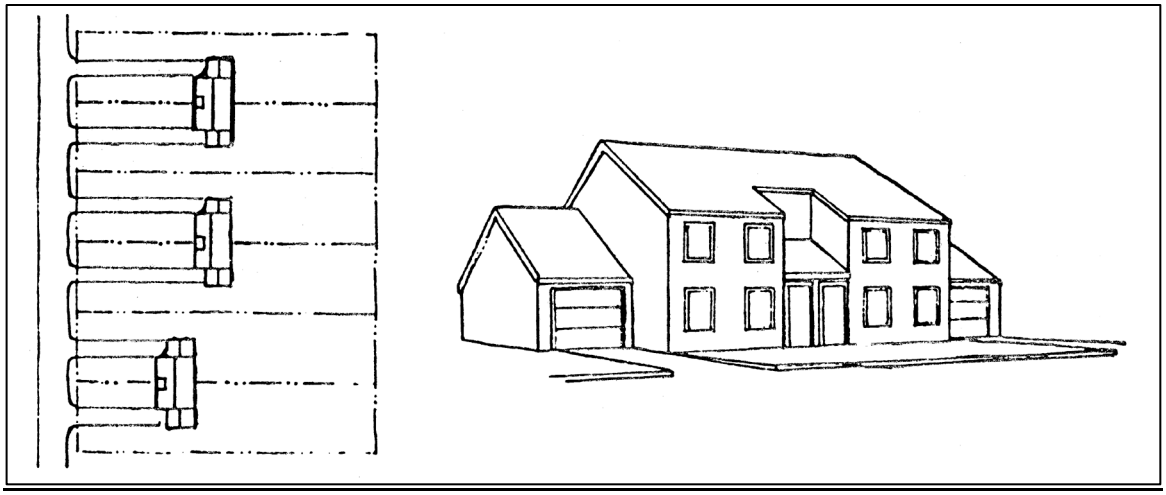


430.3 Dwelling, duplex: A building used for two (2) dwelling units that are connected by a common wall.

Duplex:

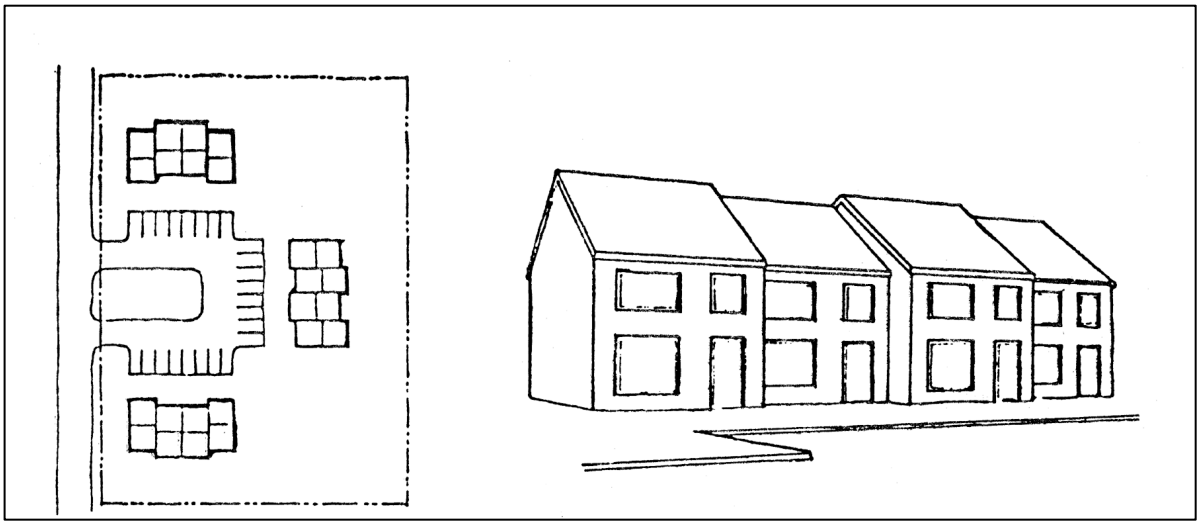
430.4 Dwelling, semi-detached: A dwelling attached to one (1) other dwelling by a common vertical wall, and each dwelling located on an individual lot.

Semi-detached:



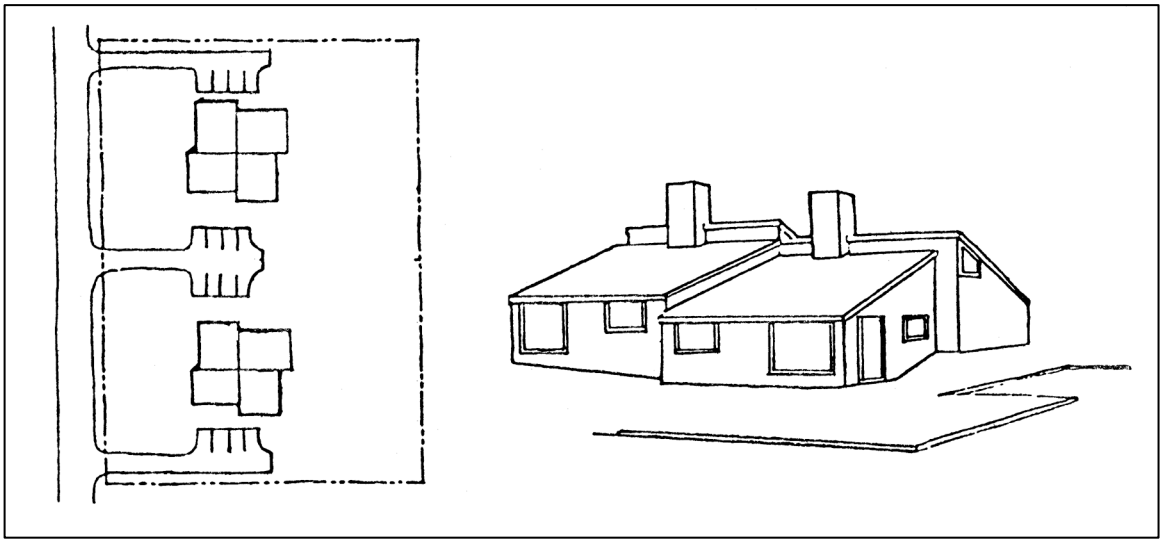
430.5 Dwelling, townhouse: A single-family dwelling in a row of at least three (3) and no more than eight (8) such units in which each unit has its own front and rear access to the outside, no unit is located over another unit, each unit is separated from any other unit by one (1) or more common fire-resistant walls, and each unit is serviced by separate utilities. These units may be subdivided on fee simple lots. Where units are subdivided, an easement shall be provided to allow utilities to cross parcel lines to provide service to attached units.

Townhouse:



430.6 Dwelling, quadruplex: A multiplex containing four (4) attached dwellings in one (1) structure. Each unit has two (2) open space exposures and shares one (1) or two (2) walls with adjoining unit(s).

Quadruplex:



430.7 Dwelling, multi-family: A building used for more than two (2) dwelling units, with each dwelling unit having a common wall with any other dwelling unit.

Nonresidential Development

The proposed general nonresidential development categories (defined below) can be used for all new construction within Horry County. Nonresidential development categories represent general groups of land uses that share similar average weekday vehicle trip generation rates and employment densities (i.e., jobs per thousand square feet of floor area).

Retail: Establishments primarily selling merchandise, eating/drinking places, and entertainment uses. By way of example, *Retail* includes shopping centers, supermarkets, pharmacies, restaurants, bars, nightclubs, automobile dealerships, and movie theaters, auto repair/service station.

Office: Establishments providing management, administrative, professional, or business services; By way of example, *Office/Service* includes banks, business offices, headquarter buildings, business parks, and research and development centers.

Industrial: Establishments primarily engaged in the production, transportation, or storage of goods. By way of example, *Industrial* includes manufacturing plants, distribution warehouses, trucking companies, utility substations, power generation facilities, telecommunications buildings, trade shops, and contractors.

Institutional: Establishments providing management, administrative, professional, or business services; By way of example, *Institutional* includes assisted living facilities, nursing homes, hospitals, medical offices, veterinarian clinics, schools, universities, churches, daycare facilities, government buildings, and prisons.

Lodging: Lodging includes hotels, motels, condotels, campground sites, and other related uses. A hotel is a place of lodging that provides sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities (pool, fitness room), and/or other retail and service shops. All suites hotel, business hotel, motel, and resort hotel are related uses. Condotel is in its most simple form a condominium form of ownership of a building which is constructed usually with a combination of a multifamily structure with some commercial features and operated similar to a hotel in terms of onsite rental and management. Another similar use is a timeshare resort.

APPENDIX D: SOUTH CAROLINA DEVELOPMENT IMPACT FEE ACT

https://www.scstatehouse.gov/code/title6.php

March 22, 2019

CHAPTER 1

General Provisions

ARTICLE 9

Development Impact Fees

SECTION 6-1-910. Short title.

This article may be cited as the "South Carolina Development Impact Fee Act".

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-920. Definitions.

As used in this article:

(1) "Affordable housing" means housing affordable to families whose incomes do not exceed eighty percent of the median income for the service area or areas within the jurisdiction of the governmental entity.

(2) "Capital improvements" means improvements with a useful life of five years or more, by new construction or other action, which increase or increased the service capacity of a public facility.

(3) "Capital improvements plan" means a plan that identifies capital improvements for which development impact fees may be used as a funding source.

(4) "Connection charges" and "hookup charges" mean charges for the actual cost of connecting a property to a public water or public sewer system, limited to labor and materials involved in making pipe connections, installation of water meters, and other actual costs.

(5) "Developer" means an individual or corporation, partnership, or other entity undertaking development.

(6) "Development" means construction or installation of a new building or structure, or a change in use of a building or structure, any of which creates additional demand and need for public facilities. A building or structure shall include, but not be limited to, modular buildings and manufactured housing. "Development" does not include alterations made to existing single-family homes.

(7) "Development approval" means a document from a governmental entity which authorizes the commencement of a development.

(8) "Development impact fee" or "impact fee" means a payment of money imposed as a condition of development approval to pay a proportionate share of the cost of system improvements needed to serve the people utilizing the improvements. The term does not include:

(a) a charge or fee to pay the administrative, plan review, or inspection costs associated with permits required for development;

(b) connection or hookup charges;

(c) amounts collected from a developer in a transaction in which the governmental entity has incurred expenses in constructing capital improvements for the development if the owner or developer has agreed to be financially responsible for the construction or installation of the capital improvements;

(d) fees authorized by Article 3 of this chapter.

(9) "Development permit" means a permit issued for construction on or development of land when no subsequent building permit issued pursuant to Chapter 9 of Title 6 is required.

(10) "Fee payor" means the individual or legal entity that pays or is required to pay a development impact fee.

(11) "Governmental entity" means a county, as provided in Chapter 9, Title 4, and a municipality, as defined in Section 5-1-20.

(12) "Incidental benefits" are benefits which accrue to a property as a secondary result or as a minor consequence of the provision of public facilities to another property.

(13) "Land use assumptions" means a description of the service area and projections of land uses, densities, intensities, and population in the service area over at least a ten-year period.

(14) "Level of service" means a measure of the relationship between service capacity and service demand for public facilities.

(15) "Local planning commission" means the entity created pursuant to Article 1, Chapter 29, Title 6.

(16) "Project" means a particular development on an identified parcel of land.

(17) "Proportionate share" means that portion of the cost of system improvements determined pursuant to Section 6-1-990 which reasonably relates to the service demands and needs of the project.

(18) "Public facilities" means:

(a) water supply production, treatment, laboratory, engineering, administration, storage, and transmission facilities;

(b) wastewater collection, treatment, laboratory, engineering, administration, and disposal facilities;

(c) solid waste and recycling collection, treatment, and disposal facilities;

(d) roads, streets, and bridges including, but not limited to, rights-of-way and traffic signals;

(e) storm water transmission, retention, detention, treatment, and disposal facilities and flood control facilities;

(f) public safety facilities, including law enforcement, fire, emergency medical and rescue, and street lighting facilities;

(g) capital equipment and vehicles, with an individual unit purchase price of not less than one hundred thousand dollars including, but not limited to, equipment and vehicles used in the delivery of public safety services, emergency preparedness services, collection and disposal of solid waste, and storm water management and control;

(h) parks, libraries, and recreational facilities;

(i) public education facilities for grades K-12 including, but not limited to, schools, offices, classrooms, parking areas, playgrounds, libraries, cafeterias, gymnasiums, health and music rooms, computer and science laboratories, and other facilities considered necessary for the proper public education of the state's children.

(19) "Service area" means, based on sound planning or engineering principles, or both, a defined geographic area in which specific public facilities provide service to development within the area defined. Provided, however, that no provision in this article may be interpreted to alter, enlarge, or reduce the service area or boundaries of a political subdivision which is authorized or set by law.

(20) "Service unit" means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards for a particular category of capital improvements.

(21) "System improvements" means capital improvements to public facilities which are designed to provide service to a service area.

(22) "System improvement costs" means costs incurred for construction or reconstruction of system improvements, including design, acquisition, engineering, and other costs attributable to the improvements, and also including the costs of providing additional public facilities needed to serve new growth and development. System improvement costs do not include:

(a) construction, acquisition, or expansion of public facilities other than capital improvements identified in the capital improvements plan;

(b) repair, operation, or maintenance of existing or new capital improvements;

(c) upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

(d) upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development;

(e) administrative and operating costs of the governmental entity; or

(f) principal payments and interest or other finance charges on bonds or other indebtedness except financial obligations issued by or on behalf of the governmental entity to finance capital improvements identified in the capital improvements plan.

HISTORY: 1999 Act No. 118, Section 1; 2016 Act No. 229 (H.4416), Section 2, eff June 3, 2016.

Effect of Amendment

2016 Act No. 229, Section 2, added (18)(i), relating to certain public education facilities.

SECTION 6-1-930. Developmental impact fee.

(A)(1) Only a governmental entity that has a comprehensive plan, as provided in Chapter 29 of this title, and which complies with the requirements of this article may impose a development impact fee. If a governmental entity has not adopted a comprehensive plan, but has adopted a capital improvements plan which substantially complies with the requirements of Section 6-1-960(B), then it may impose a development impact fee. A governmental entity may not impose an impact fee, regardless of how it is designated, except as provided in this article. However, a special purpose district or public service district which (a) provides fire protection services or recreation services, (b) was created by act of the General Assembly prior to 1973, and (c) had the power to impose development impact fees prior to the effective date of this section is not prohibited from imposing development impact fees.

(2) Before imposing a development impact fee on residential units, a governmental entity shall prepare a report which estimates the effect of recovering capital costs through impact fees on the availability of affordable housing within the political jurisdiction of the governmental entity.

(B)(1) An impact fee may be imposed and collected by the governmental entity only upon the passage of an ordinance approved by a positive majority, as defined in Article 3 of this chapter.

(2) The amount of the development impact fee must be based on actual improvement costs or reasonable estimates of the costs, supported by sound engineering studies.

(3) An ordinance authorizing the imposition of a development impact fee must:

(a) establish a procedure for timely processing of applications for determinations by the governmental entity of development impact fees applicable to all property subject to impact fees and for the timely processing of applications for individual assessment of development impact fees, credits, or reimbursements allowed or paid under this article;

(b) include a description of acceptable levels of service for system improvements; and

(c) provide for the termination of the impact fee.

(C) A governmental entity shall prepare and publish an annual report describing the amount of all impact fees collected, appropriated, or spent during the preceding year by category of public facility and service area.

(D) Payment of an impact fee may result in an incidental benefit to property owners or developers within the service area other than the fee payor, except that an impact fee that results in benefits to property owners or developers within the service area, other than the fee payor, in an amount which is greater than incidental benefits is prohibited.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-940. Amount of impact fee.

A governmental entity imposing an impact fee must provide in the impact fee ordinance the amount of impact fee due for each unit of development in a project for which an individual building permit or certificate of occupancy is issued. The governmental entity is bound by the amount of impact fee specified in the ordinance and may not charge higher or additional impact fees for the same purpose unless the number of service units increases or the scope of the development changes and the amount of additional impact fees is limited to the amount attributable to the additional service units or change in scope of the development. The impact fee ordinance must:

(1) include an explanation of the calculation of the impact fee, including an explanation of the factors considered pursuant to this article;

(2) specify the system improvements for which the impact fee is intended to be used;

(3) inform the developer that he may pay a project's proportionate share of system improvement costs by payment of impact fees according to the fee schedule as full and complete payment of the developer's proportionate share of system improvements costs;

(4) inform the fee payor that:

(a) he may negotiate and contract for facilities or services with the governmental entity in lieu of the development impact fee as defined in Section 6-1-1050;

(b) he has the right of appeal, as provided in Section 6-1-1030;

(c) the impact fee must be paid no earlier than the time of issuance of the building permit or issuance of a development permit if no building permit is required.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-950. Procedure for adoption of ordinance imposing impact fees.

(A) The governing body of a governmental entity begins the process for adoption of an ordinance imposing an impact fee by enacting a resolution directing the local planning commission to conduct the studies and to recommend an impact fee ordinance, developed in accordance with the requirements of this article. Under no circumstances may the governing body of a governmental entity impose an impact fee for any public facility which has been paid for entirely by the developer.

(B) Upon receipt of the resolution enacted pursuant to subsection (A), the local planning commission shall develop, within the time designated in the resolution, and make recommendations to the governmental entity for a capital improvements plan and impact fees by service unit. The local planning commission shall prepare and adopt its recommendations in the same manner and using the same procedures as those used for developing recommendations for a comprehensive plan as provided in Article 3, Chapter 29, Title 6, except as otherwise provided in this article. The commission shall review and update the capital improvements plan and impact fees in the same manner and on the same review cycle as the governmental entity's comprehensive plan or elements of it.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-960. Recommended capital improvements plan; notice; contents of plan.

(A) The local planning commission shall recommend to the governmental entity a capital improvements plan which may be adopted by the governmental entity by ordinance. The recommendations of the commission are not binding on the governmental entity, which may amend or alter the plan. After reasonable public notice, a public hearing must be held before final action to adopt the ordinance approving the capital improvements plan. The notice must be published not less than thirty days before the time of the hearing in at least one newspaper of general circulation in the county. The notice must advise the public of the time and place of the hearing, that a copy of the capital improvements plan is available for public inspection in the offices of the governmental entity, and that members of the public will be given an opportunity to be heard.

(B) The capital improvements plan must contain:

(1) a general description of all existing public facilities, and their existing deficiencies, within the service area or areas of the governmental entity, a reasonable estimate of all costs, and a plan to develop the funding resources, including existing sources of revenues, related to curing the existing deficiencies including, but not limited to, the upgrading, updating, improving, expanding, or replacing of these facilities to meet existing needs and usage;

(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of existing public facilities, which must be prepared by a qualified professional using generally accepted principles and professional standards;

(3) a description of the land use assumptions;

(4) a definitive table establishing the specific service unit for each category of system improvements and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, agricultural, and industrial, as appropriate;

(5) a description of all system improvements and their costs necessitated by and attributable to new development in the service area, based on the approved land use assumptions, to provide a level of

service not to exceed the level of service currently existing in the community or service area, unless a different or higher level of service is required by law, court order, or safety consideration;

(6) the total number of service units necessitated by and attributable to new development within the service area based on the land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;

(7) the projected demand for system improvements required by new service units projected over a reasonable period of time not to exceed twenty years;

(8) identification of all sources and levels of funding available to the governmental entity for the financing of the system improvements; and

(9) a schedule setting forth estimated dates for commencing and completing construction of all improvements identified in the capital improvements plan.

(C) Changes in the capital improvements plan must be approved in the same manner as approval of the original plan.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-970. Exemptions from impact fees.

The following structures or activities are exempt from impact fees:

(1) rebuilding the same amount of floor space of a structure that was destroyed by fire or other catastrophe;

(2) remodeling or repairing a structure that does not result in an increase in the number of service units;

(3) replacing a residential unit, including a manufactured home, with another residential unit on the same lot, if the number of service units does not increase;

(4) placing a construction trailer or office on a lot during the period of construction on the lot;

(5) constructing an addition on a residential structure which does not increase the number of service units;

(6) adding uses that are typically accessory to residential uses, such as a tennis court or a clubhouse, unless it is demonstrated clearly that the use creates a significant impact on the system's capacity;

(7) all or part of a particular development project if:

(a) the project is determined to create affordable housing; and

(b) the exempt development's proportionate share of system improvements is funded through a revenue source other than development impact fees;

(8) constructing a new elementary, middle, or secondary school; and

(9) constructing a new volunteer fire department.

HISTORY: 1999 Act No. 118, Section 1; 2016 Act No. 229 (H.4416), Section 1, eff June 3, 2016.

Effect of Amendment

2016 Act No. 229, Section 1, added (8) and (9), relating to certain schools and volunteer fire departments.

SECTION 6-1-980. Calculation of impact fees.

(A) The impact fee for each service unit may not exceed the amount determined by dividing the costs of the capital improvements by the total number of projected service units that potentially could use the capital improvement. If the number of new service units projected over a reasonable period of time is less than the total number of new service units shown by the approved land use assumptions at full development of the service area, the maximum impact fee for each service unit must be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to the projected new service units by the total projected new service units.

(B) An impact fee must be calculated in accordance with generally accepted accounting principles.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-990. Maximum impact fee; proportionate share of costs of improvements to serve new development.

(A) The impact fee imposed upon a fee payor may not exceed a proportionate share of the costs incurred by the governmental entity in providing system improvements to serve the new development. The proportionate share is the cost attributable to the development after the governmental entity reduces the amount to be imposed by the following factors:

(1) appropriate credit, offset, or contribution of money, dedication of land, or construction of system improvements; and

(2) all other sources of funding the system improvements including funds obtained from economic development incentives or grants secured which are not required to be repaid.

(B) In determining the proportionate share of the cost of system improvements to be paid, the governmental entity imposing the impact fee must consider the:

(1) cost of existing system improvements resulting from new development within the service area or areas;

(2) means by which existing system improvements have been financed;

(3) extent to which the new development contributes to the cost of system improvements;

(4) extent to which the new development is required to contribute to the cost of existing system improvements in the future;

(5) extent to which the new development is required to provide system improvements, without charge to other properties within the service area or areas;

(6) time and price differentials inherent in a fair comparison of fees paid at different times; and

(7) availability of other sources of funding system improvements including, but not limited to, user charges, general tax levies, intergovernmental transfers, and special taxation.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1000. Fair compensation or reimbursement of developers for costs, dedication of land or oversize facilities.

A developer required to pay a development impact fee may not be required to pay more than his proportionate share of the costs of the project, including the payment of money or contribution or dedication of land, or to oversize his facilities for use of others outside of the project without fair compensation or reimbursement.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1010. Accounting; expenditures.

(A) Revenues from all development impact fees must be maintained in one or more interest-bearing accounts. Accounting records must be maintained for each category of system improvements and the service area in which the fees are collected. Interest earned on development impact fees must be considered funds of the account on which it is earned, and must be subject to all restrictions placed on the use of impact fees pursuant to the provisions of this article.

(B) Expenditures of development impact fees must be made only for the category of system improvements and within or for the benefit of the service area for which the impact fee was imposed as shown by the capital improvements plan and as authorized in this article. Impact fees may not be used for:

(1) a purpose other than system improvement costs to create additional improvements to serve new growth;

(2) a category of system improvements other than that for which they were collected; or

(3) the benefit of service areas other than the area for which they were imposed.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1020. Refunds of impact fees.

(A) An impact fee must be refunded to the owner of record of property on which a development impact fee has been paid if:

(1) the impact fees have not been expended within three years of the date they were scheduled to be expended on a first-in, first-out basis; or

(2) a building permit or permit for installation of a manufactured home is denied.

(B) When the right to a refund exists, the governmental entity shall send a refund to the owner of record within ninety days after it is determined by the entity that a refund is due.

(C) A refund must include the pro rata portion of interest earned while on deposit in the impact fee account.

(D) A person entitled to a refund has standing to sue for a refund pursuant to this article if there has not been a timely payment of a refund pursuant to subsection (B) of this section.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1030. Appeals.

(A) A governmental entity which adopts a development impact fee ordinance shall provide for administrative appeals by the developer or fee payor.

(B) A fee payor may pay a development impact fee under protest. A fee payor making the payment is not estopped from exercising the right of appeal provided in this article, nor is the fee payor estopped from receiving a refund of an amount considered to have been illegally collected. Instead of making a payment of an impact fee under protest, a fee payor, at his option, may post a bond or submit an irrevocable letter of credit for the amount of impact fees due, pending the outcome of an appeal.

(C) A governmental entity which adopts a development impact fee ordinance shall provide for mediation by a qualified independent party, upon voluntary agreement by both the fee payor and the governmental entity, to address a disagreement related to the impact fee for proposed development. Participation in mediation does not preclude the fee payor from pursuing other remedies provided for in this section or otherwise available by law.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1040. Collection of development impact fees.

A governmental entity may provide in a development impact fee ordinance the method for collection of development impact fees including, but not limited to:

(1) additions to the fee for reasonable interest and penalties for nonpayment or late payment;

(2) withholding of the certificate of occupancy, or building permit if no certificate of occupancy is required, until the development impact fee is paid;

(3) withholding of utility services until the development impact fee is paid; and

(4) imposing liens for failure to pay timely a development impact fee.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1050. Permissible agreements for payments or construction or installation of improvements by fee payors and developers; credits and reimbursements.

A fee payor and developer may enter into an agreement with a governmental entity, including an agreement entered into pursuant to the South Carolina Local Government Development Agreement Act, providing for payments instead of impact fees for facilities or services. That agreement may provide for the construction or installation of system improvements by the fee payor or developer and for credits or reimbursements for costs incurred by a fee payor or developer including interproject transfers of credits or reimbursement for project improvements which are used or shared by more than one development project. An impact fee may not be imposed on a fee payor or developer who has entered into an agreement as described in this section.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1060. Article shall not affect existing laws.

(A) The provisions of this article do not repeal existing laws authorizing a governmental entity to impose fees or require contributions or property dedications for capital improvements. A development impact fee adopted in accordance with existing laws before the enactment of this article is not affected until termination of the development impact fee. A subsequent change or reenactment of the development impact fee must comply with the provisions of this article. Requirements for developers to pay in whole or in part for system improvements may be imposed by governmental entities only by way of impact fees imposed pursuant to the ordinance.

(B) Notwithstanding another provision of this article, property for which a valid building permit or certificate of occupancy has been issued or construction has commenced before the effective date of a development impact fee ordinance is not subject to additional development impact fees.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1070. Shared funding among units of government; agreements.

(A) If the proposed system improvements include the improvement of public facilities under the jurisdiction of another unit of government including, but not limited to, a special purpose district that does not provide water and wastewater utilities, a school district, and a public service district, an agreement between the governmental entity and other unit of government must specify the reasonable share of funding by each unit. The governmental entity authorized to impose impact fees may not assume more than its reasonable share of funding joint improvements, nor may another unit of government which is not authorized to impose impact fees do so unless the expenditure is pursuant to an agreement under Section 6-1-1050 of this section.

(B) A governmental entity may enter into an agreement with another unit of government including, but not limited to, a special purpose district that does not provide water and wastewater utilities, a school district, and a public service district, that has the responsibility of providing the service for which an impact fee may be imposed. The determination of the amount of the impact fee for the contracting governmental entity must be made in the same manner and is subject to the same procedures and limitations as provided in this article. The agreement must provide for the collection of the impact fee by the

governmental entity and for the expenditure of the impact fee by another unit of government including, but not limited to, a special purpose district that does not provide water and wastewater utilities, a school district, and a public services district unless otherwise provided by contract.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1080. Exemptions; water or wastewater utilities.

The provisions of this chapter do not apply to a development impact fee for water or wastewater utilities, or both, imposed by a city, county, commissioners of public works, special purpose district, or nonprofit corporation organized pursuant to Chapter 35 or 36 of Title 33, except that in order to impose a development impact fee for water or wastewater utilities, or both, the city, county, commissioners of public works, special purpose district or nonprofit corporation organized pursuant to Chapter 35 or 36 of Title 33 must:

(1) have a capital improvements plan before imposition of the development impact fee; and

(2) prepare a report to be made public before imposition of the development impact fee, which shall include, but not be limited to, an explanation of the basis, use, calculation, and method of collection of the development impact fee; and

(3) enact the fee in accordance with the requirements of Article 3 of this chapter.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-1090. Annexations by municipalities.

A county development impact fee ordinance imposed in an area which is annexed by a municipality is not affected by this article until the development impact fee terminates, unless the municipality assumes any liability which is to be paid with the impact fee revenue.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-2000. Taxation or revenue authority by political subdivisions.

This article shall not create, grant, or confer any new or additional taxing or revenue raising authority to a political subdivision which was not specifically granted to that entity by a previous act of the General Assembly.

HISTORY: 1999 Act No. 118, Section 1.

SECTION 6-1-2010. Compliance with public notice or public hearing requirements.

Compliance with any requirement for public notice or public hearing in this article is considered to be in compliance with any other public notice or public hearing requirement otherwise applicable including, but not limited to, the provisions of Chapter 4, Title 30, and Article 3 of this chapter.

HISTORY: 1999 Act No. 118, Section 1.