# FAYETTEVILLE TECHNICAL COMMUNITY COLLEGE (FTCC)
2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Approved by Board of Trustee's on February 15, 2021

Planning assumptions and vulnerabilities, according to the _Research and Development Corporation_ (RAND) (2005), one of the pioneer organizations in the development and use of planning assumptions, are shown below:

> _An organization's assumptions are not immutable facts but, rather, are projected to hold true for some period of time. The planning time horizon is the farthest point out that a given planning effort will consider; it sets the limits on the vulnerability of an assumption. In some cases, an organization's planning time horizon is set before planning begins. If not, it must be set before vulnerabilities can be established."_

Planning Assumptions inform the following institution planning activities:
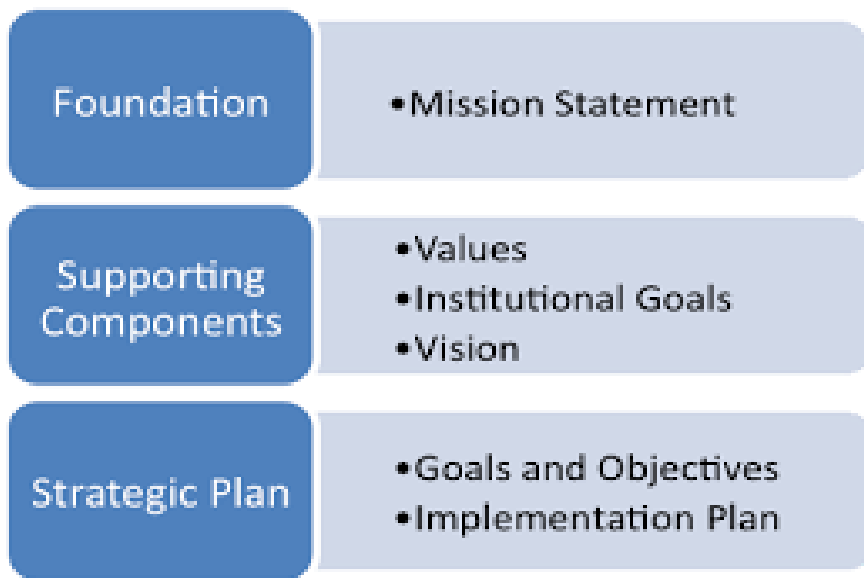
As we work through our examination of the above strategic visioning components and development of our 2021-2022 Strategic Plan, we will remain focused on diversity, equity, and inclusion demonstrating our courage, optimism, and sustained commitment, for steady improvement. Our primary goal as we continue to refine our processes, procedures and policies are to actively promote Diversity, Equity, and Inclusion (DE&I) through shared vision, purposeful inclusion, and providing equitable opportunities through our recruitment of students and employees, enhanced DE&I education and training opportunities, a focus on creating more inclusive facilities, celebrating DE&I in publications and website presence, and implementation of a Quality Enhancement Plan focused on First-Generation student support.   The College will recognize creative techniques to adapt, adjust, and when necessary create additional opportunities to further expand shared diversity, equity and inclusiveness opportunities across the College. (_See P.25 for additional information related to the College's DE&I planning assumptions_)

I.   ECONOMIC TRENDS AND PLANNING ASSUMPTIONS

Analysis Summary

- Meeting demand for qualified applicants in nursing, transportation and related industries, retail, cosmetologists, personal care aides, cyber-security, computer support technicians/managers, logistics including operations managers, construction, manufacturing, and hospitality occupations remain the strongest priority need for local employers. FTCC continues to train in these occupations to meet this employer need.
- The COVID-19 pandemic has significantly disrupted the global economy and affected post-secondary enrollment and retention. However, FTCC continues to provide synchronous and asynchronous instruction, with enhanced support services, to meet the educational needs of our students and has not experienced declines to the levels being reported from other higher education institutions.
- Employers report it is increasingly difficult to find applicants who can communicate clearly, demonstrate self-driven initiative, problem-solving skills, and maintain positive communication and relationships with their co-workers. FTCC continues to supplement instruction with soft-skill development training in support of the College's General Education Core Competencies and provides human resource development courses offered through Corporate and Continuing Education division.
- FTCC military/college rankings reflect FTCC is continuing to provide education needed by highly skilled active duty soldiers, their spouses, and veterans, with recognition received via multiple national awards for superior course content and service support provided to active-duty military, retired military, veterans, and their families.

General Economic Assumptions and Trends

- Performance of national financial markets and overall employment adjustments has greatly declined during the most recent fiscal year with the substantial loss of jobs across different economic sectors due to COVID-19. FTCC employees continue to work creatively to support students and the community throughout the pandemic. (*Emerging Markets Finance and Trade,* 2020; *Harvard Business Review,* 2020).

- The number of people filing for unemployment benefits has increased to its highest levels since the Great Depression due to the COVID-19 pandemic. This normally equates to higher enrollment in community colleges as the economy moves downward and the newly unemployed look for new careers in which to train. FTCC continues to actively recruit students across all population sectors but has noted a slight decline in enrollment not nearly at the levels experienced by other post-secondary institutions. FTCC employee recruitment and job stability has remained strong throughout the pandemic. (*American Association of Community Colleges,* 2020; *Journal of Public Economics,* 2020; *Journal of Vocational Behavior,* 2020).

- Defense spending, with significant reliance upon COVID-19 government spending bills, and the movement to increase the capabilities of the Armed Forces is anticipated to continue over the next several years, indicating additional training requirements will likely evolve to meet those increased training needs. FTCC continues to work closely with the military to meet those training needs, including being a primary provider of education and credentialing in the Health Care occupation. (_Military Spending and Global Security_, 2020_; Political Science Review_, 2020_; The Economic History Review_, 2020).

- Fort Bragg has a significant impact on the local economy. It is the largest local employer, with 65,000 military and civilian employees. It is also home to more military decision makers than any other location, outside the Pentagon. This concentration of economic impact directly resulting from Fort Bragg operations and the concentration of senior- level decision makers, has influenced growing numbers of major defense contractors open sites in the local area to support local operations. The North Carolina Military Business Center's (NCMBC) ongoing business recruitment activities continue to provide strong support to companies desiring to move closer to Fort Bragg. With the anticipated growth of both troop end-strength and defense spending with the current COVID spending bill, FTCC's co-location and the ongoing partnerships with Fort Bragg and other major military installations across the United States places the College in a strong position to meet the needs of the changing military and the larger defense industry. (_North Carolina Military Business Center_, 2020).

  - FTCC offers the Transition Tech program to active-duty military who are transitioning into the civilian workforce. There are currently thirteen career pathways that offer industry-recognized credentials in career fields of high-demand.

National and Local Job Trends

- U.S companies added 202,000 jobs in December 2020 that were broad based according to needs of the measured business sectors. In December, job gains occurred in the trades, transportation and utilities sectors (+78,000), healthcare (+46,000), and construction (+37,000). FTCC continues to modify programs and enroll students in these critical areas, along with other sectors of high growth not included in the BLC report, such as healthcare, cyber-security, logistics and operations management, automotive engine repair/mechanics, automotive-collision repair, and related programs. (_United States Bureau of Labor Statistics (BLC)_, January 2021; _US News and World Report_, 2021).

- Employers report that 85% of the today's jobs will not exist in 2030 and many new jobs have not even been created yet. In support of these assumptions, the Institute for the Future provides examples of current-mainstream careers that did not exist just a few years ago, including drone operator, social media manager, app developer, and cloud computing engineer, among others. FTCC continues to expand programs, including short-term training opportunities, to meet this evolving career pattern anticipated over the coming decade. (_Applied Economics_, 2020; _Economic Alternatives_, 2020)

- The Fast Food industry continues to suffer and/or adjust as a result of COVID-19 restrictions placed upon maximum seating capacity within restaurants by relying upon the use of fast-food trucks and to-go dining. Other industries such as the grocery and retail industries have also expanded self-service lanes and online shopping with curbside pick-up and home delivery options. Through the use of mobile apps, online ordering has become more convenient and allowed for the expansion of third-party delivery through apps such as Grub Hub, Uber Eats, and Door Dash. It is likely that these trends will continue for the foreseeable future. FTCC continues to modify programs in computer technologies to meet this changing training need. (*Journal of Work, Environment, and Health*, 2020; *Trends in Food Science and Technology,* 2020*).*

- The healthcare industry has transformed due to COVID-19 with an increased use of telehealth options and stricter health protocols. COVID-19 has created larger demand for new occupations such as contact tracers, COVID-19 testers and skilled technicians for vaccine inoculations, and temperature screeners. FTCC has expanded its health care programs and worked closed with the local and State-level health departments to meet this changing need and implemented internal testing, contact tracing, and daily temperature checks to slow the pandemic spread. (*Journal of Communication in Healthcare*, 2020; *SHRM*, 2020)

- Companies across the United States say it is becoming increasingly difficult to find applicants who can communicate clearly, take self-directed initiative, problem-solve and willingness to get along with others. These soft-skills are some of the job market's most sought-after skills and can make a huge difference when companies are considering applicants for available employment positions. FTCC continues to incorporate soft-skills as a component of instruction within program of study courses, in both curriculum and corporate and continuing education, to enhance student success as they transition into the job market. Soft-skills remain a significant portion of the College's General Education Core Competencies expected of all FTCC graduates and measured annually during program assessment activities. (*Journal of Applied Educational Research and Policy Research*, 2020; *Problems of Education in the 21st Century*, 2020).

- Table 1 reflects new jobs created during the 2019-20 fiscal year and industries showing declining numbers of positions. Food Service, General Managers, Registered Nurses, Building Construction Trades, Logistics, Computer Technologies, and Automotive Repair/Transportation lead the projected growth industries, when separated from the general sector of sales and related occupations. There is a significant need for additional nurses, maintenance support and repair technicians, computer technicians, building and construction trades workers, and mobile food delivery employees, and related jobs both locally and nationally. FTCC continues to strategically expand these programs to meeting the growing need. (*Journal of Communication in Healthcare*, 2020; *SHRM*, 2020)

- Table 2 reflects long-term employment sector projections for new jobs through 2025, with the greatest need occurring in the industry sectors of food service, healthcare,

computer support jobs including cyber-security, construction, logistics including facilities maintenance, and transportation related jobs such as vehicle drivers and vehicle repair/maintenance jobs. The College continues to offer programs of study, with both short–and long-term credential opportunities, to prepare students for employment in these evolving fields of work. (*Journal of Communication in Healthcare*, 2020; *SHRM*, 2020)

- o Tables 1 and 2 collectively illustrates the local industry demand in these occupations. The College continues to expand partnerships with employers through:

    - academic program reviews, and

    - regular advisory committee meetings with industry leaders sharing their additional training requirements in growing employment sectors, and

    - Industry sector modeling, including analysis of the College's direct economic impact on the local and State economies.

See business and labor trend analysis charts beginning on next page

Table 1: Economic Modeling Specialists, International (EMSI)
Regional Private Workforce and Industry *New Job Creation*
(Cumberland County)

Description	2020 Jobs	2021 Jobs	2020 - 2021 Change	Avg. Hourly Earnings	2021 Location Quotient
Fast Food and Counter Workers	5,938	6,042	104	$9.73	1.48
Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	1,539	1,636	97	$13.41	0.53
Waiters and Waitresses	2,246	2,300	54	$10.29	0.88
Real Estate Sales Agents	2,555	2,606	51	$32.75	0.65
Cooks, Restaurant	1,405	1,455	50	$12.70	0.94
Customer Service Representatives	1,898	1,944	46	$14.32	0.63
Hairdressers, Hairstylists, and Cosmetologists	1,497	1,532	35	$13.92	1.18
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	1,969	2,002	33	$41.56	0.89
Registered Nurses	3,043	3,072	29	$34.49	0.99
Construction Laborers	1,271	1,300	28	$15.40	0.65
Project Management Specialists and Business Operations Specialists, All Other	1,868	1,896	27	$39.00	1.35
Personal Financial Advisors	791	817	26	$54.30	0.44
Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	925	950	25	$16.28	0.98
First-Line Supervisors of Food Preparation and Serving Workers	1,420	1,442	22	$15.89	1.32
First-Line Supervisors of Construction Trades and Extraction Workers	842	858	17	$27.51	0.98
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	711	727	16	$8.80	1.69
General and Operations Managers	1,688	1,703	15	$55.13	0.65
Light Truck Drivers	1,083	1,097	14	$17.89	0.85
Food Preparation Workers	616	629	13	$10.07	0.69
Meat, Poultry, and Fish Cutters and Trimmers	361	373	12	$13.36	2.36
First-Line Supervisors of Non-Retail Sales Workers	545	556	11	$27.63	0.58
Accountants and Auditors	895	905	10	$36.75	0.52
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	745	754	9	$23.54	0.57
Textile Bleaching and Dyeing Machine Operators and Tenders	114	122	8	$12.61	14.11
Heavy and Tractor-Trailer Truck Drivers	2,177	2,185	7	$20.30	0.77
Software Developers and Software Quality Assurance Analysts and Testers	253	259	6	$42.76	0.16
Shipping, Receiving, and Inventory Clerks	359	365	5	$16.05	0.49
Telecommunications Line Installers and Repairers	106	110	4	$26.21	0.74

FTCC 2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Description	2020 Jobs	2021 Jobs	2020 - 2021 Change	Avg. Hourly Earnings	2021 Location Quotient
Engineers, All Other	251	255	3	$47.93	1.23
Dental Hygienists	220	223	2	$30.00	0.98
Cost Estimators	137	138	1	$31.83	0.59
Electric Motor, Power Tool, and Related Repairers	116	115	(1)	$24.97	5.57
Postal Service Clerks	78	77	(2)	$25.96	1.04
Pharmacy Technicians	443	440	(3)	$18.14	1.06
Hotel, Motel, and Resort Desk Clerks	295	292	(4)	$9.75	1.11
Plumbers, Pipefitters, and Steamfitters	443	438	(6)	$19.85	0.76
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	131	125	(7)	$16.92	0.65
Postal Service Mail Sorters, Processors, and Processing Machine Operators	243	235	(8)	$23.68	2.53
Animal Caretakers	569	560	(9)	$12.93	0.66
Postal Service Mail Carriers	417	407	(10)	$24.77	1.29
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	490	479	(11)	$19.77	1.11
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	132	120	(12)	$21.39	1.67
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	126	114	(13)	$20.88	1.49
Security Guards	1,086	1,072	(14)	$17.96	0.86
Childcare Workers	1,555	1,540	(15)	$9.99	1.05
Inspectors, Testers, Sorters, Samplers, and Weighers	605	589	(16)	$17.94	0.96
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	446	427	(18)	$17.77	1.46
Cashiers	4,245	4,226	(19)	$10.10	1.19
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,746	2,726	(20)	$12.66	0.84
Office Clerks, General	3,814	3,792	(22)	$15.21	1.11
Miscellaneous Assemblers and Fabricators	707	678	(29)	$13.40	0.49
Military-only occupations	22,591	22,516	(75)	$18.37	24.52
Total	80,745	81,219	474	$22.02	1.78

*Source: EMSI 2020 (4th Quarter): Occupation Report; *Location Quotient: Concentration in Cumberland County compared to all other NC Counties; 1 – Average*

Table 2: EMSI Regional Private Workforce and Industry _Projections_
(Cumberland County)

Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	Avg. Hourly Earnings	2025 Location Quotient
Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	1,539	1,904	365	$13.41	0.54
Fast Food and Counter Workers	5,938	6,295	357	$9.73	1.48
Cooks, Restaurant	1,405	1,598	193	$12.70	0.98
Real Estate Sales Agents	2,555	2,743	188	$32.75	0.66
Waiters and Waitresses	2,246	2,424	178	$10.29	0.92
Customer Service Representatives	1,898	2,043	145	$14.32	0.67
Home Health and Personal Care Aides	2,148	2,279	131	$10.88	0.53
Hairdressers, Hairstylists, and Cosmetologists	1,497	1,628	131	$13.92	1.19
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	1,969	2,090	121	$41.56	0.89
Management Analysts	1,064	1,174	111	$42.06	0.75
Construction Laborers	1,271	1,379	108	$15.40	0.67
Personal Financial Advisors	791	896	105	$54.30	0.46
Property, Real Estate, and Community Association Managers	1,061	1,159	97	$33.81	0.65
Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	925	1,017	92	$16.28	1.04
Registered Nurses	3,043	3,133	91	$34.49	0.98
Project Management Specialists and Business Operations Specialists, All Other	1,868	1,950	82	$39.00	1.37

FTCC 2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	Avg. Hourly Earnings	2025 Location Quotient
First-Line Supervisors of Food Preparation	1,420	1,491	71	$15.89	1.33
Substance Abuse, Counselors	506	569	64	$22.96	1.58
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	711	768	57	$8.80	1.74
Real Estate Brokers	733	790	56	$42.88	0.65
General and Operations Managers	1,688	1,741	53	$55.13	0.66
First-Line Supervisors of Construction Trades and Extraction Workers	842	893	51	$27.51	1.02
Food Service Managers	496	547	51	$21.73	0.88
Food Preparation Workers	616	664	47	$10.07	0.72
First-Line Supervisors of Non-Retail Sales Workers	545	587	42	$27.63	0.60
Writers and Authors	321	363	42	$25.16	0.55
Light Truck Drivers	1,083	1,121	38	$17.89	0.83
Exercise Trainers and Group Fitness Instructors	231	269	37	$18.00	0.56
Accountants and Auditors	895	932	37	$36.75	0.53
Financial Managers	423	458	35	$54.46	0.45
Market Research Analysts and Marketing Specialists	248	282	34	$31.84	0.31
Construction Managers	460	494	33	$39.37	0.80
Clinical, Counseling, and School Psychologists	183	215	32	$37.09	1.08
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	745	776	31	$23.54	0.58
Electrical Power-Line Installers and Repairers	120	149	29	$29.35	1.25
Carpenters	928	953	25	$17.94	0.64

FTCC 2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	Avg. Hourly Earnings	2025 Location Quotient
Sales Representatives, Wholesale	666	690	24	$27.62	0.43
Software Developers and Software Quality Assurance Analysts	253	276	23	$42.76	0.17
Medical and Health Services Managers	599	621	22	$52.60	1.30
Phlebotomists	239	260	21	$16.01	1.83
Chefs and Head Cooks	126	145	20	$20.23	0.66
Civil Engineers	482	501	19	$44.06	1.40
First-Line Supervisors of Retail Sales Workers	2,291	2,309	18	$19.38	1.13
Telecommunications Line Installers and Repairers	106	123	17	$26.21	0.84
Speech-Language Pathologists	175	191	16	$33.75	0.86
Medical Secretaries and Administrative Assistants	469	484	15	$14.44	0.74
Automotive Service Technicians and Mechanics	1,561	1,576	14	$15.96	1.58
Physical Therapists	236	250	13	$40.17	0.93
Sales Managers	174	186	12	$34.58	0.38
Marketing Managers	124	134	11	$46.90	0.36
Nurse Practitioners	185	195	10	$54.23	0.81
Occupational Therapists	124	133	9	$36.18	0.86
Installation, Maintenance, and Repair Workers, All Other	496	503	8	$23.98	1.62
Hazardous Materials Removal Workers	44	51	7	$13.94	1.06
Clinical Laboratory Technologists and Technicians	444	451	6	$26.45	1.31
Healthcare Social Workers	64	68	5	$25.00	0.35
Computer User Support Specialists	509	513	4	$22.58	0.65
Financial Examiners	54	57	3	$50.60	0.82
Insurance Underwriters	40	42	2	$59.21	0.41
Crane and Tower Operators	13	13	1	$22.78	0.28
Materials Engineers	14	13	(1)	$47.25	0.49

FTCC 2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	Avg. Hourly Earnings	2025 Location Quotient
Electric Motor, Power Tool, and Related Repairers	116	114	(2)	$24.97	5.59
Industrial Engineering Technologists and Technicians	30	28	(3)	$23.79	0.39
Pediatricians, General	72	68	(4)	$130.91	1.73
Maintenance Workers, Machinery	42	38	(5)	$17.38	0.50
Automotive and Watercraft Service	151	145	(6)	$11.21	1.20
Office Machine Operators, Except Computer	112	106	(7)	$13.77	2.41
Interviewers, Except Eligibility and Loan	304	297	(8)	$14.15	1.30
Meter Readers, Utilities	143	135	(9)	$15.71	4.70
Legal Secretaries and Administrative Assistants	74	65	(10)	$17.33	0.43
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	106	95	(11)	$12.33	1.48
Pressers, Textile, Garment, and Related Materials	54	42	(12)	$10.90	1.31
Elementary School Teachers, Except Special Education	1,589	1,574	(15)	$21.42	1.10
Telecommunications Equipment Installers and Repairers, Except Line Installers	353	337	(16)	$24.22	1.42
Teaching Assistants, Except Postsecondary	1,308	1,291	(17)	$11.54	0.93
Retail Salespersons	5,651	5,634	(18)	$12.43	1.18
Executive Secretaries and Executive Administrative Assistants	219	199	(20)	$31.20	0.40
Sewing Machine Operators	202	182	(20)	$11.24	1.07
Plumbers, Pipefitters, and Steamfitters	443	422	(21)	$19.85	0.71
Mixing and Blending Machine Setters, Operators	137	114	(24)	$16.95	0.91

FTCC 2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	Avg. Hourly Earnings	2025 Location Quotient
Nursing Assistants	2,379	2,355	(24)	$12.09	1.51
Farmers, Ranchers, and Other Agricultural Managers	282	256	(26)	$20.04	0.16
Driver/Sales Workers	994	967	(27)	$10.25	1.94
Postal Service Mail Sorters, Processors, and Processing Machine Operators	243	209	(34)	$23.68	2.54
Animal Caretakers	569	534	(35)	$12.93	0.65
Tellers	232	196	(35)	$15.69	0.49
Heating, Air Conditioning, and Refrigeration Mechanics Installers	490	451	(39)	$19.77	1.02
Postal Service Mail Carriers	417	376	(40)	$24.77	1.31
Truck Operators	1,001	960	(41)	$19.61	1.38
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	131	89	(42)	$17.45	0.56
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	132	86	(47)	$21.39	1.22
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	126	79	(47)	$20.88	1.09
Tire Builders	116	66	(50)	$29.15	3.37
Security Guards	1,086	1,032	(54)	$17.96	0.83
Childcare Workers	1,555	1,494	(61)	$9.99	1.06
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,746	2,677	(69)	$12.66	0.81
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	446	375	(70)	$17.77	1.30
Inspectors, Testers, Sorters, Samplers	605	533	(72)	$17.94	0.92

FTCC 2021-2022 PLANNING ASSUMPTIONS AND TRENDS

Description	2020 Jobs	2025 Jobs	2020 - 2025 Change	Avg. Hourly Earnings	2025 Location Quotient
Cashiers	4,245	4,138	(107)	$10.10	1.20
Miscellaneous Assemblers and Fabricators	707	588	(119)	$13.40	0.45
Office Clerks, General	3,814	3,686	(128)	$15.21	1.10
Military-only occupations	22,591	22,388	(203)	$18.37	25.00
Total	**110,154**	**112,300**	**2,146**	**$25.37**	**1.30**

*Source: EMSI 2020 (1st Quarter): Occupation Report; *Location Quotient: Concentration in Cumberland County compared to all other NC Counties; 1 – Average*

Planning Assumptions continue on the next page

- Defense and Aerospace sector projections

  o North Carolina has the third-largest military population with the U.S. Army having the largest military presence in the state. Combined with the potential growth in both troop end-strength and federal government defense spending, additional opportunities in defense and aerospace are anticipated. Major corporations in this sector have begun establishing their footprint in the Fayetteville area as the region continues to grow in new businesses supporting the military. This expansion of new businesses is anticipated to continue its growth pattern as more businesses move into the local economy. FTCC's Military Business Center (NCMBC), All-American Veteran's Center, and College-wide educational programs provides ongoing support to this growing industry across North Carolina. (*Economic Development Partnership of North Carolina*, 2020).

  o The military, and expanding military-support industries, will continue to have a high demand for a skilled workforce with strong computational skills, interpersonal communication skills, and soft-skills. FTCC continues to offer mathematics, information technology courses, airframe and powerplant certification preparation, ground school for pilots, drone flight and maintenance, communications courses, and soft skills training in all programs. The College is also expanding STEM-related training opportunities to meet the expanding needs of local, regional and national employment sectors. (*Developments and Advances in Defense and Security*, 2020; *Sustainability*, 2020).

  o Highly skilled active duty service members depart active military service each year. More than 97% of new veterans begin their transition to private sector careers at community colleges. FTCC has expanded its course offerings for military personnel to other branches of the military beyond just the U.S. Army stationed at Fort Bragg. To meet the needs of the multiple military branches, the College continues to revise and expand its Credit for Prior Learning opportunities, thereby assisting the multiple branches of the armed forces with members transitioning to civilian careers. (*International Security*, 2020; *Viqtory Media*, 2020).

  o FTCC is highly ranked by nationally recognized military support publications for superb service to military students, including:

    - Ranked #5 in the nation in "*Military Times EDGE* Magazine 2020."

    - Best for Vets: Career and Technical Colleges." Rankings were based on college culture, student support, academic policies, academic quality, and financial aid.

- Designated as a Military Friendly School: Ranked #1 (Gold) among the Top 10 School by Victory Media (2nd year in a row). The designation is awarded to the top 10% of schools nationwide that deliver the best experience for military students and their family members.

- Designated as a Military Advanced Education and Transition College by KMI Media Group. The designation is reserved for those colleges and universities that implement best practices regarding its active duty and veteran student populations.

- Public sector projections

  o Public sector employment is anticipated to continue steady growth over the next five years as legislature requirements and needs continue to be modified or expanded. (*North Carolina Department of Commerce*, 2020)

  o NC-based public colleges and universities continue to experience difficulty in obtaining annual budget revenues in a timely manner to support expansion of programs to meet employer needs. NC Community College faculty salaries continue to lag behind salaries paid in other states, ranking 40th in the nation and behind both the University of North Carolina System and NC's K-12 average teacher salaries. Compounding this problem, community college faculty salary increases were held back in the 2019-2020 legislative session. Continued restrictions on pay raises may have an increasing impact on retention and recruitment of qualified instructors. FTCC implemented a Teacher Preparation program, effective in the Spring 2021 semester, to assist the College in preparing a larger instructional workforce. (*NC Community College's 2010 Consensus Budget Priorities*)

  o Twelve of Cumberland County's top twenty-five employers are public sector organizations—Department of Defense, Veterans' Administration, County and City governments, Postal Service, Healthcare, secondary and post-secondary education. FTCC continues to expand program offerings to meet anticipated employer needs in these employment sectors. (*North Carolina Department of Commerce*, 2020)

- Food Service, Hospitality, and Retail sector projections

  o Population growth across the nation, and locally, is expected to increase food consumption and increase demand for food service, hospitality, and retail sales at or above the average for all occupations. Due to COVID-19, however, these industries are currently struggling to survive in the local, regional, national, and global markets. FTCC programs of study continue to provide highly trained graduates each year to meet the anticipated demand for new employees according to labor market

projections within these sectors through 2025. Regionally, these industry sectors are expected to add more than 900 jobs over the next five years, supplemented with an increased demand for skilled managers in all of the sectors. FTCC's culinary, hospitality and business administration programs continue to meet the training need requirements for these occupations. (*International Journal of Hospitality Management*, 2020; *Tourism Management*, 2020).

- Healthcare sector projections

  - As a result of the COVID-19 pandemic, the healthcare sector is currently experiencing a massive shortage of skilled healthcare workers and other allied-health medical staff. The anticipated shortage of healthcare employees will continue to increase through 2025. FTCC has entered into partnerships with healthcare providers and expanded program capacity to increase the numbers of qualified applicants to meet the increasing demand for qualified and credentialed applicants ready to go to work immediately. (*New England Journal of Medicine*, 2019; *The Modern Hospital*, 2019).

  - FTCC can expect increasing needs in education/training demands for skilled registered nurses, practical nurses, and allied health professions. In conjunction with the COVID-19 pandemic, increasing competition for patient dollars has intensified through consolidation of hospitals into major regional healthcare centers, providing a higher demand and financial reward opportunity for talented nurses and allied health direct care professionals who are properly credentialed and work-ready. FTCC has expanded training in these growing employment sectors and provides clinical rotation experiences during such training to meet the growing need in these occupations. Cape Fear Valley Health System, through a partnership with the College, is covering the tuition and fees of registered nursing students to expand their opportunities to hire qualified nursing graduates locally. Upon graduation, these students agree to work for Cape Fear Valley Health System and will receive a $15,000 sign-on bonus.

- Manufacturing and Skilled Trades sector projections

  - Through 2025 continued demand for skilled technicians is anticipated. These economic projections are fueling increased opportunities in the manufacturing industry across the United States. Job growth is projected in the areas of Food Manufacturing, Transportation Equipment Manufacturing, and Machinery Manufacturing as well as production of COVID-19-related personal protection equipment and supplies. FTCC's Computer-Integrated Machining, Welding, and Certified Production Technician programs are preparing employees for this forecasted employment growth sector. (*NC Dept. of Commerce*, 2020).

o Manufacturing-related and skilled trades positions offer lucrative Fayetteville-area salaries, supplemented with strong employer-paid benefit packages. The total compensation package in the trade occupations indicates local employers value our employee skills and their post-secondary education/credentials that prepares them to be qualified applicants in hard to fill positions. FTCC continues to offer short-and long-term training leading to industry recognized credentials preparing students to meet this ongoing need as the baby-boomer generation continues moving into retirement. Please note the trades-skill projections on the next page.

Occupation	Number of Fayetteville Area Jobs - Projected through 2025*	Average Starting Salary**	Value of the Benefits Package paid by the Employer**	Total Average Compensation (inclusive of benefits) **
Electricians	802	$54,948	$26,790	$81,738
Diesel Mechanics	611	$52,790	$25,406	$78,196
Plumbers, Pipefitters, and Steamfitters	397	$52,198	$25,055	$77,253
HVAC	229	$69,141	$31,298	$100,439
Automotive Body and Related Repairers	211	$53,892	$25,610	$79,502
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	22	$51,293	$18,086	$69,379
Automotive Service Technicians and Mechanics	1,222	$53,235	$26,725	$79,960
Total	**3494**	**$55,357**	**$25,567**	**$80,924**

*Source #1: EMSI 2020 (4th Quarter): Occupation Report
**Source # 2: Salary.com (Some average salaries
are computed at levels II and III to meet employer
skill need of future applicants).

Legend: Value of Benefits includes employer paid social security, disability, healthcare, pension, and paid time off from Salary.com.

o FTCC offers curriculum programs and corporate and continuing education programs in manufacturing technologies, and the skilled trades occupations identified in the preceding chart. These programs prepare graduates with short-term certifications and/or one- and two-year diplomas, and/or associate degrees. These programs have attracted the attention of manufacturing and skilled trades leaders across the nation. With training opportunities available at FTCC, local residents

are preparing now for these current and future employment opportunities in the skilled trades industry. (*Clean Energy*, 2020; *Energy and Fuels*, 2020).

- Distribution and Transportation sector projections

  o The ongoing need for logistics analysts is expected to rise by 22% through 2022. Logisticians work in nearly every industry sector, and the increased employment growth anticipated in this sector reflects significant opportunities in the transportation sector of the global economy. FTCC continues to expand training opportunities preparing students for these sector growth opportunities. (*Journal of Cleaner Production*, 2020; *Journal of Infrastructure Development*, 2020).

  o Walmart stores, with a regional distribution warehouse in Cumberland County, remains a major employer in the region with more than 1,000 employees. Rooms-to-Go has a regional sales and distribution center, strategically located close to Fayetteville on Interstate 95 that is midway between the Central Atlantic states to the north, and Atlanta and Florida to the south. This region's access to deep water ports in both North and South Carolina, makes this area a strong choice for additional distribution operations. FTCC has expanded programs of study related to global logistics and supply chain management to provide a workforce ready to meet the growing demand for talented employees to sustain distribution operations in these enterprises.

  o According to the American Trucking Association, about 51,000 more truck drivers are needed to meet the demand from companies such as Amazon and Walmart as increased shipping is required across the nation. As a result of COVID-19, truck driver applicants are expected to remain in high demand to support increases in transportation infrastructure across the nation. Locally, truck drivers are being hired quickly as soon as they complete their FTCC training and certifications. (*Transportation Planning and Technology*, 2020; *Transport Policy*, 2020).

Unemployment and Labor Force Participation

- The number of long-term unemployed (those jobless for 27 weeks or more) has significantly increased during the past year to 3.941 million nationwide which may be attributed to the economic effects of COVID-19. (*United States Bureau of Labor Statistics*, 2020)

  o The North Carolina unemployment rate has increased as compared with the national average. This increase does not include those that are underemployed (working part-time and/or not seeking jobs with additional benefits) or those that are no longer in the labor force

(discouraged workers). The underemployed and those no longer considered in the workforce, including the homeless, remains a growing concern for regional economists, labor-market analysts, and social/health experts. FTCC continues to strengthen its partnerships with the local employment experts and the Workforce Development Board to meet the training needs of the underemployed or the region's discouraged workers. (*United States Bureau of Labor Statistics*, 2020)

Unemployment Rates			
	Nov 2019	Nov 2020	Status
National	3.5%	6.7%	⬆ 3.2%
North Carolina	3.6%	6.2%	⬆ 2.6%
Cumberland County	4.7%	8.4%	⬆ 3.7%

Source: North Carolina Department of Labor and Economic Analysis, 2020, 4th Quarter

Enrollment and Financial Aid Trends

- As students enroll in community colleges across the United States, online programs of study have expanded exponentially since 2010. Nationally, online students completed their associate degrees at rates higher than students participating in face- to-face modalities. FTCC requires the same level of work, competencies, and learning outcomes regardless of modality. FTCC also requires all classes to include an online component to supplement in-class instruction and facilitate continued studies in periods of military deployments, adverse weather, or other reasons requiring College closings. While the COVID-19 pandemic has disrupted face-to-face instruction globally, the College has been able to seamlessly transition from face-to-face to online using both synchronous and asynchronous modalities of instruction (*American Association of Community Colleges*, 2020*; Journal of Urban Economics*, 2020).

  - A focus on assisting students when outside influences may be negatively affecting decisions on whether to continue studies or discontinue educational goals. Non-educational demands of community college students can negatively affect their retention, completion rates and future financial aid, such as the COVID-19 pandemic. These demands include family life, employment conflicts, and local economic conditions. At FTCC, students take advantage of a variety of student support services and learning modalities, College Foundation grants, federal COVID-19 financial assistance, and College-issued laptop computers to persevere during these difficult times to achieve their educational and career aspiration goals. FTCC provides multiple sources of emergency funding to help students struggling financially to continue their programs of study and faculty allow flexibility in assignment due dates due to outside influences, including illness associated with COVID-19. (*The Internet and Higher Education*, 2020; *Pedagogy and the Human Sciences*,

2020).

- A growing number of students who have already completed advanced degrees are returning to community colleges, including FTCC, for specific job skills training that will enable them change their career or advance in their current career. Students enrolled in four-year colleges and universities also enroll at community colleges during their summer breaks to take advantage of lower tuition rates and transferring community college courses back to their institution for transcript credit. FTCC provides timely registration and course completion for these students enabling them to complete their degrees quicker. (*Annual Survey of Colleges & Universities*, 2010-2019; *Petersons Undergraduate Survey of Colleges & Universities*, 2010-2020).

- The Southeastern region of the United States will experience an 11% increase in the number of high school graduates by 2022. FTCC is home to the Cumberland Polytechnic High School and will continue to expand partnerships with K-12 institutions preparing for this increased student population. The College also hired and placed College-paid Career Coaches in local high schools to assist with new student registration, career-planning, retention and success. (*Bureau of Labor Statistics*, 2020; *The Economics of Education*, 2020).

  - The Department of Education published a series of reports that identified factors contributing to the current student loan default rates. Those factors include attendance at private institutions, COVID-19 pandemic, students coming from low-income families, and their unemployment. Student default rates at FTCC have steadily declined through close monitoring, advanced debt counseling, and follow-up activities required to collect payments. (*Journal of Public Budgeting, Accounting and Financial Management*, 2020; *Wall Street Journal*, 2020).

- The federal government reports an ongoing need for student aid for higher education. However, as this aid has increased, the government has not seen a corresponding increase in numbers of students completing college. While the COVID-19 pandemic has disrupted post-secondary enrollment and completion rates globally, FTCC continues to increase student retention and graduation rates even with the demands associated with COVID-19 symptoms, hospitalizations and recovery time. (*Integrated Post-Secondary Education Data Systems*, 2021; *The Economics of Education*, 2020).

- Throughout the 2019-2020 academic school year, VA payment rates reflected maximum amounts. This means full eligibility and benefits (100%) for students at in-state public colleges. Private or foreign colleges may receive up to $25,162.14 each academic school year, which is the national maximum. Regardless of formal state of residency, if a student temporarily lives in the same state as the college, then qualifications remain the same for receiving

tuition benefits. Students may also be qualified to receive a one-time rural benefit package, a monthly housing allowance, and a course resource stipend. As a result of these VA benefits, FTCC continues to experience increased enrollment of military spouses and dependents with a corresponding expansion of support services staff providing guidance and administrative support. (*U.S. Department of Veterans Affairs*, 2020).

- The Forever GI Bill assists students who were affected by school closures or specific program disapprovals, by eliminating the 15-year time limit for using the GI Bill at community/technical colleges. The Forever GI Bill continues to undergo changes associated with additional funding for licensure or certification programs, increased survivor's and dependent's educational assistance, transferring of benefits within the family, consolidating benefit levels, beneficiary entitlement, additional funding for STEM (Science, Technology, Engineering & Math) programs, pilot programs, additional funding for recipients of the Purple Heart medal, and increases in housing allowances. FTCC continues to monitor legislative changes in benefits and provides timely information to students, faculty and staff possibly affected by such changes. (*Approaches to Military Pedagogy and Education*, 2020; *New Directions for Adult and Continuing Education*, 2020).

- The federal government continues to focus on higher retention, graduation and job placement rates from colleges receiving federal financial aid. FTCC continues to focus on those activities necessary to increase retention, graduation, and job placement rates. This is evidenced by more than tripled graduation rates from 7% to 22% from 2011-12 to 2019-20. (*National Center for Education Statistics*, 2020).

  - 3-Year Financial Aid Review: As a result of fewer curriculum students enrolling because of COVID-19 pandemic reasons, during the latter half of 2020, there has been a decrease in the amount of eligible financial aid monies awarded to cover tuition and fees, as reflected in Table 3. This financial aid funding allows students to continue their educational goals as prices of goods and services continue to rise and when they are able to return following COVID-19 reasons for not registering in as high of numbers during Fall 2020 and 2021 as compared to 2018-19 and 2017-18.

Table 3: Three-Year Financial Aid Awards

2019-2020 FTCC Financial Aid Awards			
Number of Students (duplicated) receiving awards	In-State Tuition Rate	Out-of-State Tuition Rate	Amount of Aid
24,380	$2,528	$8,672	$51,342,278

2018-2019 FTCC Financial Aid Awards			
Number of Students (duplicated) receiving awards	In-State Tuition Rate	Out-of-State Tuition Rate	Amount of Aid
27,808	$2,528	$8,672	$66,063,169

2017-2018 FTCC Financial Aid Awards			
Number of Students (duplicated) receiving awards	In-State Tuition Rate	Out-of-State Tuition Rate	Amount of Aid
25,369	$2,528	$8,672	$51,837,762

Source: Integrated Post-Secondary Education Data Systems, Student Financial Aid Survey, 2020

II.   PERSONAL FINANCE TRENDS

Analysis Summary
- NC ranks 40th of the 50 states in per-capita personal income.
- Financial aid and student educational loans remain a priority need for those seeking higher levels of educational and/or skill development.
- The COVID 19 pandemic created more opportunities for training and retooling skills for potential students eligible for financial aid.
- Nearly half of Americans report living paycheck to paycheck.
- The ability to pay for college, housing, food and other obligations remains problematic across the nation and FTCC continues to offer multiple financial aid or loan opportunities to students.

- According to data published in December 2020, from the U.S. Bureau of Economic Analysis, North Carolina ranked 40th among all 50 states and the District of Columbia in per-capita personal income at $49,981 which is 83% of the national income average of $60,320. (*U.S. Bureau of Economic Analysis*, 2020).

- With the COVID 19 pandemic impacting the economy, many Americans report facing a worse personal financial condition than they experienced a decade ago, resulting in a need for increased financial aid and other support services to enroll, pay, and complete a degree, diploma or certificate. The challenges North Carolina students, including those at FTCC, face include:
  .
  - North Carolina's population is reported at 10,488,084 with 13.6% living at or below poverty income levels as defined by the *Bureau of Labor Statistics* (2020).
    .
  - The COVID 19 pandemic saw a sharp increase in unemployment during 2020. The NC unemployment rate capped as high as 12.9% in April 2020. While the number unemployed has slowly fallen, it remains higher than the pre-COVID 19 unemployment rates (*Bureau of Labor Statistics*, 2020; *Public Policy and Aging Report*, 2020).

  - According to a 2020 survey conducted by Highland Solutions, information technology company, the number of Americans living paycheck to paycheck increased from 53% to 63% since the start of the COVID 19 pandemic.

  - A financial planning survey conducted by the First National Bank of Omaha showed that 53% of Americans do not have an emergency fund that covers three months of expenses. Further, the Federal Reserve Bank of New York reports that household debt increased by

$87 billion (0.6%) in the third quarter of 2020. Financial assistance for education is critical for those seeking educational opportunities. FTCC has provided multiple grants and started a food pantry to help FTCC students and their families. (*Federal Reserve Bank of New York, Center for Microeconomic Data*, 2020; *International Small Business Journal*, 2020).

- Educational opportunities improve as access to computers and internet become more available. It is estimated that 89.1% have access to a computer while 80.7% have access to broadband internet. In rural areas, there may be less reliable service available, with students having difficulty completing online courses. FTCC students, without reliable internet access, have been provided laptops and internet hotspots facilitating their continued studies. (*The School of Public Policy Publications*, 2020; *US Census Bureau*, 2020).

- Other factors may create challenges for student persistence in higher education. In North Carolina, 9.4% of the population have a disability and are under the age of 65. Also, 13.4% under the age of 65 do not have health insurance and many have recently lost their jobs. FTCC continues to help students through the College's work-study program and Career Center services.   (*Bureau of Labor Statistics*, 2020; *Health Sociology Review*, 2020; *New England Journal of Medicine*, 2020).

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III.   HIGHER EDUCATION AND PERSONNEL TRENDS

Analysis Summary
- Increasing federal regulations related to compliance are expected to continue. Additionally, increased use of adjunct faculty, ongoing efforts to increase faculty salaries, and increasing demand for advanced credentials will shape our work in the years to come.
- Data security and access must be addressed as more data becomes available for research, on-line job searches, and student coaching for success purposes.
- The COVID Crisis has required significant investment in technology to quickly shift from in-person classes to online classes, preserve the security of student records, and provide the myriad of other student support services remotely.
- Quick adjustments to strong COVID protocols, including FTCC's protocols, have shown better efficacy at institutions with a strong sense of shared governance.
- Student credit transfer has increased competition within and between schools and systems but also provided opportunities for programs to construct new articulation agreements to help students navigate college transfer.
- Employee shortages, as the baby-boomer generation continues retiring, are expected to increase demands for highly skilled employees, especially those that demonstrate requisite soft-skills. Generational trends will also impact the scope of diversification in the classroom.
- Developmental Education initiatives will continue to put stress on college resources as the COVID Crisis has the potential to produce more high school graduates that are unprepared for college learning.
- As higher education ebbs and flows, it will be imperative to maintain the currency of faculty and staff through ongoing professional development activities.

Higher Education Personnel Trends

- Employers use diversity, equity, and inclusion (DE&I) initiatives for both compliance obligations and to increase the overall bottom line with a more diverse equitable, and inclusive workforce (and customer base). Implementation initiatives include a review of policies and practices, student, faculty, staff and administrator engagement, targeted recruiting, institutional sponsored DE&I awareness events, team-building exercises, and ongoing dialogue regarding diversity, equity and inclusion during regularly scheduled meetings. FTCC embraces DE&I and will engage in the following initiatives during 2021-2022: (1) Faculty and Staff recruitment and retention practices (2) Student pipeline expansion to recruit students across demographic spectrums (3) Expansion of faculty and staff professional development activities and (4) inclusion of a course syllabi statement articulating the College's commitment to continually promote student, faculty, staff and administration's success guided by the principles of DE&I. (*Society of Human Resource Management website: How-To Guide on developing a Diversity, Equity, and Inclusion Initiative,* 2021)

- The College and University Professional Association for Human Resources (2020) conducted a survey of 254,160 higher education professionals across 1,114 public and private institutions including both universities and community colleges. The survey findings indicate that higher education professionals received a median salary increase of 2.66% in the 2019-2020 academic year, with two-year institutions providing the highest salary increases at 3.05%. The highest growth rate was experienced by health science and environmental sustainability professionals with an increase of approximately 32% (likely due to the increase of nurses at higher education institutions aligned with labor market growth projections). Women represent 60% of higher education professionals and racial/ethnic minorities comprise 23%. In professional leadership positions nationally, women are generally paid less than their male counterparts with Black and Hispanic women having the lowest pay ratios in comparison to Caucasian men (*CUPA-HR*, 2020; *Journal of Business Research*, 2020).

- The average full-time community college instructor in North Carolina earned $49,549 in 2017-18, which was significantly below the national average of $64,200. However, within the NC Community System, FTCC ranks 12th in average salary as of academic year 2018 – 2019 at $51,850 (*North Carolina Community College System*, 2019). The General Assembly did not approve a pay raise in 2018-20. The Southern Regional Education Board (2019) found that the average salary of full-time community college instructors in North Carolina was lower than instructors in all but seven other states. The University of North Carolina System's full-time instructors earned an average of $86,252, which is near the national average of $86,777.

- In 2013, the State of North Carolina became the first in the nation to no longer award additional salary to faculty with advanced degrees. Although many bemoan the national trends, State Legislators have argued that there was little benefit to students or classroom learning for the advanced credentials. There have been multiple attempts to reverse this legislation but all attempts have failed. In short, advanced credentialing and financially rewarding individuals for those credentials is certainly a statewide issue and may be more pervasive in the coming years (*North Carolina Center for Public Policy Research*, 2019).

- In May of 2020, the U.S. Department of Education released the final Title IX regulations governing campus sexual assault and prohibiting sex discrimination at federally-funded institutions. The new regulations are designed to ensure due process for students who report sexual misconduct, as well as their alleged perpetrators. The new regulations require colleges to provide hearings and allow for the cross-examination of involved parties. The regulations also require colleges to act on complaints of misconduct that occur within educational programs, such as Greek life organizations and university events. FTCC has updated policies and procedures to ensure compliance with the revised regulations and the College has had few Title IX complaints over the past three years. (*Inside Higher Ed*, 2020; *Journal of Advanced Academics*, 2020).

- Over the past few years, national trends indicate that the proportion of employed part-time faculty is shrinking. Although an argument could be made that enrollment declines may be the culprit for this shift, as of 2018, the proportion of part-time faculty made up slightly less than 50% of all college faculty in the United States (*Community College Journal of Research and Practice*, 2021; *Inside Higher Ed.*, 2019). Between 1990-1991 and 2017-2018 academic years, the total number of community college instructors in North Carolina grew 45% from 14,264 to 20,744. During this time, part-time positions accounted for six of every 10 new positions. FTCC has increased the number of full-time faculty and remained relatively consistent with the number of part-time faculty over the past year.

Data Validation and Security Trends

- With unprecedented investment in data acquisition, storage, and cloud-service availability, a landscape now exists to know more about higher education data protocols and the students' use of technology as it serves more students than ever before. As a caveat, privacy and data security must become part of the conversation. Whom has access to what data elements are key questions that must be expected, inspected, and respected (*Big Data and the Ethical Implications of Data Privacy in Higher Education Research*, 2020; *International Journal of Information Management*, 2020). FTCC maintains tight controls on electronic data and this year hosted mandatory cyber-security professional development sessions for all employees, using KnowBeFor© platforms, to increase focused attention to this critical requirement of safeguarding information.

- As a result of the COVID pandemic, teleworking has become a necessary step to ensure the safety and security of faculty, staff and administrators at FTCC. With this shift in work space, it became necessary to provide access to student records and office computer stations via VPN or other devices. Since the location of work has changed it is necessary, now more than ever, that users are well acquainted with policies regarding access to private records and what technology may be used to view those records. The College has issued College-owned laptops to employees to ensure safety of College information while working in a remote environment.

- According to researchers for Inside Higher Ed, 23% of all surveyed CAO's rated their institutions as being "very effective" in using data to impact campus decision making. K. Green argued that this poor rating for making data driven decisions is not driven by the lack of data, but the lack of an implementation system to put proper planning in place (*Inside Higher Ed.*, 2020; *New America*, 2019). FTCC has a strong institutional effectiveness operation providing data, on a regular basis, to decision-makers, faculty, staff and students, as well as documenting performance of all College entities through annual assessment activities.

Shared Governance Trends

- In a time where faculty and staff consensus building remain key to the success of any initiative, the COVID Crisis has shown that institutions with a strong sense of shared governance and policy making were well served in responding to this crisis. Such practices must be institutionalized and common to respond to future pivots and challenges. (*Inside Higher Ed.*, 2020; *Shared Governance in Higher Education*, 2020) FTCC use the Faculty, Staff, and Planning Councils to assist with shared governance activities at the College. In addition, the College has a myriad of Standing Committees to ensure input for decisions is received from all constituencies across the College. Ad hoc Committees are created, as needed throughout the year, for special circumstances requiring collective research, analysis and problem-solving, usually associated with one-time situations.

Transfer and Credit Mobility Trends

- Between 2008 and 2014, 66.7% of all first-time college students transferred credits from one institution to another and that percentage is growing (*Inside Higher Ed.*, 2020). However, according to the latest data from the National Student Clearinghouse Research Center, Community College transfers to 4-year institutions are down 10.1%. Transfer enrollment dropped significantly for Black and Hispanic students enrolling in a community college this fall (-22.5% and -20.4%, respectively) (*National Student Clearinghouse Research Center*, 2020). The has maintained steady transfer rates with 514 students transferring to colleges and universities across 28 of the 50 states with 219 of those graduating students electing to enroll in a second major program at FTCC.

- Recent changes to the North Carolina Comprehensive Articulation Agreement have made community college to university transfer more attractive to students, including programs that have not historically been transfer programs (*The University of North Carolina System,* 2020). FTCC continues to grow its articulation agreements with public and private colleges and universities located across the United States.

Addressing the Generational Divide

- The FTCC student population is diverse in age as reflected in the Table # 3 below:

Table 3: Student Age Group Frequency by Semester (Generated by Primary Academic Program)

Age Group	2018FA	2019SP	2019SU	2019FA	2020SP	2020SU	2020FA
14-23	30.40%	30.71%	26.33%	39.78%	39.90%	33.72%	45.62%
23-31	33.28%	33.51%	36.50%	30.55%	30.31%	33.17%	27.85%
32-40	17.74%	18.29%	18.90%	14.65%	14.66%	16.60%	12.78%
41-49	10.36%	9.97%	10.48%	8.51%	8.48%	9.58%	7.62%

Age Group	2018FA	2019SP	2019SU	2019FA	2020SP	2020SU	2020FA
50-58	5.85%	5.32%	5.48%	4.44%	4.60%	5.11%	4.34%
59-67	2.00%	1.89%	1.95%	1.71%	1.74%	1.63%	1.47%
68-76	0.35%	0.30%	0.35%	0.34%	0.31%	0.19%	0.29%
77-85	0.01%	0.01%	0.00%	0.01%	0.01%	0.00%	0.01%
Total	**11878**	**11523**	**5639**	**12427**	**11313**	**5397**	**10437**

- With four generations in our classrooms simultaneously, differentiating instruction can be particularly difficult especially related to diverse perceptions of academic integrity, digital adoptions, access to technology, time since last educational experiences, etc. (*Professional Development in Education*, 2020; *Winona State University*, 2020). FTCC provides all students with an orientation designed to address concerns and take positive resolution actions for any concerns. FTCC faculty and staff remain available to assist students in-person, or remotely, to provide timely responses to differing perceptions resulting in increase student retention and graduation rates.

- According to NCCCS, of the 735,000 students served by the system in 2020, 59,000 were current high school students. Students taking college classes have the ability to earn credits towards graduation or for college transfer. While there are many benefits to the Career and College Promise program, it also has the added effect of further diversifying the general population (*North Carolina Community College System*, 2020). FTCC has a strong Career and College Promise program that is well-received by FTCC faculty, staff, students, parents, and the Cumberland County Public Schools System. The College also provides space for one high school on the Fayetteville campus and provides access to learning resources needed by those students.

The Future of Developmental Education and a Comprehensive Curriculum

- Developmental Education seems to be in constant flux. NCCCS is still piloting their new RISE program and recommendations are currently being authored to address some of the most recent findings from pilot schools, of which FTCC is one (*North Carolina Community College System RISE*, 2020).

- NCCCS is not unique in its pursuit of Developmental Education reforms. The Mathematics and English Curriculum still exists as the most common barrier to student success. Many colleges and systems are using an expanded review of student experiences for placement while others are redesigning the curriculum to be more specific to a student's academic plan (*Center for the Analysis of Postsecondary Education*, 2019; *The Journal of Continuing Higher Education*, 2020). The FTCC Quality Enhancement Plan, continuing its implementation over the next five years, has student performance in Mathematics and English curriculums as one of its annual data collection, analysis, and assessment activities

to continually improve student outcomes. Results of these annual assessments will be provided to the College's regional accreditation agency at the conclusion of the five-year implementation period.

- The COVID Crisis will also play a role in Developmental Education, particularly in mathematics. Researchers have found that a significant gap across all grade levels in mathematics skills when comparing performance from Fall 2019 to Fall 2020 (*Brookings*, 2020; *Educational Researcher*, 2020). Since many of the mechanisms used for placing students upon college admission depends directly on student performance in high school, but NOT directly on their performance in mathematics, there is the potential for many students to be unprepared for the coursework when they may not have been properly placed. FTCC was one of first of the NC Community Colleges to begin using multiple measures to assess proper program placement and the use of multiple measures has gradually increased student performance over the previous years where placements were based solely on admission testing.

The New Federal Administration and Its Impact on the Higher Education Landscape

- With the change in Federal Administration there are new policy initiatives and actions related to campaign promises. The bullet points that follow are some of the potential shifts that may impact the Higher Education Landscape over the coming four years:

  o The COVID Crisis has led the Biden Administration to review the impacts of the crisis on underserved communities. The new administration will need to work with state and local districts to enact new partnerships and implement strategies to reverse these impacts *(Brookings*, 2020; *The Journal of Values-Based Leadership*, 2020). FTCC has been recognized by the Cumberland County Health Department for its strong response and protocols to the pandemic, including but not limited to (1) reporting (2) contact tracing and (3) COVID testing processes. The number of infections has remained below 1% for students, faculty, and staff as a result of the protocols.

  o The reauthorization of the Higher Education Act was not a priority for the previous administration, but S. Boggs (2020) argued that this will be a focal point of both the new Congress and the Biden administration. Additionally, President Biden has pledged new investments in workforce development and Community College infrastructure (*Brookings*, 2020; *Lexology*, 2020). FTCC continues to comply with all aspects of the current Higher Education Act as evidenced by the recent SACSCOC reaffirmation committee finding no issues with College processes and procedures.

  o President-Elect Biden is likely to propose new legislation to expand PELL grants beyond the $6,345 and to investigate Student Loan Forgiveness based on eligibility (*Brookings*, 2020; *Inside Higher Ed.,* 2020). FTCC

continues to monitor and reduce the number of students and amount of loans in an effort to reduce debt of these students.

o The President has nominated Miguel Cardona as the incoming Secretary of Education. In the past, Dr. Cardona has indicated that, under his leadership, the Department of Education will focus on increasing accessibility, reducing cost burdens, and addressing an internalized culture of low expectations at some institutions. FTCC is not one of those institutions with low expectations. The College is recognized for being a leading-edge institution that explores new possibilities for increasing student success and job placement after graduation. Furthermore, as the COVID crisis has exasperated disparities, Mr. Cardona pledged to make equity, diversity, and inclusion a central tenet of his policy work (*National Public Radio*, 2020; *Phi Delta Kappan*, 2020).

Addressing the Affordability of Higher Education

- President Biden's Free College Plan if enacted would make public colleges and universities, as well as private Historically Black Colleges and Universities, tuition-free for students coming from families making less than $125,000 annually. Additionally, the President has pledged to make community colleges tuition-free for all students, regardless of income (*Forbes*, 2020; *Inside Higher Ed*, 2020). FTCC stands ready to quickly implement policies and procedures if the College plan(s) are enacted.

- The COVID Crisis has re-invigorated the conversation around the affordability of higher education. From the stagnant nature of PELL awards to increasing textbook costs, students are paying more than ever for college. One initiative that has gained popularity in recent years is the adoption of Open Educational Resources (OER). Many colleges have adopted zero cost textbook courses and others have pivoted to only using OER materials. Beyond impacting student costs, faculty have reported switching to OER out of frustration with textbook publishers. Some of the documented frustrations have included rising costs, incompatibility with technology, overseas access, and the quality of the materials (*Educational Technology Research and Development*, 2020; *Inside Higher Ed.,* 2020). FTCC continues to explore new resources to reduce the cost of attendance for the students under the guidance and recommendations of the faculty teaching their assigned courses.

- In late December of 2020, the NCCCS established OpenNCCC which provides a repository of Open Educational Resources for use within the system. This program also sponsors hubs and groups for collaboration across NCCCS member institutions (*OpenNCCC,* 2020).

Maintaining the Currency of Faculty and Staff Development

- There is Increasing the emphasis related to professional development in technical skills, soft skills, safety, security measures, computer security controls, and changing federal regulations associated with compliance requirements (*Journal of Further and Higher Education*, 2020; *TechTrends*, 2020). FTCC has increased the number and quality of professional development offerings in each of these areas and other professional development designed to assist faculty with teaching for student success.

- A strong protocol for faculty development has the potential to fundamentally shift the culture of an institution. S. Mohr (2020) stated that good development protocols should be introspective and specific the needs of each individual faculty member. Some need to focus on digital literacy and best practices in online learning while others may need development regarding pedagogical practices. They further argued that faculty and staff should be engaged in the selection of their professional development activities and that work should cater to their needs (*Journal of Education for Teaching*, 2020; *The Online Learning Consortium,* 2020). FTCC provides a myriad of professional development opportunities designed to meet the training needs of faculty, staff, and administration. These professional development offerings are posted on the College's website with reminder emails on the date of the training to encourage and promote attendance. The appraisal process requires documented certificates of training be attached to annual appraisals for faculty, staff, and administrators. Decisions on which professional development is best for the employee is discussed decided jointly between the employee and their supervisor.

IV.   TECHNOLOGICAL TRENDS AND PLANNING ASSUMPTIONS

Analysis Summary
- Community college classroom technology continues to change with:
    - Expanded emphasis of student-centered teaching philosophies.
    - Continuously changing technological demands that enhances digital fluency in the 21st century workplace.
    - Expanded course offerings that leads to micro credentials.
- Students and technology use continue to change with:
    - Connecting software tools with expected student learning outcomes.
    - Use of artificial intelligence and predictive analytics software that enhances student success.
    - Stronger demands for immediate communication with students utilizing different software platforms.
    - Emphasis on offering additional courses and programs of study in both hybrid and online modalities versus in-classroom instruction.

Community College Classroom Technology Trend Analysis

- According to the *New Media Consortium (NMC) Horizon Report* 2020, the following are the most important technologies for colleges, including FTCC, to consider over the next five years. *Campus Technology* (2020) stated there were five trends to monitor in the coming year. The list of trends includes:

    - Adaptive Learning Technologies
    - AI/Machine Learning Education Applications
    - Analytics for Student Success
    - Elevation of Instructional Design, Learning Engineering, and UX Design
    - Open Education Resources
    - XR (AR, VR, MR, Haptic) Technologies

- The NMC's top-ranked challenges expected for colleges in 2020 and beyond include:

    - Changes in Student Population - Global fertility rates have decreased 50 percent since 1960, potentially leading to fewer students and presenting fiscal challenges, especially for smaller and tuition-dependent institutions. Increased student diversity (in age, ethnicity, and other factors) requires institutional leaders to rethink how to achieve their teaching and learning objectives and will demand a new emphasis on holistic student success. FTCC is recognized as a leader in forward-thinking, data analysis and marketing to a diverse population of potential students to fill the gap of an anticipated reduction in the number of high school graduates immediately transferring to the community college based upon this planning assumption.

    - Alternative Pathways to Education - Institutions must rethink their degree pathways to accommodate a changing student demographic and

employment landscape. Alternatives include nano- and micro-degrees, competency-based programs, expanded online options, and portable, standards-based credentials, as well as increased collaboration and partnerships with other institutions. Advising programs will use integrated platforms and data. FTCC has created multiple pathways over the previous two years and continues to expand them going forward as a significant part of the institution's Quality Enhancement Plan (QEP). The College's QEP also increases collaboration between faculty, staff and students, with the assistance of Success Coaches, to increase graduation rates and student success.

o   Online Education - Online education is increasingly seen as a scalable means to provide courses to an increasingly nontraditional student population. Faculty must be prepared to teach in online, blended, and face-to-face modes. Higher education institutions, including FTCC, are moving to new models for online programs, such as assessment (competency) and crediting (micro credentials and digital badging). Institutions will increasingly engage with online program managers (OPMs) to jumpstart online programs. FTCC has been a pioneer institution in this educational process change allowing the College to instantly shift from in-class instruction to online instruction, without difficulty, during the COVID-19 pandemic. FTCC faculty and staff are provided ongoing professional development related to quality enhancements related to their online instructional techniques; thereby, creating opportunities for both synchronous and asynchronous instruction meeting the instructional preferences of distance education students.

o   Decrease in Higher Education Funding - As public funding for higher education continues to decrease in the United States, institutions must pursue alternative business and funding models to sustain operations. Alternative approaches may include privatization of the industry, micro credentialing, establishing partnerships with other industries or organizations, and other more sustainable models. Meanwhile, teaching, learning, and research practices will be increasingly driven by opportunities to secure funding. FTCC is expanding efforts to procure grants, additional articulation agreements with partnering institutions of higher education, while also engaging in right-sizing strategies, by shifting resources to high demand areas, based upon student demand for programs across the College.

o   Value of Higher Education - A majority of adults in the United States believe the higher education industry is headed in the wrong direction, due either to the increasing cost of higher education or to the perceived social or political bent of higher education. Millennials tend to believe in the value of higher education, though they express concern over the cost. As overall enrollments continue to decline, institutions will be forced to identify alternative education or business models. While some adults across the nation may question the cost-benefit of higher education, FTCC's most recent Economic Impact Study (EIS) cited the following FTCC benefits provided to students and the community:

- Cost Analysis: The EIS reported students realize a 20.1% rate of return or $3.80 in higher future earnings for every dollar student's invested in their education.

- Social Impact: The EIS reported for every dollar invested in FTCC education, residents in North Carolina will receive $10.90 in return, for as long as the FTCC students included in the study remain active in the state's workforce.

- Taxpayer Analysis: The EIS reported for every dollar of public money invested in FTCC, taxpayers receive $4.10 in return, over the course of student's working lives. The average annual rate of return for taxpayers is 16.9%

- **Students and Technology**

  o According *eCampus News Today's Innovations in Education* (2020), there are five technologies higher education should adopt to meet the future needs of the educational consumer:

- **Predictive Analytics**

  o This technology can determine which courses a student may take, based on history and previous coursework, to maximize the odds of students doing well in their major. Additionally, predictive analytics are expected to eventually help educational institutions identify when students might be at risk of dropping out based on factors such as decreased attendance, lack of engagement with course work, or even their work or commute schedules.

  o FTCC's use of predictive analytics is a central component of the College's Five-Year Quality Enhancement Plan and includes early warning messages to students demonstrating decreased attendance, lack of engagement, and/or other difficulties shared with their Success Coaches, faculty or staff and,

  o FTCC implemented Civitas® software that provides such data for each student with shared access by faculty, admissions, registrar and success coaches while assisting the student with difficulties that without such intervention could prevent the student from graduating and/or achieving their educational, career and life-goals.

Artificial intelligence (AI)

  o AI can also provide a conversational interface with students, helping to answer common questions, such as "When is the first day of school?" or "How do I enroll in classes this semester?" By building automated responses into telephone lines, web sites, virtual digital assistants, and other channels students use, AI can help institutions save time and trim costs. FTCC's website provides this

information in real-time, regularly updated, and supplemented by social media postings. The College intends to complete a web-site redesign during the 2020-21 academic year further assisting students, faculty, staff and the community with enhanced access to information. The College also has a "chat-box" on its homepage explained below.

Chatbots

o   Chatbots simulate human conversation through voice commands or text chats or both. Chatbots are proving an invaluable tool for establishing essential dialogs with enrolled students, as well as those interested in attending school.

o   FTCC has recently added Chatbox technology to its website to answer inquiries.

Nudge Technology

o   This is essentially a collection of technologies working together to deliver timely personalized interactions and reminders to students, staff, and faculty

o   Nudge tech can go even further by monitoring a variety of student records and noting potential opportunities or issues affecting the student's educational success. Nudge tech may let a student know they have just one day to pay tuition or warn that a class in their major is filling up quickly or even that they are likely to miss a big exam if they do not reach class in the next five minutes.

o   FTCC implemented Civitas® software that allows for such nudge interactions.

Augmented Reality (AR) and Virtual Reality (VR)

o   From an admissions standpoint, AR and VR let institutions provide personalized virtual campus tours, complete with a video representation of administrators welcoming prospective or incoming students to the school and walking them through key facilities aligned to their fields of study. The College's Marketing and Public Relations office is expanding use of virtual campus tours and modern video representations showcasing the College, programs, students, faculty and staff.

o   Table 4 demonstrates the changing demands for technology-assisted Curriculum and Corporate and Continuing Education courses at FTCC:

Table 4 moved to next page to prevent splitting the chart

Table 4: Four-Year Analysis of Technology Assisted Courses at FTCC

Curriculum	2016-17	2017-18	2018-19	2019-20
Internet Classes	1,889	2,036	2,079	2,282
Hybrid Classes *	275	296	283	138
Web-Assisted Classes **	2,560	2,087	1,841	N/A
Other Distance Learning Classes**	28	25	13	N/A
Blended Classes ***	N/A	N/A	N/A	737
Continuing Education	2016-17	2017-18	2018-2019	2019-2020
Internet Classes	1,009	1,013	846	862

*A course where the primary delivery is on-line with a requirement that students also meet in traditional face-to-face sessions as determined appropriate by the College.

**A course where the primary delivery is via traditional face-to-face with a requirement that students have Internet access as a supplemental part of the course. As of 2019, Web-Assisted and Other Distance Learning Classes are no longer populated categories. Within Ellucian, each curriculum course is coded as TR-Traditional, HY-Hybrid, IN-Internet, and BL-Blended.

***New category of modality as of 2019.

Planning Assumptions for Section V begins on next page

V. SOCIETAL TRENDS AND PLANNING ASSUMPTIONS

Analysis Summary

- Projected Cumberland County demographic changes covering the period 2020-2025 will impact FTCC recruiting efforts.
- Increased enrollment of students with disabilities and other special needs will require additional support and expanded professional development training to meet changing disability accommodations mandated for students, faculty, and staff.
- As a result of the COVID-19 pandemic, more students are suffering from Post-Traumatic Stress Disorder and other mental conditions.
- Increasing enrollment of a diverse student population is anticipated.
- Continued student, faculty, and staff training related to potential active shooter situations and prevention of other potentially violent attacks on campus will remain a priority.

- Cumberland County statistical data projects higher concentrations of non-majority demographics, as compared to all other counties, with an expansion in residents who identify as a member of Black, Non-Hispanic, White, Hispanic, and Two or More Races & Non-Hispanic. Trends reflect increases in Hispanics across most demographic groups. The demographic groups projected to have the largest growth and possible declines are reflected below in Table 5:

Table 5: Cumberland County Resident Ethnicity Projections 2020-2025

Demographic*	2020 Population	2025 Population	% Change	Change
Black, Non-Hispanic	125,937	130,543	4%	4,606
White, Hispanic	29,867	32,807	10%	2,940
Two or More Races, Non-Hispanic	13,502	14,728	9%	1,226
Black, Hispanic	6,548	7,071	8%	523
Two or More Races, Hispanic	2,991	3,316	11%	325
Asian, Non-Hispanic	8,816	9,133	4%	317
American Indian or Alaskan Native, Non-Hispanic	4,993	5,125	3%	132
Native Hawaiian or Pacific Islander, Non-Hispanic	1,159	1,264	9%	106
American Indian or Alaskan Native, Hispanic	1,313	1,360	4%	47
Native Hawaiian or Pacific Islander, Hispanic	300	319	6%	19
Asian, Hispanic	409	417	2%	8
White, Non-Hispanic	140,356	135,073	(4%)	(5,282)
Total	336,189	341,157	4%	4,967

*Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2020, 4th Quarter Demographic Profile. *Demographic categories are pre-selected by the National Center of Education Statistics, not FTCC.*

- The U.S. workforce is getting older, which means employees will consider retirement and other life changes later than previous generational groups. In the US, 10,000 baby boomers turn 65 on a daily basis, a trend that began in 2011 and is expected to continue through 2030. Many workers are not retiring because of the benefits of working, such as prolonged health and even keeping skills fresh by postponing retirement, and increasing their financial stability (*Journal of Gerontological Social Work*, 2020; *Strategic HR Review*, 2020). FTCC and other community colleges expect challenges with recruitment of replacements as the baby-boomers continue to leave the workforce. The College recently completed a 100% salary study resulting in increased salaries for faculty and staff. These pay range increases are anticipated to enable to the College to better compete for trained and qualified applicants replacing the retiring employees.

- As older employees age out, employers must find ways to hire and maintain younger employees at a higher retention rate because many of the younger workers do not reflect the same longevity beliefs or traits demonstrated by the baby-boomer population. (*Current and Emerging Trends in Aging and Work*, 2020; *The Sociological Review*, 2020). This assumption is difficult to overcome; however, FTCC is increasing efforts to fully engage new hires quickly in the development of continuing improvement strategies, as a means of enhancement in student success and instilling a desire to continue working at the College, making a significant difference in student's lives, careers and goals.

- The National Center of Education (NCES) recently reported that 5.8 million students attended a Two-Year institution during the Fall of 2020. Research also shows that the total enrollment in degree-granting postsecondary institutions by attendance status, sex, and age are projected to increase in 2020 through 2029. (*Digest of Education Statistics*, 2020; *Journal of Higher Education*, 2020). FTCC works closely with regional employers to ensure that programs of study align with job skills required for the 21st century workplace and short-term retraining programs are available for all students as the industry's potential workers.

- Cumberland County resident's age change projections indicate the most growth potential, over the next five years, includes those with ages 65-69 followed by 30-34. There are strong indications of more residents in ages 65 to 86 with a decline in ages 25 to 64. Table 6 (on next page) provides all age groups in **ranked descending order based upon the last column on the right side of the chart**.

Table 6: Cumberland County Resident Age Projections 2020-2025

Age Cohort	2020 Population	2025 Population	% Change	Change
65 to 69 years	13,959	15,923	14%	1964
30 to 34 years	25,336	27,037	7%	1701
40 to 44 years	18,413	19,977	8%	1564
70 to 74 years	10,984	12,502	14%	1519
75 to 79 years	7,622	9,084	19%	1462
Under 5 years	25,365	26,159	3%	794
80 to 84 years	5,019	5,761	15%	742
85 years and over	4,473	5,012	12%	539
35 to 39 years	22,030	22,339	1%	309
10 to 14 years	21,809	22,062	1%	253
20 to 24 years	33,146	33,278	0%	133
45 to 49 years	17,370	17,477	1%	107
15 to 19 years	22,965	23,052	0%	87
60 to 64 years	17,255	17,045	(1%)	(210)
50 to 54 years	16,855	16,479	(2%)	(377)
5 to 9 years	23,432	22,950	(2%)	(482)
55 to 59 years	18,291	15,826	(13%)	(2466)
25 to 29 years	31,865	29,194	(8%)	(2671)
Total	336,189	341,157	4%	4,967

Source: QCEW Employees, Non-QCEW Employees & Self-Employed - EMSI 2020, 4th Quarter Demographic Profile

- Based upon Table 6 data, the College prepare and design programs of study and associated support services necessary to meet the needs of senior students and young adult students. FTCC age demographics are in line with national trends associated with the five different generations currently in pursuit of either more education or actively seeking employment.

Students with Disabilities

- Community colleges continue to serve more persons with disabilities.

    o Twenty-Five percent of students enrolled nationally at colleges and universities are classified as disabled. During the last 25 years, the number of disabled students enrolled in higher education has tripled. The College has a strong interactive accommodation process for students, faculty and staff. (*Community College Journal of Research and Practice*, 2021; *Journal of Advanced Research in Social and Behavioral Sciences*, 2020)

        ▪ Statistical analysis indicates disability assistance enrollment through the Disability Support Services Office (DSSO) has increased significantly and this increase is anticipated to continue as the baby-boomer generation continues enrolling in higher education to retool skills and/or pursue post-retirement hobbies and other pursuits:

            • From Fall 2015 through the Fall 2020, the Disability Support Services Office (DSSO) has increased its student population served by 123%

            • From the Fall of 2017 through the Fall of 2020, the DSSO has increased its student population served by 72%

    o There are upward trends of disabled people entering the job force in entry-level positions which tend to require few credentials and lower-level degrees. This causes these disabled applicants to possibly experience an unsecure, highly stressful, and poorly paid position (*Forbes*, 2020; *Work, Employment and Society*, 2020). Since approximately one million disabled people lost their jobs during COVID-19, employers should consider the following guidelines when hiring employees with disabilities: 1) consider legal, reasonable accommodations; 2) identify practical accommodations; 3) note the cost of implementing accommodations, 4) identify potential effects of these accommodations on the workplace *(Forbes*, 2020; *Journal of Disability Studies*, 2020).

    o FTCC makes reasonable accommodations to assist employees in entry-level, mid-level, and upper-levels of the organization. In the past year, the College has provided hundreds of standing desks to those employees experiencing back difficulties, better mouse pads with enhanced wrist protection, and other requested equipment and supplies. Also, the College fully supports of medical doctor requests for Family Medical Leave and/or Worker's Compensation consideration to further accommodate the disabled.

- National data reflects that colleges and universities must create a more inclusive and supportive environment for students with disabilities. (*Accessibility and Diversity*, 2020; *Reading and Writing*, 2019; *Severe Disabilities*, 2020). FTCC continues to

enhance disabled student accommodations via:

- Web accessibility and ADA compliance in all electronic media:

  - Disability discrimination is becoming more pressing due to artificial assessment and algorithmic tools. A danger for people with disabilities is the tension between the lifestyle of those with disabilities and the way algorithmic tools function in regard to standard, normal behaviors throughout the majority of the populations (*Forbes*, 2020; *Series Review*, 2020).
  - FTCC has responded to this challenge by creating:

    - An online form allowing users to make suggestions or report accessibility issues under an electronic "Accessibility Suggestions" form."

    - Increased availability of counseling or referral services due to the specific nature of the impairment(s)

    - Access to a mental health counselor has transitioned from "by appointment only" to 24/7/365 sessions

    - During the 2020-2021 academic year, the Disability Support Services Coordinator (Licensed Clinical Mental Health Counselor in North Carolina) named and launched the ROCS: Reaching Out for Counseling Services program at FTCC. This program provides the free, 24/7/365 counseling to all FTCC students.

    - The Disability Support Services Coordinator created an Institutional Behavioral Assessment Team. This team provides a cross-functional, multidisciplinary point of contact for members of the college community, who have encountered student behavior, which they perceive as unusual, threatening, or dangerous. The team determines if there have been additional warning signs or reasons for concern (such as code violations or classroom incidents), classify the level of the threat, and develop a plan of action. Examples of action can include possible reasonable accommodations such as referrals to appropriate campus offices and if necessary, off-campus agencies, for assistance and interim measures such as accommodations.

    - Faculty, staff, and student athletes are provided with several mental health counseling awareness professional developments throughout the academic school year, since 2019-present

    - FTCC updates assistive technology annually within the DSSO (i.e., Dragon Software, JAWS screen reader software, speech-to-text apps using iPads, etc.)

- Assistive technology resources assist students in pursuit of their education goals (*Contemporary Educational Technology*, 2020; *Journal of Education Research and Rural Community Development*, 2020)

o FTCC serves a number of students who have been diagnosed with an autism disorder and other medically-diagnosed disabilities as reflected below (*Education Sciences*, 2020; *Disability and Society*, 2020).

- COVID-19 is causing some patients to experience PTSD and delirium due to constant worry that relates to poor mental health coping strategies (*Psychiatry Research*, 2020; *The Lancet Psychiatry*, 2020)

o Post-Traumatic Stress Disorder (PTSD) associated with COVID-19 is often aligned with exposure to the loss of loved ones, loss of jobs, and development of multiple mental health conditions (*CNBC*, 2020; *Current Psychology*, 2020; *The Clinical Neuropsychologist*, 2020). PTSD is also rising at an alarming rate among law enforcement officers throughout the United States due to protests and riots during 2020. For instance, 150 Minneapolis police officers file for duty-related PTSD disability symptoms. In 2020, the FDA released authorization for the use of an Apple Watch to help reduce nightmares stemming from PTSD related symptoms (*American Journal of Criminal Justice*, 2020; *Food and Drug Administration*, 2020). FTCC offers referrals to College-paid counseling as part of the Student/Employee Assistance Program in support of these types of medical issues.

o People with intellectual or developmental disabilities are having difficulties coping without support during the COVID-19 pandemic. The reasons stem from less care, assistance, and a disproportionate physical contact required for many of them (*CNN*, 2020; *Frontiers in Psychology*, 2020; *Psychological Medicine*, 2020). FTCC provides immediate assistance to those experiencing these difficulties through the Disability Support Services Office and/or the Human Resources Office.

o There is a six-year high of suicide rates among *active duty military members* in the U.S. because of COVID-19 stress (*Journal of Military, Veteran and Family Health*, 2020; *USA Today*, 2020). The average number of veterans committing suicides per day, in 2018, was 17.6. If veterans receive VA benefits and care, this number decreases by 2.4%. Since the COVID-19 pandemic, *veterans* who commit suicide for reasons relating to the pandemic are unknown (*Community Mental Health Journal*, 2020; *Department of Veterans Affairs*, 2020). FTCC provides accommodations to many active-duty military or veterans, and the College is unaware of any serious injury or death associated with FTCC students based on the statistics listed above.

School Violence

- According to *School Mental Health* (2020), the majority of students who have committed deadly school attacks had a history of being bullied and/or previous disciplinary troubles. This requires ongoing professional development related to environmental awareness and immediate actions to lessen the possibility of injuries or death. Also, according to the *Centers for Disease and Control and Prevention* (2020), school shootings have an impact that is "devastating for families, schools and entire communities" and outside of physical injuries, children exposed to violence can suffer a "wide array of negative health behaviors and outcomes, including alcohol and drug use and suicide"

    o An ABC News Analysis also found 57.6 percent of school shooting incidents happened at sporting events, specifically basketball and football games in 2019. ("School shootings are more common than you may think: A look at the incidents that went under the radar in 2019," *ABC News*, Dec. 2019)

Quick Look: 277 Active Shooter Incidents in the United States Between 2000 - 2018
**Location Categories**
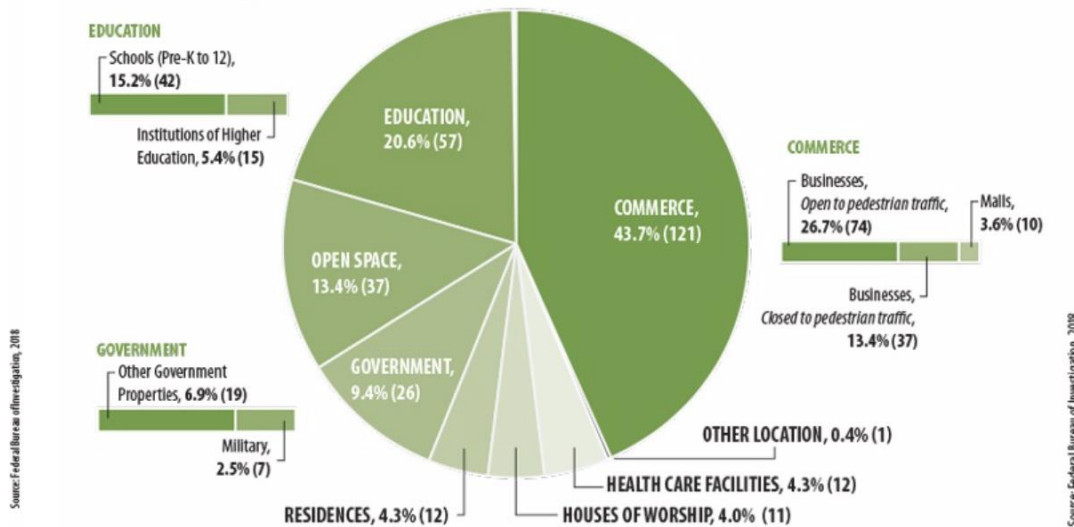
The above pie chart shows a statistical breakdown of the location categories where the 277 active shooter incidents took place in the U.S. from 2000 to 2018. Those location categories include: areas of commerce, 121 incidents or 43.7 percent; educational environments, 57 incidents or 20.6 percent; government property, 26 incidents or 9.4 percent; open spaces, 37 incidents or 13.4 percent; residences, 12 incidents or 4.3 percent; houses of worship, 11 incidents or 4 percent; health care facilities, 12 incidents or 4.3 percent; and other location, 1 incident, or 0.4 percent.

Source: Federal Bureau of Investigation, 2019

- In addition to the number of active shooter incidents in America, 20.6 percent occurred at places of education – more specifically, 15.2 percent at schools grades Pre-K -12 and 5.4 percent at institutions of higher education between 2000-2018, according to data from the Federal Bureau of Investigation entitled "Quick Look: 277 Active Shooter Incidents in the United States from 2000 to 2018." (*Criminology and Public Policy, 2020*; *Federal Bureau of Investigation*, 2019).

Source: Federal Bureau of Investigation (FBI)

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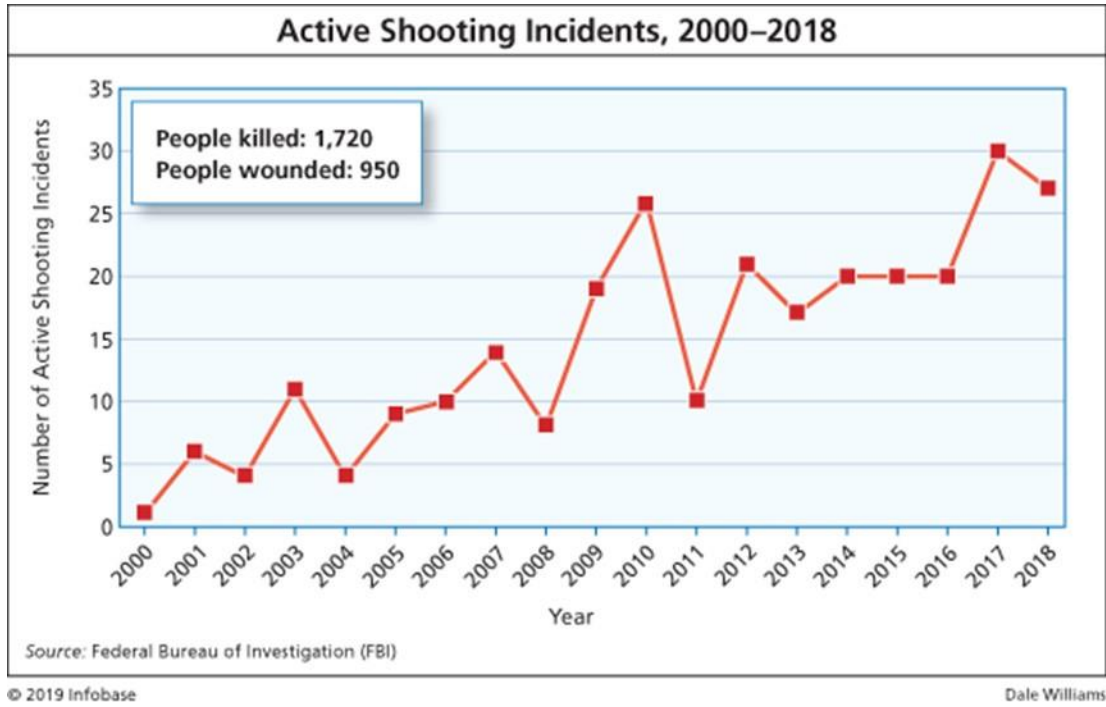
- School violence is rising, which includes sexual assault (*Indiana Journal of Law and Social Equality*, 2020; *National Center for Education Statistics*, 2020). A survey conducted by The *Canadian Broadcasting Corporation* (2019) stated that 1 out of 7 girls alleged they were sexually assaulted by another student. FTCC has expanded training related to emergency management and prevention of sexual harassment/violence processes and procedures to prepare for unknown future events
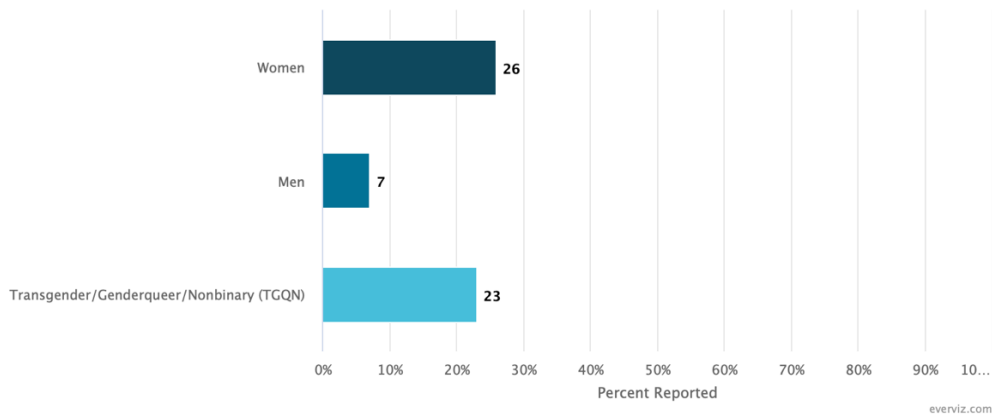
Source: American Association of American Universities, 2019

- According to *Best Colleges* (2019), young adults ages 18-34 are at the highest risk and represent 54% of sexual assault cases. One out of every six women falls victim to completed or attempted sexual assault within their lifetime. Furthermore, women ages 18-24 not attending college face a 20% higher risk of falling victim to sexual assault. While sexual violence remains a concern, the number of cases has fallen 63% since 1993. Other issues stemming from sexual assault include underreporting, victim-perpetrator relationships, school policies and procedures. FTCC has made faculty, staff, and students aware regarding their rights and organizations that can help them address their concerns of sexual assault. FTCC has a strong professional development program related to prevention of sexual harassment and/or other Title IX violations.

- As of 2020, all FTCC employees are required to annually complete active shooter and emergency management professional development training as a condition of continued employment. Employees must also complete professional development training associated with Title IX compliance on a 3- year renewal cycle to fully understand their responsibilities as designated reporters of potential violations of the law. New employees are provided both of these professional development training as part of their initial hire orientation.

Conclusion

- Colleges, including FTCC, must continue to emphasize academic support activities designed to facilitate student success for diverse and aging populations of students.

- FTCC continues to meet the educational needs of currently enrolled students and remains vigilant in monitoring changing trends and projections to get ahead of student needs before they are requested. This includes the development of pathways to success using a multitude of educational opportunities, including short-term credentials, certificates, diplomas, and associate degrees.

- Programs of study will continue to be added based upon current and projected job market analysis and local demands for both short-term training and credentials and longer-term degree completion needs within the Fayetteville Metropolitan Service Area.

- The College fully supports active-duty military and their family members residing in locations across the globe. This support includes flexible class arrangements to meet the demands of military service on short-notice deployments. The College also continues to refine its Credit for Prior Learning to recognize prior military and non-military work experiences that qualify for educational credits.

- Students of all capabilities continue to be professionally served by highly trained and skilled instructors and support staff.

- FTCC has expanded local partnerships with the public-school systems and other colleges to offer a variety of programs of study necessary to meet the changing employment needs of students and businesses, including increased training in the

area of soft-skills to supplement technical and professional training.

- FTCC remains diligent with enforcement of federal, State and local laws, rules, guidelines and policies, to reduce the potential for future litigation.

- As a result of COVID-19 and slight decreases in FTE, the College will monitor and, if necessary, prepare for budgetary constraints that may inhibit program growth.

- As a result of sustained research and long-term investment, regarding student learning data, the College launched a series of software platforms, including Civitas®, that will predict different levels of student persistence, offer faculty and advisors real-time information about a student's academic progress, and facilitate best practices to achieve student success through shared information from the faculty, staff, and students working together.

- The College continues to monitor financial revenues and expenditures to ensure that the College remains good stewards of taxpayer funds.

- Regardless of the pandemic, it has been a good year for FTCC and these Planning Assumptions are designed to guide continuous improvement activities. Because the past is a prediction for what to expect in the future, the College is pleased to share economic impacts created by College operations over the past three years, which we continue to build upon over the next five years: (*EMSI Economic Impact Study*, 2019)

  o FTCC's day-to-day operations spending added $77.6 million in income to Cumberland County.

  o The College's construction spending had a substantial impact on the local county economy, equal to $930.7 thousand in added income.

  o The average associate degree graduate from FTCC will see an increase in earnings of $9,000 each year compared to a person with a high school diploma or equivalent working in North Carolina, which equates to a 20.1% average annual return on investment for FTCC students.

  o For every dollar of public money invested in FTCC, local taxpayers will receive $4.10 in return, over the course of students' working lives.

  o For every dollar invested in FTCC educations, people in North Carolina will receive $10.90 in return for as long as students remain active in the workforce (*EMSI Economic Impact Study*, 2019).