

**BRUNSWICK COUNTY BOARD OF COMMISSIONERS
COUNTYWIDE GOAL WORKSHOP AGENDA**

February 18, 2019

9:00 AM

1. Call to Order

2. Order Of Business

9:00 a.m. - Invocation & Pledge of Allegiance

9:05 a.m. - Approval of Agenda

9:10 a.m. - Administration - Opening Remarks (Ann Hardy, County Manager)

9:15 a.m. - Tax Administration - Revaluation Report (Jeff Niebauer, Tax Administrator)

9:30 a.m. - Administration - Midyear Financial Update (Ann Hardy, County Manager)

9:45 a.m. - Human Resources - Employee Compensation, Recruitment, Staff Training, Retention, Benefits (Melanie Turrise, HR Director, and Staff)

10:00 a.m. - Administration - Preliminary General Government Capital Improvement Plan - (Stephanie Lewis, Operations Services / Aaron Perkins, Parks & Recreation Director / Bill Pinnix, Engineering Services Director / Steve Stone, Deputy County Manager)

10:20 a.m. - Planning - New Comprehensive Land Use Plan (Kirstie Dixon, Planning Director / Aaron Perkins, Parks & Recreation Director)

10:30 a.m. - Planning - Community Enforcement Update (Kirstie Dixon, Planning Director)

10:40 a.m. - Morning Break

10:55 a.m. - County Attorney - Legislative Matters (Bob Shaver, County Attorney)

11:05 a.m. EMS - Community Paramedic Program Update (Lyle Johnston, EMS Deputy Director)

11:15 a.m. - Emergency Services - Hurricane Florence & BNP REP Exercise After Action Reports (Malcolm Smith, Interim Emergency Services Director/Fire Administrator)

11:30 a.m. - Building Code Enforcement Information - (Ann Hardy, County Manager)

11:35 a.m. - Remote Video Inspections Presentation (Michael Slate, Code Administrator)

11:45 a.m. - ICC Building Valuation Data Permit Fee Schedule (Michael Slate, Code Administrator)

12:00 p.m. - Recess for Lunch

12:45 p.m. - Administration - County Seal and Logo Options (Amanda Hutcheson, Public Information Officer)

1:00 p.m.- Enterprise Capital Improvement Plan (John Nichols, Public Utilities Director)

1:20 p.m. - Medicaid Managed Care Update (Cris Harrelson, Health Director)

1:25 p.m. - Substance Use & Addiction Commission Update (Steve Lanier, BCSUAC Chair / Cris Harrelson, Health Director)

1:35 p.m. - Sheriff's Office Goals (Sheriff John Ingram)

1:45 p.m. - MIS - Cyber Security Focus (Steve Randone, MIS Director)

1:50 p.m. - Brunswick County Schools Bond Update (Dr. Jerry Oates, Superintendent)

2:05 p.m. - Afternoon Break

2:15 p.m. - Brunswick Community College Update (Dr. Gene Smith, President)

2:30 p.m. - BSRI Update (Jim Fish, President/CEO)

2:45 p.m. - Brunswick BID Update (Bill Early, Executive Director)

3:00 p.m. - Approval of Commissioners FY 19-20 Goals (Commissioners)

3:05 p.m. - Closing Remarks (Commissioners)

3. Adjourn



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

9:00 a.m. - Invocation & Pledge of Allegiance

From:

Andrea White

Issue/Action Requested:

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:

Andrea White

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Brunswick County Board of Commissioners
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From:
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Action Item # 2. -
9:10 a.m. - Administration - Opening Remarks (Ann Hardy,
County Manager)

Issue/Action Requested:

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ATTACHMENTS:

Description

- ☐ Commissioners Goals PPT
- ☐ Master Presentation PPT

Commissioners' Goals and Major Focus Areas To Guide Budget Development for FY 20

Ann Hardy, County Manager

Goal: Economic Development

1. Collaborate with the Brunswick Community College Workforce Development Initiatives, Brunswick Business & Industry Development, the four Chambers of Commerce and the Tourism Development Authority to develop a friendly and positive business environment, employ an effective business expansion and retention effort, develop a targeted business/industry recruitment strategy and grow the tourism and hospitality industry while protecting our residential neighborhoods.

Goal: Education

1. Continue the multi-year local funding agreement with the Brunswick County Board of Education to provide for a quality education that prepares our children for college or the workforce.
2. Support and enhance the Brunswick Guarantee Program with BCC Foundation that provides scholarships for county high school graduates to attend BCC.
3. Support the expansion of Allied Health Career Programs at BCC.
4. Facilitate the facility improvements associated with the voter approved 2016 \$152 million school bond referendum.

Goal: Financial Stewardship

1. Adopt a County Budget to maintain one of the lowest tax rates among counties in North Carolina with a population over 100,000.
2. Employ a conservative budgetary philosophy and make strategic decisions on all fiscal matters in order to maintain the positive financial position and credit strength of the county; continue a zero-based budgeting strategy wherever appropriate and feasible.
3. Staff seek out ways to reduce overhead and administrative costs.

Goal: Environmental Stewardship

1. Encourage and incentivize green development and construction to minimize the impact on natural resources while respecting and protecting private property rights.

Goal: Transportation

1. Continue the supplemental financial support for the Brunswick Connector transit service provided by the Cape Fear Public Transportation Authority.
2. Support BTS in continued development of rural transportation services, providing access to services and employment for rural residents.
3. Support the efforts of the NCACC to oppose any transfer of responsibility for transportation funding from the state to counties.
4. Request that NCDOT initiate a comprehensive transportation plan specifically for Brunswick County that includes municipal and other county partners.

Goal: Organizational Improvement/Development

1. Embed a focus on exceptional customer service where it becomes part of the organizational culture.
2. Provide all services in a way that recognizes and values diversity.
3. Recognize that businesses are customers of the county and review the Unified Development Ordinance to develop small business assistance by providing local rules that are clear, simple, easy to understand, that are predictable, reasonable and appropriate for Brunswick County.
4. Revise and implement policies, processes, procedures, and programs focused on ensuring a high performing workforce.
5. Encourage a healthy lifestyle to improve upon individual health of employees, improve productivity and reduce medical costs.
6. Provide supervisory skill building and leadership training opportunities for all supervisory personnel and those with supervisory potential. Expand Training and Skill Development to provide growth opportunities for non-supervisory staff.
7. Develop succession planning for key county positions.
8. Explore opportunities where the private sector or non-profit entities may more economically and efficiently serve the public than government.

Goal: Infrastructure/Development Expansion

1. Develop strategies for continued growth in the number of water and sewer customers by determining methods to increase the number of SAD projects, ~~prioritizing County funded water and sewer mains~~ and acquiring or merging existing private and/or public water and sewer systems.
2. Support the participants of the Lower Cape Fear Water and Sewer Authority in obtaining the raw water capacity to meet the county's long-term potable water needs.
3. Improve communication between the county and its wholesale water customers and utilities that contribute flow to the regional wastewater treatment plants.
4. Explore methods to work with surrounding utilities to reduce operational costs.
5. Support the plant expansion for Southport to become a participant in the West Brunswick Regional Wastewater System to meet the City's capacity needs.
6. Support the plant expansion at the Northeast Sewer System to meet the capacity needs of the participants.
7. Support the expansion and low pressure reverse osmosis advanced treatment at the Northwest Water system to meet the capacity and water quality needs of the county.

Goal: Public/Mental Health

1. Provide education to the public about preventable health issues and diseases and improve Brunswick County's health ranking in the state.
2. Support the Trillium LME/MCO to operate a program for mental health, developmental disabilities, and substance abuse services as they transition to one of the four state entities.
3. Continue to advocate for sufficient state/federal funding to adequately address MH/DD/SAS needs of our residents.

Goal: Community Development

1. Investigate additional policy amendments and enhancements to provide tangible incentives to encourage the development of affordable single and multi-family housing opportunities.
2. Enhance community appearance and protect property values through responsible zoning and code enforcement while recognizing the diversity of our county and respecting private property rights.
3. Support the Community Improvement Plan to remove unsafe and derelict structures.

Goal: Technology

1. Implement the results of the comprehensive in-house evaluation and assessment of the County's technological resources and operations and identify opportunities for departments to improve efficiency and service delivery through the implementation of proven technology applications.

Goal: Public Safety

1. Continue to ensure the safety and security of Brunswick County residents, property owners and visitors, while planning for Brunswick County's growth.
2. ~~Review the recommendations of the Brunswick County Fire Commission and~~
Continue to explore best practices of fire and rescue services while planning for growth in the county.
3. Support the Brunswick County Sheriff with resources to better enable law enforcement efforts while ensuring officer safety.



Countywide Goal Workshop

Brunswick County Board of Commissioners | Commissioners Chambers
February 18, 2019

Welcome & Opening Remarks

Ann Hardy, County Manager

Commissioners' Goals and Major Focus Areas To Guide Budget Development for FY 20

Ann Hardy, County Manager

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Property Tax Revaluation

Jeffery Niebauer, Tax Administrator

Revaluation

Currently performed every 4 years in Brunswick County.

North Carolina General Statute 105-283 states, “All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words “true value” shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller...”. North Carolina General Statute 105-285(d) states, “The value of real property shall be determined as of January 1” of the County revaluation year.

Progress to Date

Neighborhood Delineation

- Considered one of the most important tools in the revaluation process
 - used in the majority of mass appraisal systems
- Divides Brunswick County into smaller geographic areas
 - Typically, out of 720 neighborhoods, they are 200 parcels or less
- Developed using natural and manmade boundaries
 - Manmade – Interstates, land use & zoning
 - Natural – lakes, creeks, & watersheds
- Analyzing market data is easier, and ensures equity
 - Determine depreciation, market variables & factors
- Maintains consistent values in a manageable market area
- Easier for the public to compare property values within a market area

Progress to Date

- - 148,593 total parcels
- - 148,593 parcels valued

- - 720 Total Neighborhoods
- - 720 Neighborhoods Completed
- - Review in progress
 - (all neighborhoods to be completed by the end of February 2019)
- Parcels visited 50,071

Progress to Date

New Buildings

	Residential	Commercial
2015	2083	33
2016	2116	23
2017	2539	34
2018	2319	56

Sales / Market Transactions

Countywide Sales Statistics

	Number of Sales	Ratio
2015 Revaluation		99.6
2015 (year end)	4337	94.4
2016	5060	92.2
2017	5942	87.5
2018	6156	84.8
2019 Revaluation		99.79

Sales / Market Transactions

Single Family Sales Prices

Average Sales Price

2015	\$268,237
------	-----------

2018	\$285,982
------	-----------

Average Market Value

2018	\$265,821
------	-----------

County Growth

Brunswick County -- Market Value increase 11.9

> 10%

Ocean Isle Beach

Oak Island

Caswell Beach

Carolina Shores

Boiling Spring Lakes

Belville

Southport

St. James

Leland

5%-10%

Sunset Beach

Holden Beach

Calabash

Bolivia

Navassa

Varnamtown

Northwest

BHI MSD A & B

<5%

Village of Bald Head Island

Shallotte

Sandy Creek

Calendar of Events

July 16, 2018 Submit Schedule of Values to Commissioners

August 20, 2018 Hold Public Hearing on Schedule of Values

August 30, 2018 Adopt the Schedule of Values

September 6-27, 2018 Publish 4 notices once a week that the Schedule of Values has been adopted

December 2018 / January 2019 Mail revaluation notices --- After storm change end February 2019

January 1, 2019 Effective Date of the 2019 revaluation

January 15, 2019 Informal hearing with property owners begins -- After storm change March 2019

April 9, 2019 Board of Equalization and Review convenes and informal hearings end.

April 30, 2019 Board of Equalization and Review Adjourns

July 2019 2019 tax bills will be mailed to property owners

September 1, 2019 2019 taxes are due

January 6, 2020 Last day to pay 2019 tax bill without interest

Appeals Process

Notices mailed December 2018-January 2019 (storm change - Feb 2019)



Informal reviews with property owners until April 8, 2019
(online, in person, or by mail)



Board of Equalization and Review convenes April 9, 2019



Property Tax Commission



Courts (Appeals & Supreme)

Tax Relief Available

- Elderly or Disabled Requirements (exclusion of \$25,000 or 50% of taxable value, up to 1 acre)
 - Deed in applicant's name or title to residence as of January 1st
 - Must be N.C. resident
 - At least 65 years of age or totally and permanently disabled
 - Has income for the preceding calendar year of NOT MORE than the income eligibility limit
 - Must apply by June 1, 2019



Tax Relief Available

- Disabled Veterans Homestead Exclusion (first \$45,000 of assessed value)
 - Deed in applicant's name or title to residence as of January 1st
 - Must be N.C. resident
 - Honorably discharged veteran – 100% disabled (service related) or receive benefits for specially adapted housing under 38 U.S.C. 2101
 - There are no age or income requirements
 - Must apply by June 1, 2019



Tax Relief Available

Present use value tax deferment:

10 acres in agricultural production w/\$1,000 average 3 yr. gross income.

5 acres in horticultural production w/same income requirement.

20 acres of forestland in sound management.

3 year rollback if property loses eligibility.

**Must have applied by February 1, 2019 or
within 30 days of value change or 60 days of a transfer.**

Challenges

- Time
- Storm Damage (damaged properties, reviewing permits)
- Staffing Changes

Aerial Photography Project



Aerial Photography Project



Aerial Photography Project



Aerial Photography Project



Aerial Photography Project



© 2009 Pictometry

Aerial Photography Project



Aerial Photography Project



Aerial Photography Project

Who can benefit from Oblique Imagery?

DOT & Public Works

Police Department

Fire Department

Engineering

E-911

Property Valuation

GIS/Mapping

Planning & Zoning

Legal Departments

Environmental Health

Economic Development

Aerial Photography Project

Brunswick County has a six year contract which includes 3 flights.

We plan to fly every two years.

Timing our flights with New Hanover County provides savings to both Counties.

First flight will be complete by the end of February 2019. Aerials delivered within 60 days from completion.

In case of a natural disaster flights can be conducted for free and/or reduced cost. For ex. Hurricane at a category 2 or higher

Collections

End of the year collections
County tax year

2012	2013	2014	2015	2016	2017
94.81%	95.28%	95.67%	96.83%	97.60%	98.15%

Midyear Financial Update

Ann Hardy, County Manager

Summary Information for General Fund as of January 31, 2019

Revenues:

Total revenues are \$151.3 million for a 3.7% or \$5.4 million increase over the prior year. As compared to the prior year, collections are up for Ad valorem Taxes \$4.0 million or 3.5% and Local Options Sales Tax \$0.5 million or 4.4%. Total revenues collected are 75.5% of the current budget. Preliminary projected total revenues at June 30, 2019 are \$209.9 million. This forecast assumes the County collects hurricane related reimbursements in the current year.

	Audited June 30, 2018	Current Budget	January 31, 2019	Prior Yr January 31, 2018	Projections June 30, 2019
Revenues:					
Ad valorem taxes	\$ 124,318,739	\$ 124,680,301	\$ 117,930,420	\$ 113,973,649	\$ 128,000,000
Local option sales taxes	23,986,670	24,754,123	11,627,749	11,139,383	24,754,123
Other taxes and licenses	6,006,050	4,653,000	3,135,277	3,273,829	5,480,063
Unrestricted intergovernmental revenues	3,767,405	2,859,275	183,251	109,626	3,648,000
Restricted intergovernmental revenues	15,952,297	26,750,632	7,453,890	8,343,578	29,240,627
Permits and fees	4,704,274	3,998,110	2,683,470	2,631,353	4,677,476
Sales and services	11,045,810	11,353,124	7,080,202	5,710,770	12,055,214
Investment earnings	467,170	200,650	409,048	208,860	701,225
Other	2,056,327	1,274,856	839,444	598,332	1,311,630
Total revenues	<u>192,304,742</u>	<u>200,524,071</u>	<u>151,342,751</u>	<u>145,989,380</u>	<u>209,868,358</u>

Summary Information for General Fund as of January 31, 2019

Expenditures:

Total Expenditures are \$110.7 million and are 53.7% of the current budget. Expenditures are up \$12.7 million or 13.0% in comparison to the same period in the prior year or 4.2% net of the hurricane related expenditures. Preliminary projected total expenditures at June 30, 2019 are \$200.4 million.

	Audited June 30, 2018	Current Budget	January 31, 2019	Prior Yr January 31, 2018	Projections June 30, 2019
Expenditures:					
Salaries	45,202,932	51,422,199	31,727,271	26,064,758	50,119,862
Fringe benefits	20,880,129	25,728,113	14,321,075	12,259,095	24,414,234
Operating costs	89,298,391	110,807,889	60,283,215	51,319,466	107,599,949
Capital outlay	3,993,531	4,786,194	2,908,137	2,663,173	4,786,194
Debt Service	13,952,380	13,460,707	1,442,309	5,625,867	13,460,707
Total expenditures	<u>173,327,363</u>	<u>206,205,102</u>	<u>110,682,007</u>	<u>97,932,359</u>	<u>200,380,946</u>

Summary Information for General Fund as of January 31, 2019

Other Financing Sources (Uses):

- Net transfers to other funds are \$2.8 million: Grant advance funding for Cape Fear Regional Jetport \$1.8 million and Landfill closure \$750k.
- Revenues and net transfers are greater than expenditures by \$37.8 million as compared to \$46.8 million in the prior year. Current fund balance projections indicate an increase of \$1.4 million to \$77.3 million mainly due to growth in the county partially offset by increased expenditures related to Hurricane Florence. This forecast assumes the county collects the hurricane related reimbursements in the current year.

	Audited June 30, 2018	Current Budget	January 31, 2019	Prior Yr January 31, 2018	Projections June 30, 2019
Revenues over (under) expenditures	<u>18,977,379</u>	<u>(5,681,031)</u>	<u>40,660,744</u>	<u>48,057,021</u>	<u>9,487,412</u>
Other Financing Sources (Uses):					
Issuance of long term debt	505,057	-	-	505,057	-
Transfers from other funds	10,510	-	-	-	-
Transfers to other funds	(17,198,089)	(6,936,275)	(2,814,190)	(1,741,030)	(8,067,540)
Appropriated fund balance	<u>-</u>	<u>12,617,306</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total other financing sources (uses)	<u>(16,682,522)</u>	<u>5,681,031</u>	<u>(2,814,190)</u>	<u>(1,235,973)</u>	<u>(8,067,540)</u>
Net change in fund balances	2,294,857	<u>\$ -</u>	<u>\$ 37,846,554</u>	<u>\$ 46,821,048</u>	1,419,872
Fund balance, beginning of year	<u>73,609,688</u>				<u>75,904,545</u>
Fund balance, end of year	<u>\$ 75,904,545</u>				<u>\$ 77,324,417</u>

Sales Tax Analysis

	2019 Year to Date	2018 Year to Date	2018-2019 Year to Date Increase	FY 2019 Estimate & % Increase Over FY 2018
Article 39 (1%)	\$5,073,175	\$4,950,635	\$123,145 or 2.5%	\$10,167,912 or 3.0%
Article 40 (1/2%)	3,227,131	3,001,086	226,045 or 7.5%	7,559,397 or 3.5%
Article 42 (1/2%)	3,327,443	3,188,267	139,176 or 4.4%	7,026,814 or 3.2%

Note: Very preliminary projections for FY 19 based on 5 months sales tax received. Total projected FY 19 sales tax projection is \$24.8m and of the total, the School's portion of Article 40 and 42 is \$6.0m.

School GO Bond Debt Service Projections

Fiscal Year	Existing GO		\$152.0 million New GO Debt Includes Financing Cost					GO Existing & New Debt		New and Existing Taxpayer		New Debt Taxpayer	
	GO Debt	Cents on Tax Rate	July 2018 52.95 million	July 2020 47.55 million	July 2022 51.5 million	New Debt TOTAL *	Cents on Tax Rate	Total Debt	Cents on Tax Rate	\$ 25,000 Car	\$ 200,000 Home	\$ 25,000 Car	\$200,000 Home
2019	5,418,365	1.9541	-	-	-	-	-	5,418,365	1.9541	4.89	39.08	-	-
2020	5,181,125	1.8685	5,636,172	-	-	5,636,172	2.0326	10,817,297	3.9012	9.75	78.02	5.08	40.65
2021	4,579,250	1.6515	4,291,060	-	-	4,291,060	1.5475	8,870,310	3.1990	8.00	63.98	3.87	30.95
2022	983,750	0.3548	4,166,060	5,886,750	-	10,052,810	3.6254	11,036,560	3.9802	9.95	79.60	9.06	72.51
2023	768,350	0.2771	4,041,060	4,579,000	-	8,620,060	3.1087	9,388,410	3.3858	8.46	67.72	7.77	62.17
2024	-	-	3,916,060	4,460,000	6,373,125	14,749,185	5.3192	14,749,185	5.3192	13.30	106.38	13.30	106.38
2025	-	-	3,791,060	4,341,000	4,956,875	13,088,935	4.7204	13,088,935	4.7204	11.80	94.41	11.80	94.41
2026	-	-	3,666,060	4,222,000	4,828,125	12,716,185	4.5860	12,716,185	4.5860	11.46	91.72	11.46	91.72
2027	-	-	3,541,060	4,103,000	4,699,375	12,343,435	4.4515	12,343,435	4.4515	11.13	89.03	11.13	89.03
2028	-	-	3,428,560	3,984,000	4,570,625	11,983,185	4.3216	11,983,185	4.3216	10.80	86.43	10.80	86.43
2029	-	-	3,328,560	3,865,000	4,441,875	11,635,435	4.1962	11,635,435	4.1962	10.49	83.92	10.49	83.92
2030	-	-	3,242,935	3,746,000	4,313,125	11,302,060	4.0760	11,302,060	4.0760	10.19	81.52	10.19	81.52
2031	-	-	3,170,435	3,627,000	4,184,375	10,981,810	3.9605	10,981,810	3.9605	9.90	79.21	9.90	79.21
2032	-	-	3,096,060	3,503,125	4,055,625	10,654,810	3.8426	10,654,810	3.8426	9.61	76.85	9.61	76.85
2033	-	-	3,020,435	3,384,375	3,926,875	10,331,685	3.7260	10,331,685	3.7260	9.32	74.52	9.32	74.52
2034	-	-	2,943,560	3,265,625	3,798,125	10,007,310	3.6090	10,007,310	3.6090	9.02	72.18	9.02	72.18
2035	-	-	2,864,810	3,146,875	3,669,375	9,681,060	3.4914	9,681,060	3.4914	8.73	69.83	8.73	69.83
2036	-	-	2,784,185	3,028,125	3,540,625	9,352,935	3.3730	9,352,935	3.3730	8.43	67.46	8.43	67.46
2037	-	-	2,702,310	2,909,375	3,411,875	9,023,560	3.2543	9,023,560	3.2543	8.14	65.09	8.14	65.09
2038	-	-	2,619,810	2,790,625	3,283,125	8,693,560	3.1352	8,693,560	3.1352	7.84	62.70	7.84	62.70
2039	-	-	2,494,280	2,671,875	3,154,375	8,320,530	3.0007	8,320,530	3.0007	7.50	60.01	7.50	60.01
2040	-	-	-	2,553,125	3,025,625	5,578,750	2.0119	5,578,750	2.0119	5.03	40.24	5.03	40.24
2041	-	-	-	2,434,375	2,896,875	5,331,250	1.9227	5,331,250	1.9227	4.81	38.45	4.81	38.45
2042	-	-	-	-	2,768,125	2,768,125	0.9983	2,768,125	0.9983	2.50	19.97	2.50	19.97
2043	-	-	-	-	2,639,375	2,639,375	0.9519	5,278,751	1.9037	4.76	38.07	2.38	19.04
2044	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	\$ 16,930,840		\$68,744,532	\$ 72,501,250	\$ 78,537,500	\$ 219,783,282		\$239,353,498					

Note: Model Assumes no Growth Rate

Average Cents on Tax Rate	3.26
	3.52
FY 20 Estimate	\$ 2,772,845 Value of 1 cent est.

Avg Weekly 1.54

New Debt
Existing and New Debt

1.33

Preliminary 2019 - Value Estimates

	FY 2019	FY 2020
BRUNSWICK COUNTY	<u>2018 VALUE ESTIMATE</u>	<u>2019 VALUE ESTIMATE</u>
Date of Estimate		2/11/2019
Gross Real Property	\$ 24,034,619,745	\$ 26,688,829,541
Exempt Property	1,313,227,360	1,362,656,320
Taxable Real Property	22,721,392,385	25,326,173,221
Land Use Deferred	493,000,000	451,776,800
Net Taxable After PUV	22,228,392,385	24,874,396,421
Working Waterfront Deferred	2,650,000	3,500,000
Elderly Exemptions (Personal)	86,800,000	93,000,000
Elderly Exemptions (Real)	550,000	550,000
Veteran Exemptions (Personal)	125,000	130,000
Veteran Exemptions (Real)	29,000,000	36,100,000
Beach Club HOA Property	4,300,000	6,200,000
DENR Pollution Abatement	76,890	95,840
Low Income Housing Deferred	34,705,000	37,000,000
Builder Exemptions	55,000,000	55,000,000
Net Taxable Real Property	22,015,185,495	24,642,820,581
Individual & Business Personal	575,000,000	595,000,000
Net Taxable Real/Personal Property	22,590,185,495	25,237,820,581
Public Utilities	1,650,000,000	1,680,000,000
Total Property Value	24,240,185,495	26,917,820,581
Estimated Reductions - PTC	8,000,000	175,000,000
Estimated Reductions - Board of E & R	9,000,000	20,000,000
Net Forecast Property Excluding MV & Boats	24,223,185,495	26,722,820,581
Motor Vehicle Value	1,350,000,000	1,500,000,000
Estimated Total Tax Base	\$ 25,573,185,495	\$ 28,222,820,581

Note: Estimated Total Tax base is a 10.4% increase over 2018 values

Preliminary 2019 Levy Estimates and School Funding

	FY 19 Approved (1/2018 Levy) at FY 19 tax rate	FY 20 projection (1/2019 Levy) at FY 19 tax rate	Estimated Change From FY 19 BUDGET	FY 19 Approved (1/2018 Levy) at FY 19 tax rate	FY 20 projection (1/2019 Levy) at Revenue Neutral	Estimated Change From FY 19 BUDGET
Tax Rate Estimate	0.4850	0.4850		0.4850	0.4525	
Real Property Value Estimate	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086
Motor Vehicle Value Estimate	1,350,000,000	1,500,000,000	150,000,000	1,350,000,000	1,500,000,000	150,000,000
Total Valuation Estimate	\$25,573,185,495	\$28,222,820,581	\$ 2,649,635,086	\$25,573,185,495	\$28,222,820,581	\$ 2,649,635,086
Motor Vehicle Value Estimate	\$ 1,350,000,000	\$ 1,500,000,000	\$ 150,000,000	\$ 1,350,000,000	\$ 1,500,000,000	\$ 150,000,000
Collection Percentage for Motor Vehicles	100.00%	100.00%		100.00%	100.00%	
Tax Generated From Motor Vehicles	\$ 6,547,500	\$ 7,275,000	\$ 727,500	\$ 6,547,500	\$ 6,787,500	\$ 240,000
Real Property Value Estimate	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086
Collection Percentage for Real Property	98.00%	98.15%		98.00%	98.15%	
Tax Generated From Real Property	\$ 115,132,801	\$ 127,207,975	\$ 12,075,174	\$ 115,132,801	\$ 118,683,729	\$ 3,550,928
Total Tax Generated From Property	\$ 121,680,301	\$ 134,482,975	\$ 12,802,674	\$ 121,680,301	\$ 125,471,229	\$ 3,790,928
Value of 1 cent	\$ 2,508,872	\$ 2,772,845	\$ 263,973	\$ 2,508,872	\$ 2,772,845	\$ 263,973
General Government Debt Service (Excluding School Debt Funded By Sales Tax or Lottery)	\$ 10,019,267	\$ 15,258,944	\$ 5,239,677	\$ 10,019,267	\$ 15,258,944	\$ 5,239,677
Ad Valorem Revenue After Debt	\$ 111,661,034	\$ 119,224,030	\$ 7,562,997	\$ 111,661,034	\$ 110,212,285	\$ (1,448,749)
Schools (Under Funding Agreement)	\$ 40,756,277	\$ 43,516,771	\$ 2,760,494	\$ 40,756,277	\$ 40,227,484	\$ (528,793)
County Funds After School & Debt Budget	\$ 70,904,756	\$ 75,707,259	\$ 4,802,503	\$ 70,904,756	\$ 69,984,801	\$ (919,956)

Note: County and School revenue is an estimated 6.77% increase at the current tax rate and a 1.30% decrease at the calculated revenue neutral rate. The current tax rate would be sufficient to offset the additional (2) GO School Bond debt issues.

General Fund Budget Pressures

- Market and Merit Increase - \$1.7m
- Retirement Rate Increase 1.20% - \$0.6m
- Debt Service School GO Phase 1 - \$5.6m; Phase 2 - \$5.9m; Phase 3 - \$6.4m
- Landfill Transfer - \$0.5m
- Voting Equipment - \$1.1m

Other Budget Pressures (costs unknown):

- Hurricane Mitigation – Unfunded by HMPG
- Opioid Epidemic
- Fire Services
- Shoreline Protection
- Growth in Waste Collection
- Increased Operating Costs for Schools & County Buildings and Parks
- BSRI Expanding Services
- Increased Support for Development Services (Planning, Fire & Building Inspections, MIS, Environmental Health, Engineering, and GIS)
- Increased Support for Public Safety (Sheriff's Office, Detention, Animal Protective Services, 911 and Emergency Services)

Summary Information for Enterprise Fund as of January 31, 2019

Water Fund:

- Total water fund revenues decreased 3.2% or \$0.5 million under the same time last year to \$15.2 million. Wholesale water sales decreased 1.1% or less than \$0.1 million mainly due low irrigation needs partially offset by an increase in the PPI rate. Industrial water sales decreased 10.8% or \$0.2 million. From one year ago, retail customers increased 1,383 for a total of 42,291 customers. Preliminary total projected revenues are \$29.0 million at June 30, 2019.
- Total expenditures in the water fund increased \$0.5 million or 4.6% net of the hurricane related expenditures . Year to date expenditures are 46.7% of the current budget. Preliminary total projected expenditures are \$25.0 million at June 30, 2019.
- Net Transfers to water capital projects are \$0.8 million compared \$0.6 million in the prior year.
- Revenues are \$2.5 million more than expenditures and net transfers as compared to more than by \$4.6 million due to low irrigation needs in the current year and increases in expenditures due to hurricane Florence. Preliminary projected revenues over expenditures and net transfers are \$3.2 million at June 30, 2019. This forecast assumes the county collects hurricane related reimbursements in the current year.

Water Fund:	Audited June 30, 2018	Current Budget	January 31 2019	Prior Yr January 31 2018	Projections June 30, 2019
Revenues:					
User charges	\$ 24,141,941	\$ 23,072,000	\$ 14,762,296	\$ 15,164,300	\$ 24,087,046
Restricted intergovernmental	216,000	3,797,331	-	216,000	4,118,733
Investment earnings	142,897	70,000	157,127	70,451	229,573
Other	<u>601,302</u>	<u>476,468</u>	<u>237,866</u>	<u>200,089</u>	<u>576,207</u>
Total revenues	<u>25,102,140</u>	<u>27,415,799</u>	<u>15,157,289</u>	<u>15,650,840</u>	<u>29,011,559</u>
Expenditures:					
Salaries	4,563,616	5,142,948	3,152,951	2,585,195	5,123,545
Fringe benefits	1,957,864	2,410,992	1,347,683	1,138,620	2,189,985
Operating costs	6,739,172	11,769,864	4,908,020	3,957,995	11,028,747
Repairs and maintenance	1,796,403	1,587,336	651,113	1,023,289	1,424,227
Capital outlay	1,611,908	2,318,195	1,189,979	809,250	2,318,195
Debt Service:					
Principal	1,179,148	1,220,861	82,103	253,670	1,220,861
Interest	<u>1,068,790</u>	<u>1,021,068</u>	<u>572,354</u>	<u>599,046</u>	<u>1,021,068</u>
Total expenditures	<u>18,916,901</u>	<u>25,471,264</u>	<u>11,904,203</u>	<u>10,367,065</u>	<u>24,326,628</u>
Revenues over (under) expenditures	<u>6,185,239</u>	<u>1,944,535</u>	<u>3,253,086</u>	<u>5,283,775</u>	<u>4,684,931</u>
Other Financing Sources (Uses):					
Transfer to Water Capital Project	(2,715,507)	(3,368,607)	(790,000)	(635,000)	(790,000)
Transfer from Water Capital Project	173,000	-	-	-	-
Budgetary Financing Sources (Uses):					
Appropriated fund balance	<u>-</u>	<u>1,424,072</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total other financing sources (uses)	<u>(2,542,507)</u>	<u>(1,944,535)</u>	<u>(790,000)</u>	<u>(635,000)</u>	<u>(790,000)</u>
Revenues and other financing sources over (under) expenditures and other financing uses	<u>\$ 3,642,732</u>	<u>\$ -</u>	<u>\$ 2,463,086</u>	<u>\$ 4,648,775</u>	<u>\$ 3,894,931</u>

Sewer Fund:

- Total revenues for the Sewer Fund increased 7.4% over the same time last year to \$15.0 million. Retail sewer sales increased \$0.3 million or 4.4% in comparison with the prior year. Capital recovery and Transmission fees decreased \$0.4 million under the same time last year. Total revenues are 61.7% of the current budget for the fiscal year. Preliminary total projected revenues are \$29.9 million at June 30, 2019.
- Total expenditures for the Sewer Fund have increased \$1.1 million or 13.0% over the same period in the prior year net of the hurricane related expenditures mainly due to capital outlay. Total expenditures are 36.3% of the budget for the fiscal year. Preliminary total projected expenditures are \$29.4 million at June 30, 2019.
- There are less than \$0.1 million net transfers from sewer capital projects due to the transfer in from the participant capital and replacement fund in the current year compared to net transfers in of \$0.8 million in the same period of the prior year.
- Revenues are greater than expenditures and net transfers by \$4.2 million as compared to \$6.1 million in the prior year. Preliminary projections indicate revenues are greater than expenditures and net transfers by \$0.6 million at June 30, 2019 down from the prior year due to the increase in capital outlay and prior year SAD revenue. This forecast assumes the county collects hurricane related reimbursements in the current year.
- Retail sewer customers billed in January 18,145 up 952 customer from one year ago.

Sewer Fund:	Audited June 30, 2018	Current Budget	January 31 2019	Prior Yr January 31 2018	Projections June 30, 2019
Revenues:					
User charges	\$ 26,830,561	\$ 23,269,098	\$ 14,669,705	\$ 13,710,518	\$ 28,456,014
Restricted intergovernmental	-	760,762	-	-	923,635
ARRA interest subsidy	120,086	91,833	46,264	59,946	91,833
Special Assessments	2,026,174	13,000	56,855	65,007	56,855
Investment earnings	127,646	50,000	151,110	58,727	220,029
Other	174,437	102,400	67,028	62,144	174,816
Total revenues	29,278,904	24,287,093	14,990,962	13,956,342	29,923,182
Expenditures:					
Salaries	2,481,261	2,942,760	1,778,069	1,431,008	2,889,362
Fringe benefits	989,586	1,304,848	721,159	578,873	1,171,883
Operating costs	4,130,740	5,536,085	2,923,425	2,269,264	5,490,828
Repairs and maintenance	1,986,908	1,773,751	1,028,363	963,271	1,685,063
Capital outlay	1,975,825	4,457,906	1,661,410	622,060	4,457,906
Debt Service:					
Principal	9,840,547	10,014,492	830,464	810,934	10,014,492
Interest	4,027,464	3,688,912	1,856,950	2,027,294	3,688,912
Total expenditures	25,432,331	29,718,754	10,799,840	8,702,704	29,398,447
Revenues over (under) expenditures	3,846,573	(5,431,661)	4,191,122	5,253,638	524,735
Other Financing Sources (Uses):					
Transfer to Wastewater Capital Project	(634,012)	(325,558)	(325,558)	(634,012)	(325,558)
Transfer from Wastewater Capital Project	1,638,171	375,000	375,000	1,445,452	375,000
Budgetary Financing Sources (Uses):					
Appropriated fund balance	-	5,382,219	-	-	-
Total other financing sources (uses)	1,004,159	5,431,661	49,442	811,440	49,442
Revenues and other financing sources over (under) expenditures and other financing uses	\$ 4,850,732	\$ -	\$ 4,240,564	\$ 6,065,078	\$ 574,177

Hurricane Florence – Damage and Claims Status

<u>Damage Category:</u>	Estimates			
	Damages	Insurance	FEMA 75%	State/Other
Category A - Debris Removal	\$ 8,736,000	\$ -	\$ 6,552,000	\$ 2,184,000
Category B - Emergency Protective Measures	5,345,500	-	4,009,125	1,336,375
Category C - Roads and Bridges	20,000	-	15,000	5,000
Category E - Building and Equipment	1,093,650	763,543	247,580	82,527
Category F - utilities	3,379,515	-	2,534,636	844,879
Category G - Parks, Recreation, and other facilities	681,000	-	510,750	170,250
Category Z - Management Costs	300,000	-	225,000	75,000
	<u>\$ 19,555,665</u>	<u>\$ 763,543</u>	<u>\$ 14,094,091</u>	<u>\$ 4,698,030</u>
<u>Proceeds and Claims Status:</u>				
Insurance proceeds received to date	211,092	211,092	-	-
Projects complete and submitted to FEMA	501,247	-	375,935	125,312
Expected FEMA submission within 30 days	14,462,811	552,451	10,432,770	3,477,590
Expected FEMA submission greater than 30 days	4,380,515	-	3,285,386	1,095,129
	<u>\$ 19,555,665</u>	<u>\$ 763,543</u>	<u>\$ 14,094,091</u>	<u>\$ 4,698,030</u>

* Expenditures to date: General Fund \$8.5 million; Enterprise Fund \$2.7 million

* Engaged CSRS Disaster Recovery Management, LLC for PA and Mitigation consulting services January 24, 2019

* Past experience: 10 to 12 months from the date of event to closeout projects and receive FEMA reimbursement

* Estimate Florence final closeout to be no earlier than 2 years or greater with hazard mitigation

Hurricane Florence - 404 HMPG Hazard Mitigation Letters of Interest Submitted

- Novant Health Brunswick Medical Center Alternative Water System \$224,350
- Shelters and Senior Centers Generators \$2,804,000
- Water and Sewer Laboratory Operations Building \$100,000, and Secondary Water Line \$1,100,000
- Fueling Sites, Re-Fueling Trailer, and High Clearance High Capacity Fuel Truck \$1,152,000
- County Buildings Flood Mitigation and Safe Rooms \$935,000
- Communication Towers Monitoring System- \$30,000
- Total \$6,345,350

Hurricane Florence – 407 Expedited Properties(Buyout)

- Municipal Application Deadline December 14, 2018
- Unincorporated property applications submitted-Total 5
- Joint application with Town of Leland through agreement
- Town of Leland submitted 25 applications for a total of 30 applications
- Received notice of approval from State to “Build Out” all properties on application
- Deadline for completion is March 1, 2019
- NOT ALL PROPERTIES ON INITIAL APPLICATION WILL REACH FINAL APPROVAL
- Total estimated \$6,390,530

Questions and Discussion

Employee Compensation, Recruitment, Staff Training, Retention, Benefits

Melanie Turrise, HR Director & Staff

—— Employee Compensation Plan ——

Estimated Market & Merit Analysis

Fiscal Year 2019-2020	General Fund	Enterprise Fund	Total
Number of Employees	909	131	1,040
December 2018 CPI Index/pay scale adjustment @ 2%. (including overtime and benefits)	\$1,126,300	\$172,000	\$1,298,300
Estimated 1% merit for employees performing at or above satisfactory. Individual merit dependent on overall performance. Merit range from .25% to 1.35%.	\$563,200	\$86,000	\$649,200
Budget Impact	\$1,689,500	\$258,000	\$1,947,500

LGERS Contribution Update

The Retirement Systems Division of the Treasurer's Office amended its policy for employer contribution rates to LGERS. Effective July 1, 2019, the "base" employer contribution rate with respect to law enforcement officers (LEOs) will increase from 8.50 to 9.70 percent of reported compensation. With respect to all other employees, it will increase from 7.75 to 8.95 percent of reported compensation. Each fiscal year it will go up incrementally by 1.2% through FY 2021.

Below is the impact for this upcoming FY:

Fiscal Year 2019-2020	General Fund	Enterprise Fund	Total
Number of Employees	909	131	1,040
LGERS Contribution increase of 1.2% (mandated additional contribution increase from 8.5% to 9.7% for LEO; 7.75% to 8.95% for general employees)	\$575,000	\$90,900	\$665,900

—— Staff Organizational Support ——

HR Organizational Support

- Continue to support County departments with staffing needs.
 - Recruitment support and assistance
- Provide training opportunities.
- Continue to review and refine any policies as needed.
- Continue to administer policies and procedures with relation to:
 - The performance evaluation system
 - Employee relations
 - Leave and benefits administration
- On-going compensation analysis countywide.
 - Collect data and conduct a pay study of 25% of the county job classifications within the next couple of months

Health Plan Update

Health Plan Highlights

Brunswick County participates in the North Carolina Health Insurance Pool (NCHIP) for our group medical plan.

Medical Plan - Preliminary renewal discussions indicate that there is no increase based on current plan design.

Dental Plan - Preliminary renewal discussions indicate a possible increase in fully insured plan with BCBSNC of 4.3%. Gallagher, our current broker, will continue to negotiate and review all other options.

Budget based on enrollment and coverage level.

FY 20 Budget Projections (no plan design changes)

	FY 19 Budget	FY 20 Projected Budget
Employees Medical <i>Includes coverage on Spouse and Children</i>	\$9,966,924 (996 FTE)	\$9,966,924 (996 FTE)
(Pre-65) Retirees Medical	2,862,600	2,862,600
Employees Dental <i>Includes coverage on Spouse and Children</i>	481,434	502,135
(Pre-65) Retiree Dental	52,482	54,739
Total Budget	\$13,340,860	\$13,386,398

Cost does not increase per FTE for Medical. Budget based on enrollment and coverage level. This table illustrates a comparison, assuming the same enrollment and a 4.3% increase in dental premiums.

Next Steps

1. Board to provide direction on plan design
2. Manager to Develop Recommended Budget Based on Goals of Board
3. Conduct Annual Open Enrollment in May

Preliminary General Government Capital Improvement Plan

Stephanie Lewis, Director of Operations Services

Aaron Perkins, Director of Parks and Recreation

Bill Pinnix, Director of Engineering Services

Steve Stone, Deputy County Manager

Preliminary General Government Capital Improvement Plan

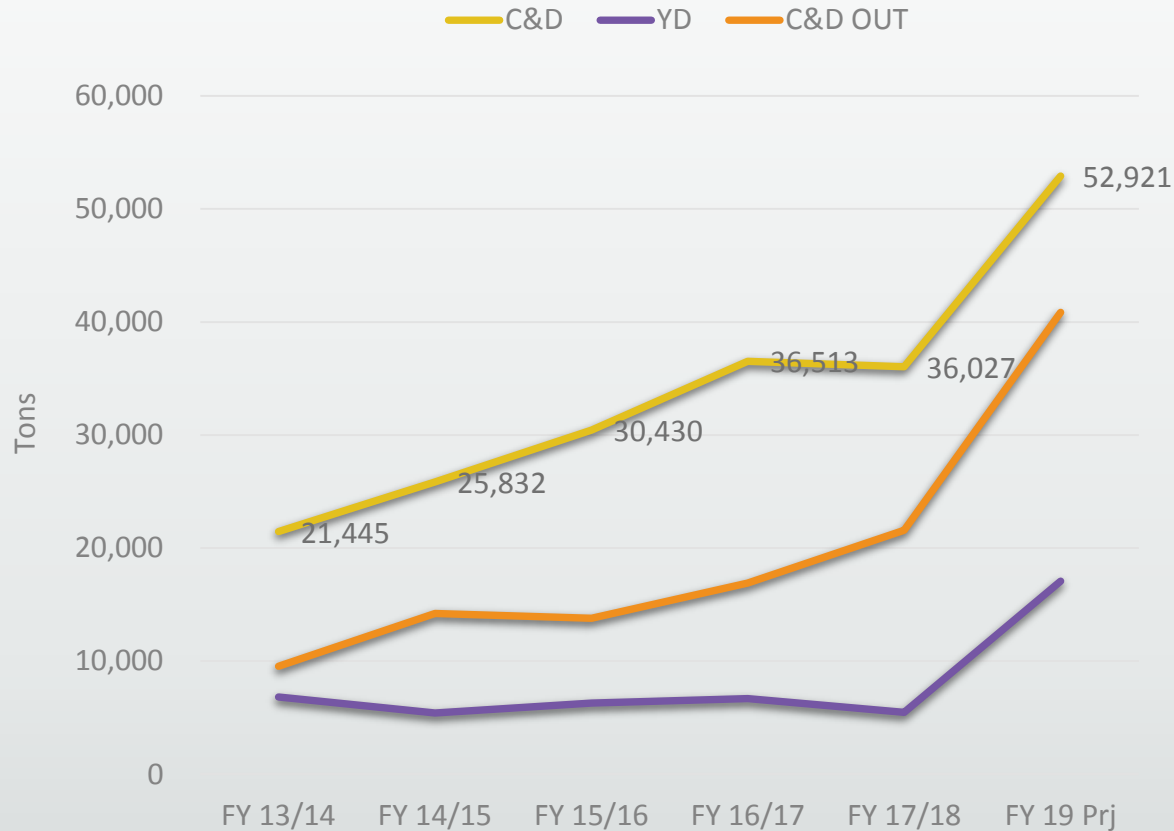
Stephanie Lewis, Director of Operations Services

General Government Improvement Plan

Project FY 2021 – FY 2023 Funding sources are current capital reserve and pay go:

1. C & D Landfill Closure - \$650,000 engineering in FY 21 & FY 22 from capital reserve and construction in FY 23 of \$9,284,355; recommend a reserve transfer of \$417,355 to set aside funds for the balance of the estimated closure costs
2. Landfill Transfer Station – was removed from the CIP due to current negotiations with Waste Industries to construct a new Transfer Station in exchange for a 10 year contract extension (June 30, 2033) with an additional 10 year term (June 30, 2043) to automatically extend unless canceled 90 days prior to the expiration of the current term. An annual payment of \$175,000 will be due to Waste Industries beginning on the first anniversary of the completion date and continuing on each anniversary through June 30, 2043. Waste Industries also agrees to renovate the current Transfer Station once the construction of the new Transfer Station is complete. Once terms are agreed upon for the estimated cost of renovating the current Transfer Station a contract amendment will be submitted for the board's approval.

C&D Waste Stream Update



- 1st qtr of FY19, C&D 8% decrease
- 2nd qtr of FY19, C&D 114% increase
- Prj FY19 C&D to average a 47% increase
- 25% increase for FY 20 = 66,150 tons
- FY20 75% transfer of C&D = \$1.98M, which is a \$945k increase from FY19
 - C&D transfer budget was amended by \$660k to \$1.7M after Florence to maintain the 75% transfer for FY19
- Prj FY19 Yard Debris 68% increase
 - R&M and Motor Fuel lines may exceed budget limits for grinding operation, may be able to offset with excess revenue or absorb
- Prj FY19 MSW 12% increase, historically increases 2 – 4% per year

C&D Pilot Programs Update

- FY19 Sorting Pilot Program
 - Funded at \$13,000 to sort with in house labor & equipment for two months to determine quantity of C&D that could be diverted from the waste stream
 - Sorting was not accomplished in FY19 due to:
 - Hurricane Florence – increased traffic and debris volumes
 - New Landfill Schedule – staff is 1 person short daily, more if there are absences (vacations and sickness)
- FY20 Sorting Pilot Program
 - Request funding at \$25,000 to sort with temporary employees and in house equipment for two months
- FY21 Extraction Pilot Program
 - \$50,000 for test bores or core samples and testing of material
- In lieu of the FY19 Sorting Pilot Program, consider funding a new Feasibility Study and Reassessment of Post Closure Care (PCC) costs
- Current PCC costs are \$45k - \$50k annually
- Proposal for \$9,500 from McGill Associates
 - Assessment of historical PCC data
 - Perform preliminary feasibility analysis of the possible use of new breakthrough technologies that could lower PCC costs, maximize landfill airspace, generate new revenues and/or reduce greenhouse gases
- The study findings will present several PCC reduction options upon review of site data, that may include:
 - Assessing natural attenuation within the landfill
 - Mining the landfill to reduce environmental hazards
 - Treating waste mechanically while *in-situ*, using new bioremediation technology
 - Evaluating landfill reuse scenarios where the airspace could be continually reused

Fuel and Generator Projects

Government Center Main Generator

- Sheriff's Office, Detention Center, Call Center, Administration, Courthouse and EMS have individual generators separate from the main generator
- The main generator services all other campus buildings (which housed personnel from federal and state agencies), including the MIS building (which houses servers for most county functions), the cafeteria (which provides meals), the Board of Education building, the fuel site (which provides fuel for the fleet and all generators), the warehouse (which serves as the Shipping & Receiving point for the county), as well as both the county and school garages
- Current capacity is 2,000 gal, which provides 24hrs of power
- Main diesel tank does not have a direct dispenser and the regular fuel dispenser is too slow to fuel a truck or tank when needed to refuel generators, currently dispenses 7 gal/min
- Current piping on fuel tanks is too small to achieve maximum dispensing speed, but can be corrected by adding submersible pumps to each tank to increase speed of fuel to the dispensers

Project Description

- Eliminate current 2,000 gal tank and add a 10,000 gal tank to the main generator with a dispenser that will allow fuel to be used during non-emergency times to prevent fuel stagnation
 - Provide a 5 day capacity and eliminates staff from having to perform fueling operations in dangerous conditions
- Add a high flow dispenser to the main diesel tank
 - Increase dispensing speed to 50 gal/min (70 gal/min if both hoses are used) and allow staff to fill fuel trucks much quicker when needing to refuel other generators
- Replace the regular dispensers and add submersible pumps to all four main tanks, which will increase dispensing speed to 22 gal/min
- Scope of work will include:
 - Pouring a concrete pad for new 10,000 gal tank
 - Installing bollards around new tank
 - Piping generator to new tank
 - Installing new dispensers, including electrical and plumbing
 - Engineering/Permitting and Spill Prevention, Control, and Countermeasure (SPCC) plans
- Estimated cost is \$250,000

Fuel and Generator Projects

Leland Fuel Site

- Currently has two 3,000 gal tanks, one gas and one diesel
- One of the oldest fuel sites with lower capacity and tanks are in poor condition
- Serves the north portion of the county, including the Northwest Water Treatment (NWT) plant, and was quickly depleted of fuel once the flooding created land locked areas
- NWT plant was without power for 8 days and ran critically low on diesel for the generator
- Flooding and a damaged tank prevented the Leland site from being refueled in a timely manner and the NWT plant was dependent on a fuel vendor that had one truck also land locked in this area
- Current dispensing speed is very slow due to older equipment and no submersible pumps in the tanks

Project Description

- Replace current gas tank with a 5,000 gal tank
- Replace current diesel tank with a 20,000 gal tank
- Add a high flow dispenser to the diesel tank
 - Increase dispensing speed to 50 gal/min (70 gal/min if both hoses are used) and allow staff to fill fuel trucks much quicker when needing to refuel other generators
- Replace current dispensers and add submersible pumps to both tanks to increase fueling speed
- Scope of work will include:
 - Pouring a concrete pad for new 20,000 gal tank
 - Installing new tanks, submersible pumps and dispensers
 - Crane rental
 - Electrical and plumbing work
 - Engineering/Permitting and Spill Prevention, Control, and Countermeasure (SPCC) plans
- Estimated cost \$280,000

Preliminary General Government Capital Improvement Plan

Aaron Perkins, Director of Parks and Recreation

General Government Improvement Plan

Current projects – Funding sources are current capital reserve, grants, and pay go:

- 1. Ocean Isle Beach Park – Complete Spring 2019**
- 2. Smithville Park – Multi-Purpose Field, Walking Trail and Batting Cage**
- 3. Brunswick County Waterway Park – Bidding & In-House Construction Spring 2019**

Ocean Isle Beach Park Phase 2



Ocean Isle Beach Park Phase 2



Smithville Park Phase 1



Smithville Park Phase 2



Brunswick Waterway Park



Brunswick Waterway Park



Parks & Recreation Operating Capital Plan

1. **10 Year Comprehensive Master Plan - \$70,000**
2. **Shallotte Park Concession Stand/ Restrooms, Security Park Lighting & Paving Upgrade - \$485,000**

Parks & Recreation Operating Capital Plan

FY 18 Updates

- 1. Brunswick Nature Park Electrical Upgrades**
- 2. Navassa Park Concession Stand & Picnic Pavilion**

Coastal Events Center Proposed Property off Highway 211

- Prospective Planning for 823 Acre Track



Preliminary General Government Capital Improvement Plan

Bill Pinnix, Director of Engineering Services

Current Courthouse Related Projects Underway

Courthouse Addition and Renovation

- a) Schematic design phase complete based upon space needs study
- b) Design development phase underway to prepare final layout drawings along with HVAC, electrical, fire, and plumbing plan sheets
- c) An addition is planned for the north side of the building along with renovation of existing building spaces
- d) Emphasis has been on increasing the space efficiency of the building to maximize usable space
- d) Project budget is \$11,201,550 inclusive of design fees - (funding source current capital reserves and pay go)
- e) Two items not in current project budget:

1) Existing HVAC chiller replacement

- Building was built with one 500 ton water cooled chiller (approximately 18 years old)
- Only county building with a chilled water system and cooling tower
- Chiller is significantly oversized
 - Existing building = 181 tons (36% loading)
 - Existing building with spaces renovated = 211 tons (42% loading)
 - Renovated building plus new three story addition = 253 tons (50% loading)
- No redundancy for backup operation in case of shutdown or failure
- Chiller is experiencing surging and vibration due to being significantly oversized for the building load
- Architect's mechanical engineer recommends replacement with two 253 ton air cooled chillers which would be correctly sized for the load, provide 100% redundancy for the building, and remove all of the refrigerant handling from the building which solves a safety issue
- Chiller operation would alternate to ensure even wear and aging of the units
- Estimated additional cost to the project is \$750,000

Current Courthouse Related Projects Underway

Courthouse Addition and Renovation –continued:

2) Structured data cabling for renovated building

- Architect is providing design and documents for the conduit, raceways, data rooms, data racks, cabling, and cable terminations. Equipment specification and installation is not provided
- Per standard procedure the county IT department will need to engage a firm(s) for all structured cabling installation, audio / visual installation, security cameras, door security system, video arraignment, etc., as a separate contract from the construction contract. This will include:

Fiber

Structured cabling (for both county and AOC services)

Copper (Fax, Alarms, Etc.)

Phones

Duress Button Alarm Systems

Security cameras with monitoring and recording capabilities

Wireless network

Network equipment (computers, switches, etc.)

Audio / Visual for all courtrooms

Video Arraignment – selected courtrooms

Door security system

- This structured cabling related items for the E911 Communications Center was approximately \$1,100,000
- The estimated structured cabling contract for courthouse items is approximately \$1,600,000

Current Courthouse Related Projects Underway

Courthouse Parking Lot

- a) Project is fully designed and permitted
- b) Project will be advertised for bidding late February
- c) Project budget is \$1,057,369 (currently funded)

Large diameter storm drainage pipe replacement

- a) Existing 48-inch corrugated metal pipe (CMP) is old and in poor condition
- b) Will be replaced with 48-inch reinforced concrete pipe (RCP)
- c) Pipe is critical complex drainage infrastructure – routes large volumes of water around our buildings and roads and discharges directly to the NCDOT culvert under Old Ocean Highway
- d) Part of pipe runs through area of the proposed courthouse parking lot
- e) Bid opening on 1/24/19 – low bid was \$143,523.75 for labor, stone for pipe bedding, dewatering, and other incidentals for pipe replacement – county is providing the new 48-inch RCP material

Complex Buildings and Renovation Study

Complex Buildings and Renovation Study

- a) Proposed study of older complex buildings and old Highway Patrol building area
- b) Goal is to evaluate existing buildings and spaces for needed space efficiency and renovations
- c) Will not include:
 - Administration building
 - Courthouse building
 - E911 Communications building
 - Law Enforcement Center building
 - Building L (garage and warehouse area)
 - Building M (law enforcement)
 - Building N (Cooperative Extension)
 - Brunswick County Schools Building
- d) Old Highway Patrol area proposed use is for Parks and Recreation Department long term storage needs and vehicle parking
- e) Study cost is estimated at \$100,000

Preliminary General Government Capital Improvement Plan

Steve Stone, Deputy County Manager

Shoreline Protection and Waterways

Waterway Dredging Reserve \$200,000 ▪ Annual funding for 50% of estimated local share of routine Lockwood Folly Inlet maintenance projects.

In FY 19 \$410,000 was appropriated for funding for 25% of the estimated local share of a major project to dredge a 12' deep Lockwood Folly Inlet Ocean Bar navigation channel with a pipeline dredge vessel and provide and place approximately 250,00+ cubic yards of beach quality sand. A \$2,700,000 NC Division of Water Resources Shallow-Draft Inlet Grant has been tentatively awarded to the County to pay for two-thirds of the project. The County has been negotiating with a potential shoreline project partner to fund the remaining 75% local share and receive the sand.

Planning

Kirstie Dixon, Planning Director

Planning

New Comprehensive Land Use Plan

- **Land Use Plans are community blueprints for guiding growth and development.**
 - Includes Future Land Use Plan Maps.
 - Creates community vision.
 - Demonstrates how resources will be provided in the future.
 - Describes how to reach community vision through development patterns, infrastructure, and programs.
 - Prepare and accommodate future growth.
 - Promote desired outcomes.
 - Land Use Planning Required by CAMA Act.
- **Brunswick County has changed since current plans were adopted.**
 - Brunswick County CAMA CORE Land Use Plan (2007).
 - Brunswick Tomorrow (2004).
 - Current plans not meeting the communities vision and needs as a lot has changed.
- **Estimated Cost: \$200,000**

Planning

The Planning Department and the Parks & Recreation Department proposes an innovative and cost-saving approach to land use and parks planning by joining their plan processes together.

Results in Better Plans

More Efficient

Shared Vision, Goals, and Data

Provide Cost Savings

Estimated Cost Savings of \$70,000

Plans Separately: \$300,000

Proposed Budget: \$230,000

Community Enforcement

Kirstie Dixon, Planning Director

Community Enforcement

Balancing Citizen Complaints with Protecting Owners Rights while fulfilling Brunswick County's responsibilities to ensure Brunswick County is safe, healthy, and an appealing place to live, work, and play.

Positive & Proactive Approach to Enforcement

Education & Outreach Focus

Community Improvement Solutions (CIS) Program

Encourage Voluntary Compliance

Compliance Remediation Procedures

Next Steps Up for Discussion & Feedback

Target Specific Areas

Campers

Temporary Signs



BREAK

Legislative Update

Bob Shaver, County Attorney

Session Details

- Session began January 30, 2019
- Deadline for Local Bills:
 - March 14 for Senate (to drafting by February 27)
 - March 28 for House (to drafting by March 6)

Deadline for Public Bills is approximately 3 weeks later.

Crossover deadline is Thursday May 9, 2019. The crossover deadline is the date by which most bills must have cleared the chamber in which they were introduced in order to be considered during the session.

November Election Impacts

- No veto-proof majorities in House or Senate
- Per NCACC: 23 former county commissioners in House and 6 in Senate
- 6 Constitutional Amendments on Ballot; 4 passed:
 - Voter ID
 - Right to Hunt and Fish
 - Victims' Rights
 - Max Income Tax Rate at 7%

Recent Bills of Local Interest

Meals Tax

House Bill 17 Local Option Meals Tax / Brunswick Co. Municipalities

<https://www.ncleg.gov/BillLookup/2019/H17>

Filed 01/31/2019 Iler, Butler

- + Would be one-half percent (0.5%) of sales price of prepared food and beverages sold within municipality at retail.
- + Can be enacted by municipality by resolution after public hearing
- + Municipality may enter into agreement with County to administer and collect the tax or may do it themselves.

Recent Bills of Local Interest

Rezoning Decisions

(not yet introduced – to be sponsored by Butler and Iler)

- AN ACT TO ALLOW FOR PLANNING BOARDS TO HOLD HEARINGS AND MAKE FINAL DECISIONS FOR ZONING AMENDMENT REQUESTS IN BRUNSWICK COUNTY AND MUNICIPALITIES LOCATED ENTIRELY OR PARTIALLY WITHIN BRUNSWICK COUNTY.
- The board of commissioners may, by ordinance, delegate to the planning board the authority to conduct the public hearing required under this Article and make the final decision on zoning map amendment proposals, including the adoption of a consistency statement pursuant to G.S. 153A-341. The board of commissioners may prescribe procedures for the public hearing that are not inconsistent with this Article. The planning board shall make its final decision by majority vote of the members of the planning board. Any person with standing may appeal a decision of the planning board made pursuant to this subsection to the board of commissioners by providing written notice to the county clerk within 15 days of the final decision. On appeal, the board of commissioners shall review the decision of the planning board de novo. If no notice of appeal of the planning board decision is provided to the county clerk within 15 days, then the decision of the planning board shall be final and equivalent to the final decision of the governing body. The board of commissioners may, by ordinance, rescind or modify any authority delegated to the planning board pursuant to this subsection.

School Construction

House Speaker Tim Moore proposes a \$1.9 billion [bond referendum](#). Governor Cooper supports the proposal, saying the bond referendum will not force cuts to other areas.

Republican Senator Harry Brown proposes using money from the State Capital and [Infrastructure Fund](#) (formed 2017) to fund capital improvements to schools. The fund currently receives 4% general fund tax revenue yearly.

S5 Building North Carolina's Future. 01/31/2019

<https://www.ncleg.gov/BillLookup/2019/S5>

Senator Rabon has signed on to Senate Bill 5.

School Calendar Flexibility

+ Has become the subject of numerous local bills

Current statute: Open no later than Monday closest to August 26; Close not later than Friday closest to June 11

Issues:

- Lining up school and community college calendar to ease enrollment transition.

- Being able to have winter exams before Christmas break.

- Winter storm impacts in western counties

- Tourism in coastal counties

Counties Seeking School Calendar Flexibility

Alamance

Anson

Caldwell

Catawba

Charlotte-Mecklenburg

Cherokee

Clay

Columbus

Davie

Duplin

Forsyth

Graham

Granville

Johnston

Macon

Moore

Johnston

Onslow

Person

Randolph

Richmond

Robeson

Sampson

Scotland

Wayne

Voting Sites

House Bill 24 **Ensure Student Safety at School Voting Sites**

02/05/2019

<https://www.ncleg.gov/BillLookup/2019/H24>

Change statutory authorization to use schools as voting sites to say local board of education “may, but is not required to, consent to use of a school as a voting place.”

Medicaid

House Bill 5 / Senate Bill 3 **Close the Medicaid Coverage Gap**

01/31/2019

<https://www.ncleg.gov/BillLookup/2019/H5>

<https://www.ncleg.gov/BillLookup/2019/S3>

Medicaid expansion. 37 states have already expanded Medicaid.

Expansion could cover 500,000 to 600,000 people who fall between the gap in qualification between Medicaid and the Affordable Care Act.

Expansion votes in NC have tended to stay along party lines.

Minimum Wage

House Bill 46 **Economic Security Act of 2019**

02/11/2019 <https://www.ncleg.gov/BillLookup/2019/H46>

Raise the minimum wage in stages:

(2019 \$8.00) (2020 \$9.50) (2021 \$11.00)

(2022 \$13.00) (2024 \$15.00)

- + Mandate equal pay for equal work
- + Restore earned income tax credit
- + Repeal restrictions on public employee collective bargaining
- + “Ban the box” - no criminal history inquiry until conditional offer of employment

Last But Not Least

H30 A Bill to Adopt Ice Cream as the Official State Frozen Treat

H39 A Bill to Adopt the Osprey as the State Raptor

Community Paramedic Program

Lyle Johnston, Deputy Director of EMS

Community Paramedics

- Partnership with Brunswick Novant Hospital
- Improved Healthcare for Selected Disease Processes
- Decreased Non Payment for Hospital Readmissions
- Initial Startup Cost: \$300,000.00
- Recurring Costs: \$225,000.00
- Functional Needs Program vs Community Paramedics

Hurricane Florence After Action Report

Malcolm Smith - Fire Administrator/ Interim Emergency Services Director

Continued Improvement & Evaluation Process

EnviroSafe, Inc. was selected to perform a comprehensive After Action Report for Brunswick County after Hurricane Florence.

Stakeholder Meetings

Stakeholder meetings were held with different groups to receive feedback on the different aspects of response and recovery to Hurricane Florence.

- What Went Right/Worked
- What Went Wrong/Didn't Work
- What can we do better and what needs to be changed or improved.

Recommendations

- Additional attention and emphasis is needed to emergency sheltering operations and managing local emergency shelters, as well as planning and preparedness for emergency sheltering.
- State emergency plans should be revisited with regard to sheltering services; local solutions should be sought.
- Plans and training protocol should be revisited to ensure all personnel are proficient in their area of support.
- Continuity of operations plans were tested by this event and should be revisited and adjusted to manage through storms of this magnitude.
- Enhancements to coordination of public information, particularly with utilizing a joint information center (or JIC) were identified.
- Staffing levels and dual role responsibilities of emergency operations center (EOC) staff was also identified as a core element needing attention.

Improvement Plan

- The After Action Report has provided a template and a start of an improvement plan based on the information received during the stakeholder's meetings.
- A more comprehensive plan will be developed to address the short, medium, and long term goals needed for improvement.
- This plan will need to be a collaborative effort from all of the stakeholders involved.

Brunswick Nuclear Plant Radiological Emergency Preparedness Exercise After Action Report

Exercise Date: July 31, 2018

Malcolm Smith - Fire Administrator/ Interim Emergency Services Director

Bi-Annual Exercise

- Route Alerting
- Waterway Warning
- Medical and Hospital Plan
- Evacuation and Collection Point at North Brunswick H.S.
- E.O.C. Activation Exercise (Relocated E.O.C. to Leland Cultural Arts Center due to E.O.C. HVAC Project)

Exercise Report Conclusion

- All five exercise objectives were met and no level 1 or 2 findings were noted.
- Continued Training and Evaluation of Personnel.
- Continue Planning and Training with all Partners.

Building Code Enforcement Evaluation Information

Ann Hardy, County Manager

Building Code Enforcement Evaluation

- Effectiveness of local building codes can have a profound effect on how structures fare in a natural disaster
- Building-code enforcement can have major influence on economic well-being of a community and citizens
- ISO (Insurance Services Office) helps distinguish amongst communities with effective building-code adoption and enforcement through the Building Code Effectiveness Grading Schedule (BCEGS)
- ISO is an independent statistical, rating and advisory organization that serves the insurance industry
- Communities with well-enforced, up-to-date codes demonstrate better loss experience, and their citizens' insurances rates reflect that
- Brunswick County Code Administration participated in a BCEGS survey on 1/9/2019 with the results of a class 4 for 1 and 2 family dwellings and a class 3 for all other construction

Building Code Effectiveness Grading Point Comparison - Highlights

	2019 Grading		2014 Grading		Improvement	
	Commercial	Residential	Commercial	Residential	Commercial	Residential
Administration of Codes	36.27	35.87	25.55	25.15	10.72	10.72
Plan Review	22.49	14.32	12.96	12.76	9.53	1.56
Field Inspection	21.93	19.87	12.93	13.48	9.00	6.39
Final Score:	80.69	66.94	32.78	30.24	47.91	36.70

Achievement of Class 4 from a Class 8 in 2014

Improvement of 50%



Remote Video Inspections

Michael Slate, Code Administration



Remote Video Inspections: Wave or Ripple?

Digital Inspection Market

According to a MarketWatch report published in December 2018 the global market for digital inspection accounted for \$17B in 2017 with a projected annual growth rate of 7.2% through 2025.



Some prominent companies that are operating in this market are:

- General Electric
- Nikon
- National Instruments
- Applied Technical Services

INDUSTRIES THAT UTILIZE RVI TECHNOLOGY

Manufacturing

Aviation

Medical

Government

HIGHLY REGULATED INDUSTRY EXAMPLES

- Aviation
 - Gulfstream Aerospace currently uses FAA approved RVI for conformity and maintenance inspections. Remote engineering test witnessing is currently in the process of being developed for FAA approval.
- Medical
 - Arthroscopic surgery is a common and growing method for performing non-invasive surgery that reduces risk factors associated with more invasive surgical methods.

RVI INNOVATIVE COUNTIES



Clark,
Washington

Tucson,
Arizona

Pima, Arizona

San
Bernardino,
California

Whatcom,
Washington

Pierce,
Washington

Brunswick,
North Carolina

National Fire Protection Association: Conducting Remote Video Inspections

The NFPA concluded in their August 2018 whitepaper that:

“RVI offers both jurisdictions and permit holders the opportunity to use technology to increase the efficiency of the inspection process...With proper attention and communication, both parties may complete the inspection successfully. It is important for jurisdictions that allow the use of RVIs to develop rules, policies, and procedures to provide expectations to the permit holders. The transparency in procedures for the AHJ [Authority Having Jurisdiction] will go a long way in the success of these inspection programs.”

<https://www.nfpa.org/-/media/Files/White-papers/WhitePaperRVI.pdf> (*Conducting Remote Video Inspections - August 2018*)

BRUNSWICK COUNTY, NC

Remote Video Inspection (RVI) Policy and Procedure

Inspections Eligible for RVI

- Utility Trench (not to exceed 100')
- Shower pan
- HVAC (No Gas)
- Electric Water Heater

Client Responsibility

1. Download [Skype](#).
2. 4G must available at the inspection site.
3. Have all necessary tools and documents available. (Some examples may include: tape measurer, level, GFCI tester, step ladder, manufacturer's installation instructions, site plans, etc.)
4. Allow up to 30 minutes for the inspection.
5. If using your phone for the inspection, make sure you do the following to avoid interruptions:
 - iPhone "Settings":
 - Tap on "Do Not Disturb"
 - Set the "Manual" slide button to be green
 - Scroll down to "Silence"
 - Tap next to "Always" to add a check mark
 - Android
 - Tap "Sounds and Notifications" in Settings
 - Tap "Do Not Disturb" under the "Notifications" section
6. Call (TBD) from Skype to connect with the Inspector.
7. The inspection:
 - The inspector has to be able to see the front of the house and the address.
 - Starting from the front of the house, walk toward the site for the inspection and follow the inspector's directions.

***Disclaimer: We reserve the right to determine during the RVI that a site visit will be required for the inspection to be completed. We will attempt to schedule a site visit for the same day if possible.**



International Code Council Building Valuation Data Comparison

Michael Slate, Code Administration

Building Valuation Data

The International Code Council (ICC) publishes the Building Valuation Data (BVD) bi-annually in August and February. It provides the average construction cost per square foot that can then be used to help determine permit fees.

Some counties and cities in N.C that currently use the ICC BVD:

- Mecklenburg County
- New Hanover County
- City of Chapel Hill
- City of Raleigh
- Iredell County
- City of Burlington

ICC BVD Chart

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	244.21	236.18	230.55	221.01	207.82	201.82	214.02	189.83	182.71
A-1 Assembly, theaters, without stage	223.45	215.42	209.80	200.25	187.31	181.32	193.26	169.33	162.21
A-2 Assembly, nightclubs	190.08	184.73	180.34	172.99	163.33	158.82	166.99	147.83	142.92
A-2 Assembly, restaurants, bars, banquet halls	189.08	183.73	178.34	171.99	161.33	157.82	165.99	145.83	141.92
A-3 Assembly, churches	224.47	216.44	210.82	201.27	189.73	183.73	194.28	171.74	164.62
A-3 Assembly, general, community halls, libraries, museums	188.77	180.74	174.11	165.57	151.59	146.63	158.58	133.64	127.52
A-4 Assembly, arenas	222.45	214.42	207.80	199.25	185.31	180.32	192.26	167.33	161.21
B Business	195.88	188.76	182.90	173.98	159.08	153.13	167.31	139.76	133.67
E Educational	207.44	200.32	195.11	186.22	173.62	164.85	179.83	151.63	147.30
F-1 Factory and industrial, moderate hazard	115.30	109.99	103.87	99.84	89.72	85.56	95.69	73.79	69.57
F-2 Factory and industrial, low hazard	114.30	108.99	103.87	98.84	89.72	84.56	94.69	73.79	68.57
H-1 High Hazard, explosives	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	0.00
H234 High Hazard	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	62.34
H-5 HPM	195.88	188.76	182.90	173.98	159.08	153.13	167.31	139.76	133.67
I-1 Institutional, supervised environment	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
I-2 Institutional, hospitals	327.69	320.57	314.72	305.80	289.87	0.00	299.12	270.56	0.00
I-2 Institutional, nursing homes	227.45	220.33	214.47	205.56	191.65	0.00	198.88	172.34	0.00
I-3 Institutional, restrained	222.66	215.54	209.69	200.77	187.11	180.16	194.09	167.80	159.71
I-4 Institutional, day care facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
M Mercantile	141.54	136.19	130.80	124.45	114.24	110.73	118.45	98.74	94.83
R-1 Residential, hotels	196.81	190.20	184.74	177.03	162.97	158.58	177.13	146.15	141.65
R-2 Residential, multiple family	165.05	158.44	152.98	145.27	132.00	127.61	145.37	115.18	110.68
R-3 Residential, one- and two-family	154.04	149.85	145.98	142.32	137.11	133.50	139.93	128.29	120.75
R-4 Residential, care/assisted living facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
S-1 Storage, moderate hazard	106.85	101.54	95.43	91.40	81.50	77.33	87.25	65.57	61.34
S-2 Storage, low hazard	105.85	100.54	95.43	90.40	81.50	76.33	86.25	65.57	60.34
U Utility, miscellaneous	83.66	79.00	74.06	70.37	63.47	59.32	67.24	50.19	47.80

Current Residential Calculation

Current Calculation:

\$110 per square foot X total square feet under roof X .0045 = Permit Fee

Example: 2000 sq. ft. New Single-Family Residence

The Calculation to determine the Permit Fee: $\$110 \times 2000 \times .0045 = \990

Proposed Residential Calculation

Proposed Calculation with ICC BVD:

BVD X total square feet under roof X .004 = Permit Fee

Example: 2000 sq. ft. New Single-Family Residence

The Calculation to determine the Permit Fee: \$120.75 X 2,000 X .004 = **\$966**

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A-1 Assembly, theaters, with stage	244.21	236.18	230.55	221.01	207.82	201.82	214.02	189.83	182.71
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H-1 High Hazard, explosives	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	0.00
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R-2 Residential, multiple family	165.05	158.44	152.98	145.27	132.00	127.61	145.37	115.18	110.68
R-3 Residential, one- and two-family	154.04	149.85	145.98	142.32	137.11	133.50	139.93	128.29	120.75
R-4 Residential, care/assisted living facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
S-1 Storage, moderate hazard	106.85	101.54	95.43	91.40	81.50	77.33	87.25	65.57	61.34
S-2 Storage, low hazard	105.85	100.54	95.43	90.40	81.50	76.33	86.25	65.57	60.34
U Utility, miscellaneous	83.66	79.00	74.06	70.37	63.47	59.32	67.24	50.19	47.80

Residential Permit Fee Comparison

Current	Proposed	Difference
\$990	\$966	\$24

The August 2018 ICC BVD data result is a \$24 (-2.4%) decrease based on their bi-annual calculated average construction cost per sq. ft. compared to the current Brunswick County formula.

Current Commercial Calculation

For Structures < 20000 sq. ft.:

Square feet under roof X \$115 X .0045 = Permit Fee

Example: 15000 sq. ft. commercial structure:

15000 X 115 X .0045 = **\$7762.50**

For Structures > 20000 sq. ft.:

Square feet under roof X \$115 X .0045 X .8 = Permit Fee

Example: 25000 sq. ft. commercial structure:

25000 X 115 X .0045 X .8 = **\$10350**

Proposed Commercial Calculation

Proposed Calculation with ICC BVD:

BVD x total square feet under roof x .0035 + any additional > 15K sq. ft. x BVD x .0012

Example: 25000 sq. ft. Steel Business Building

The Calculation to determine the Permit Fee: \$173.98 X 15,000 X .0035 = \$9133.95 + \$173.98 X 10,000 X .0012 = 2087.76.

Permit Fee Total = \$11221.71

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	244.21	236.18	230.55	221.01	207.82	201.82	214.02	189.83	182.71
A-1 Assembly, theaters, without stage	223.45	215.42	209.80	200.25	187.31	181.32	193.26	169.33	162.21
A-2 Assembly, nightclubs	190.08	184.73	180.34	172.99	163.33	158.82	166.99	147.83	142.92
A-2 Assembly, restaurants, bars, banquet halls	189.08	183.73	178.34	171.99	161.33	157.82	165.99	145.83	141.92
A-3 Assembly, churches	224.47	216.44	210.82	201.27	189.73	183.73	194.28	171.74	164.62
A-3 Assembly, general, community halls, libraries, museums	188.77	180.74	174.11	165.57	151.59	146.63	158.58	133.64	127.52
A-4 Assembly, arenas	222.45	214.42	207.80	199.25	185.31	180.32	192.26	167.33	161.21
B Business	195.88	188.76	182.90	173.98	159.08	153.13	167.31	139.76	133.67
E Educational	207.44	200.32	195.11	186.22	173.62	164.85	179.83	151.63	147.30
F-1 Factory and industrial, moderate hazard	115.30	109.99	103.87	99.84	89.72	85.56	95.69	73.79	69.57
F-2 Factory and industrial, low hazard	114.30	108.99	103.87	98.84	89.72	84.56	94.69	73.79	68.57
H-1 High Hazard, explosives	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	0.00
H234 High Hazard	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	62.34
H-5 HPM	195.88	188.76	182.90	173.98	159.08	153.13	167.31	139.76	133.67
I-1 Institutional, supervised environment	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
I-2 Institutional, hospitals	327.69	320.57	314.72	305.80	289.87	0.00	299.12	270.56	0.00
I-2 Institutional, nursing homes	227.45	220.33	214.47	205.56	191.65	0.00	198.88	172.34	0.00
I-3 Institutional, restrained	222.66	215.54	209.69	200.77	187.11	180.16	194.09	167.80	159.71
I-4 Institutional, day care facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
M Mercantile	141.54	136.19	130.80	124.45	114.24	110.73	118.45	98.74	94.83
R-1 Residential, hotels	196.81	190.20	184.74	177.03	162.97	158.58	177.13	146.15	141.65
R-2 Residential, multiple family	165.05	158.44	152.98	145.27	132.00	127.61	145.37	115.18	110.68
R-3 Residential, one- and two-family	154.04	149.85	145.98	142.32	137.11	133.50	139.93	128.29	120.75
R-4 Residential, care/assisted living facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
S-1 Storage, moderate hazard	106.85	101.54	95.43	91.40	81.50	77.33	87.25	65.57	61.34
S-2 Storage, low hazard	105.85	100.54	95.43	90.40	81.50	76.33	86.25	65.57	60.34
U Utility, miscellaneous	83.66	79.00	74.06	70.37	63.47	59.32	67.24	50.19	47.80

Commercial Permit Fee Comparison

Current	Proposed	Difference
\$10350	\$11221.71	\$871.71

The August 2018 ICC BVD data result is a \$11221.71 (8.4%) increase based on their bi-annual calculated average construction cost per sq. ft. compared to the current Brunswick County formula.

Construction Value Control

Construction value is currently determined by the applicant by the value entered on the application form. This poses a serious problem with regard to maintaining accuracy. Some examples of obvious inaccurate construction values entered by applicants are:

1. A commercial application for a 51389 sq. ft. nursing home with a construction value of \$763,279,400.
2. A residential application for a 9963 sq. ft. addition to a barn with a construction value of \$150,000,000.
3. A residential application for a 3205 sq. ft. 3 bedroom 3 bathroom house with a construction value of \$54,926,200.

Reliable and Consistent Construction Values

With the proposed use of the ICC BVD chart the applicant would still enter the construction value but on our side the construction value will be determined based on the ICC BVD values, the square footage and type of construction. BCMS would automatically calculate this value and would be available on our reports for a more reliable construction value based on current construction valuation updated bi-annually by the International Code Council.



LUNCH

Brunswick County Logo/Seal Options

Amanda Hutcheson, Public Information Officer

S&A Communications Proposal

- Create new logo to supplement County seal
- Estimated cost: \$4,500-\$5,000
- Other option: Update current seal

Current Seal:



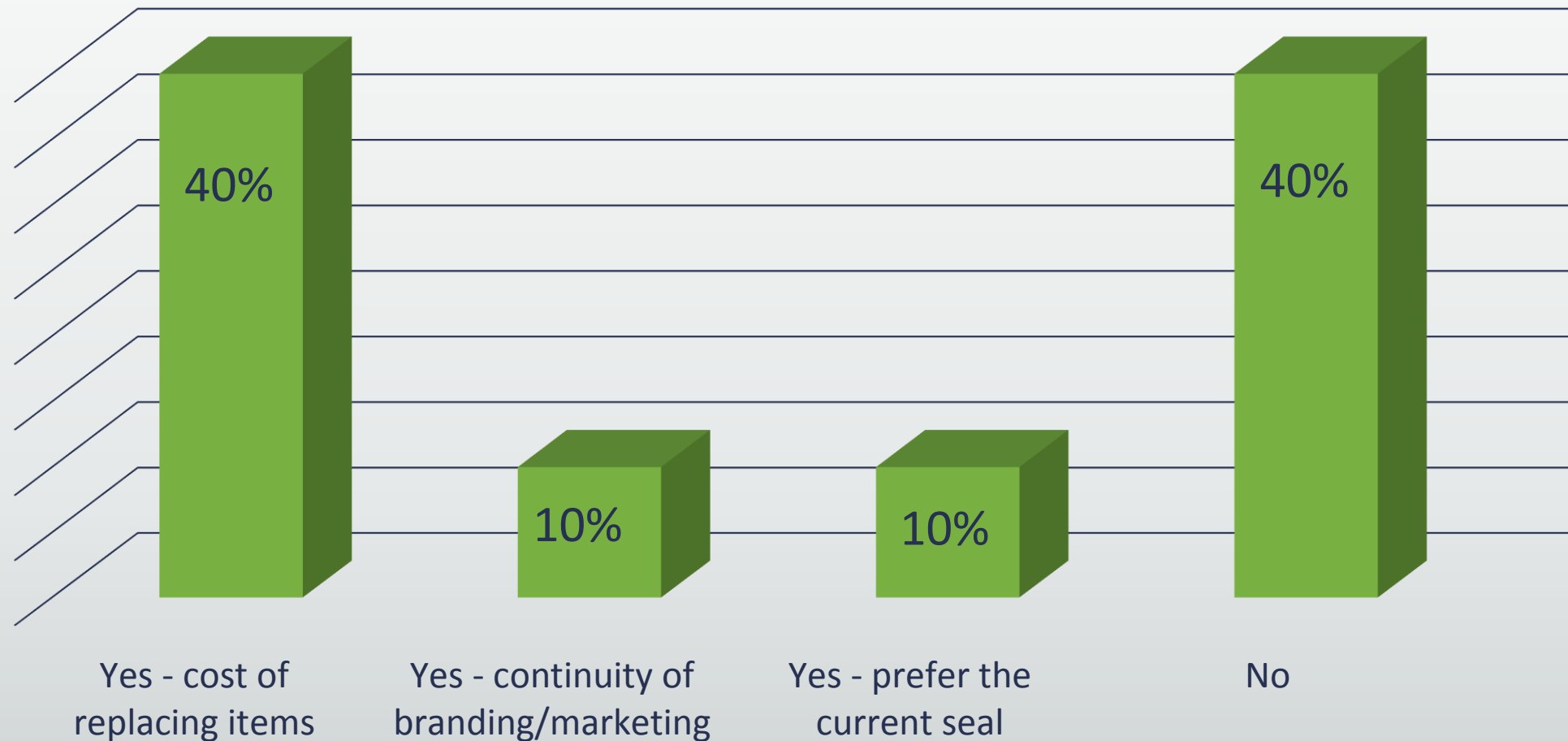
Department Leaders Feedback

Would you like to see changes to the seal?



Department Leaders Feedback

Do you have concerns with updating or replacing the seal?



Department Leaders Feedback

25% of departments have a departmental logo or seal

- 10% use it in addition to the County seal
- 15% use it instead of the County seal

100% of departments with a department logo or seal would be interested in using a new or updated County seal or logo with their departmental logo

Details of Implementation

Several departments are using the seal solely or mostly in digital form (website, PDF documents, etc.)

Other uses:

- Vehicle decals
- Business cards, letterhead, forms, brochures
- Signs
- Shirts and uniforms
- Equipment identification
- Water meter lids*
- ID badges – 1,100

Some items are replaced regularly, and logo changes could be phased in with these already-planned and –budgeted replacements.

Department Leaders Feedback

- Several liked having a symbol of farming and fishing/shrimping, representing parts of the County's history and economy
- Several thought the symbol on the right (for industry) was hard to recognize and identify
- Several suggested something more modern



Options

- Keep the current seal
- Design a new logo for use in addition to the seal
- Update the current seal

Water Capital Improvement Plan

John Nichols, Public Utilities Director

Water – Current Projects

1. Highway 74/76 Water Main – Malmo Loop Road to Mintz Road – Construction Complete
2. Bailey Road Water Main (Shallotte) – Construction Complete
3. Sunset Harbor Road Water Main – Construction Complete
4. Highway 74/76 Water Main – Mintz Drive to Old Maco – In Design
5. Highway 74/76 Water Main – Sandy Creek to Industrial Park – Design Complete Nov. 2019

Water – FY20 Projects

Funding Sources: Capital Reserve and Pay Go:

1. Shallotte Water Transmission Main – Bid December 2019 (\$4.5 million)
2. Utilities Operations Center – In Design, Start Construction in FY20 (\$590k)

Funding Source: Planned Debt Issue January 2020:

1. Northwest Water Treatment Plant – Expansion – Bid December 2019 (\$47.5 million)
2. Northwest Water Treatment Plant – Reverse Osmosis – Bid December 2019 (\$89.5 million)
3. 54” LCFWSA Raw Water Main – Bid in October 2019 (\$42.4 million)

Water – Horizon Projects – Beyond FY 24

1. Southeast Area Improvements – (\$2.035 million)
2. FY16 Top 7 & Apollo Water Mains – (\$2.435 million)
3. System Improvement Mains – Neighborhood – (\$650k)
4. Asbestos Cement Pipe Repair Program – (\$950k)
5. NC 211 - Gilbert/Old Lennon Road Improvements – (\$1.5 million)
6. Transmission Improvements – Leland to Bell Swamp – (\$5.7 million)
7. Highway 87 Transmission System Improvements – (\$5.1 million)

Wastewater Capital Improvement Plan

John Nichols, Utilities Director

Wastewater – Current Projects

1. Northeast Brunswick WWTP 2.5 mgd Expansion – Bid December 2019 (\$39.1 million)
 - Planned Debt Issue January 2020 - Funded by Participants Reimbursement
2. West Brunswick WRF 0.75 mgd Expansion (Southport) – Bid December 2019
 - \$18,450,382 Construction Cost
 - \$1,848,818 Force Main Betterment Cost in NCDOT R/W – 16” to 24” upsize
 - \$5,460,800 Transmission System Reimbursement Cost
 - \$25,760,000 Total Cost
3. Transmission – Midway Road to West Brunswick WRF – FY 23-24 @ \$13 million
 - \$5,681,226 County Pay-Go Funding
 - \$1,848,818 Southport Force Main Betterment Reimbursement
 - \$5,460,800 Southport Transmission System Reimbursement
 - \$12,990,884 Total Funding

Wastewater – Horizon Projects – Beyond FY 24

1. Enterprise Funded Low Pressure Main Extensions – (\$700k)
2. Ocean Isle Beach WWTP Effluent Disposal Improvements – (\$2.7 million)
3. Transmission Pump Station Upgrades – (\$1.2 million)

Medicaid Managed Care Update

Cris Harrelson, Health Director

MEDICAID MANAGED CARE UPDATE

2/18/19



Prepaid Health Plans

- NCDHHS recently awarded contracts to 5 Prepaid Health Plans that will participate in Medicaid managed care beginning in November 2019:
 - AmeriHealth Caritas North Carolina, Inc.
 - Blue Cross and Blue Shield of North Carolina
 - UnitedHealthcare of North Carolina, Inc.
 - WellCare of North Carolina, Inc.
 - Carolina Complete Health, Inc. (in Regions 3 and 5)

Brunswick County

- Brunswick County is located within Region 5 and is scheduled to transition to managed care in February 2020



In the Meantime...

- ▣ The recently selected managed care vendors will soon ask to contract directly with the health department for services.
- ▣ Case management programs at the health department such as CC4C and PCM will remain for a couple of years

In the Future...

- ▣ Fiscal impacts to Brunswick County Health Services are unknown at this time.
- ▣ Fiscal Year 2020-2021 will be the first year of impacts as the cost settlement (as we know it) will end.
- ▣ Unknown: “Additional Utilization-Based Payments”
 - Methodology for calculating this potential payment is unknown at this time

Brunswick County Substance Use and Addiction Commission

Steve Lanier, Chair
Cris Harrelson, Health Director

Membership Roster

Melody Bass
At-Large -exp. 06/30/19

Catherine Cooke
Board of Education - exp. 06/30/19

William Eberle
District 3 - exp. 06/30/21

Kathleen Gomes
District 1 – exp. 06/30/20

Eric Gushue
Chief Judge Office – exp. 06/30/21

William Hickman
District 5 – exp. 06/30/22

Stephen Lanier
BC Sheriff's Office – exp. 06/30/22

Joshua Torbich
District 2 – exp. 6/30/20

Resea Willis
District 4 – exp. 06/30/21

Meeting Schedule

Commission meets monthly on the first Thursday at 6:00 pm in the Board Room, Health Services (Building A)

Initial Meeting: November 8, 2018

Meetings have been well attended by Commission members and the public.

Update

Goals

- Reduce Opioid-Related Deaths
- Reduce Opioid-Related Emergency Room Visits
- Reduce the Oversupply of Prescription Opioids
- Reduce the Diversion of Prescription Opioids
- Increase Access to Naloxone
- Promote Treatment and Recovery
- Reduce Negative Stigma Associated with Substance Use and Mental Health
- Help Families Impacted by Substance Use to Heal

Update

At each meeting, members review the latest local and state substance use data

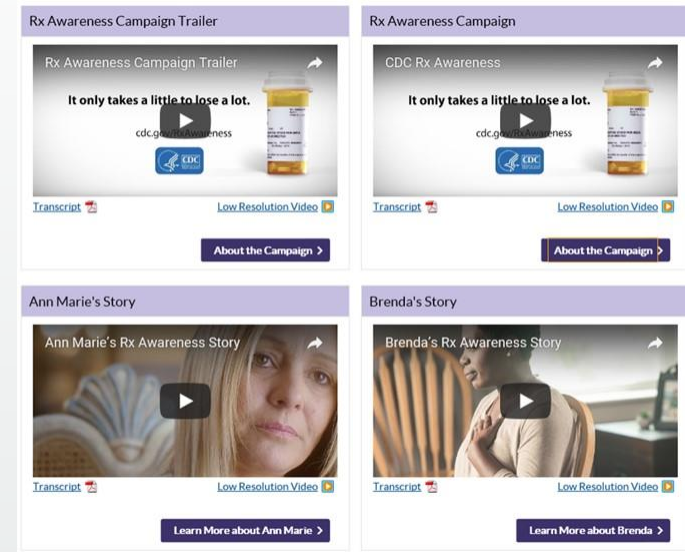
Members want to make a difference in the community and are determined to pursue practical projects that are attainable but impactful.

Proposed projects include:

- A Recovery Celebration Event
- Media Awareness Campaign

Media Awareness Campaign

- Proposed media campaign will use CDC materials from their “Rx Awareness” campaign to tell stories of real people whose lives were torn apart by prescription opioids using TV, radio, social media, and billboards.



Latest Opioid Data for Brunswick County

41

Brunswick County resident unintentional opioid overdose deaths in 2017

44

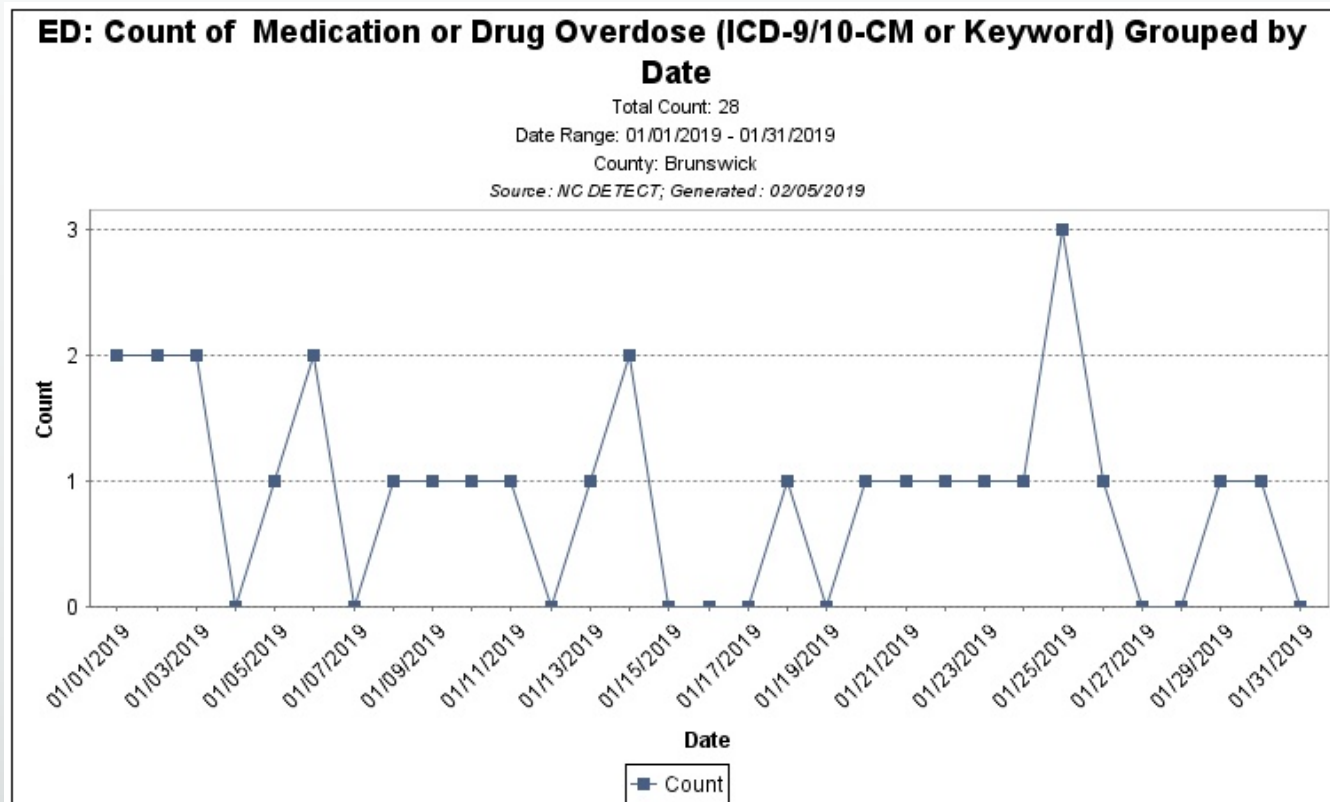
Brunswick County resident opioid overdose ED visits in 2017

8,513,000

Opioid pills dispensed to Brunswick County residents in 2017

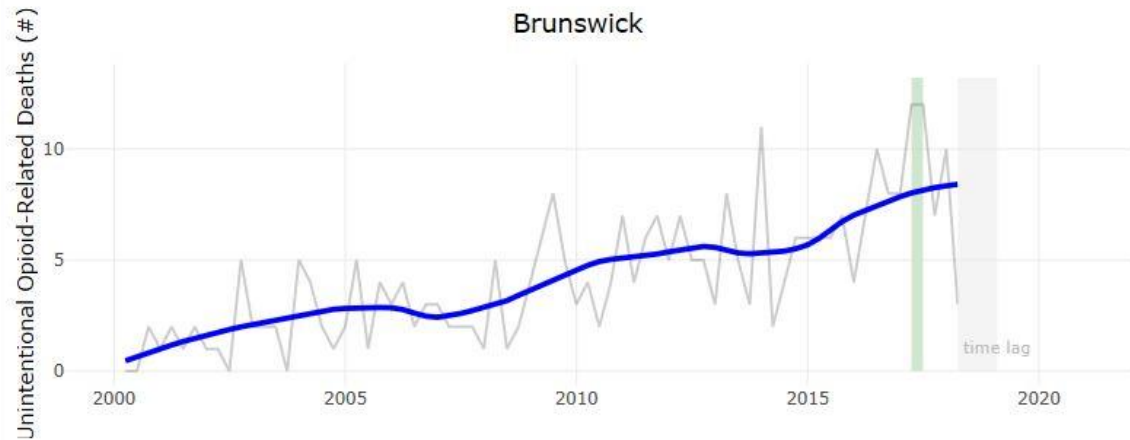
280

Reported community naloxone reversals in Brunswick County in 2017



Unintentional Opioid-Related Deaths (through Quarter 1, 2018)

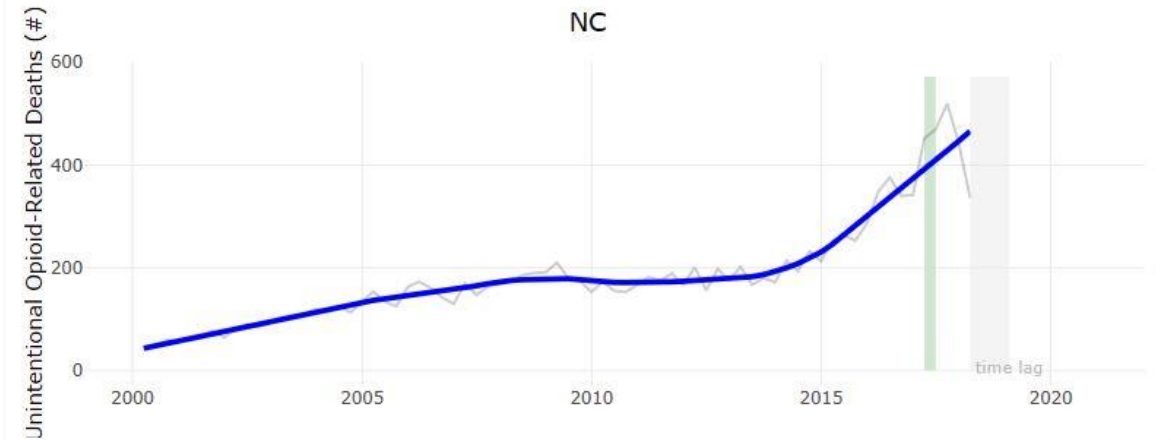
Unintentional Opioid-Related Deaths



Data Source: North Carolina State Center for Health Statistics, Vital Statistics, Death Certificate Data, 1999-present. See Technical Notes.

Brunswick County

Unintentional Opioid-Related Deaths



Data Source: North Carolina State Center for Health Statistics, Vital Statistics, Death Certificate Data, 1999-present. See Technical Notes.

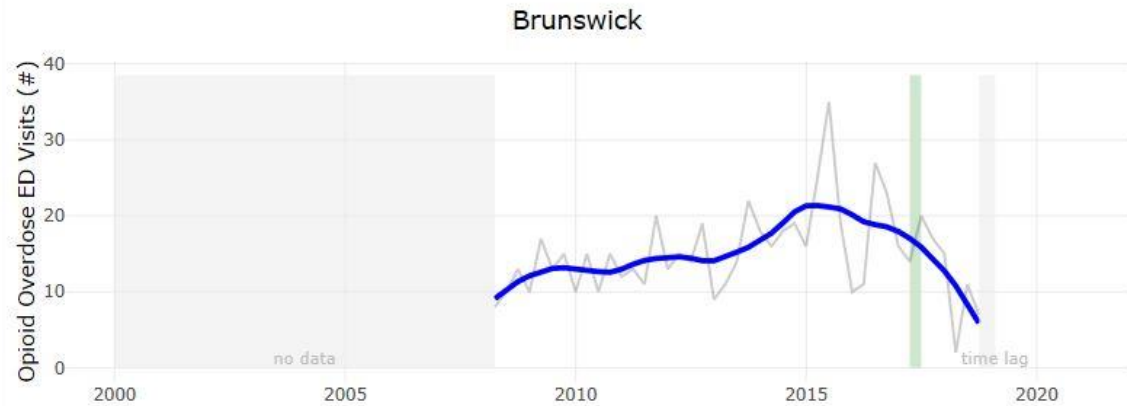
North Carolina

Data Source: North Carolina State Center for Health Statistics, Vital Statistics, Death Certificate Data, 1999-present. See Technical Notes.

Emergency Department Visits Related to Opioid Overdoses

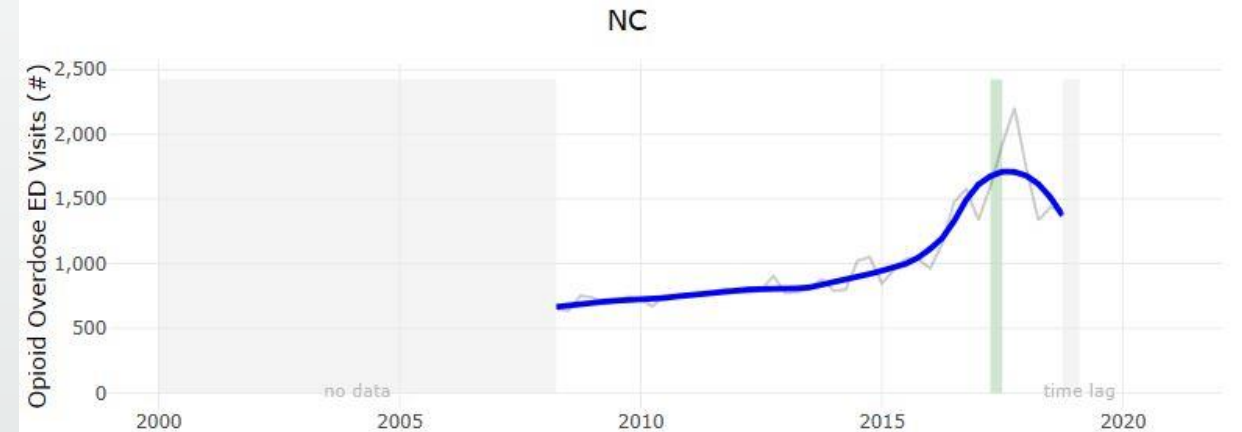
(through Quarter 3, 2018)

Opioid Overdose ED Visits



Brunswick County

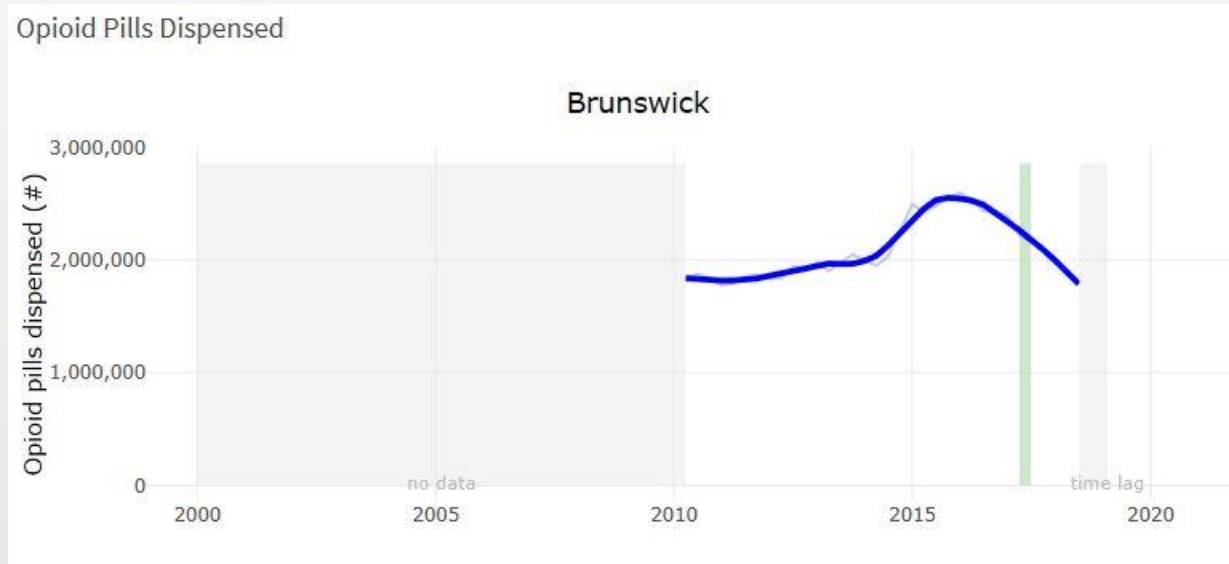
Opioid Overdose ED Visits



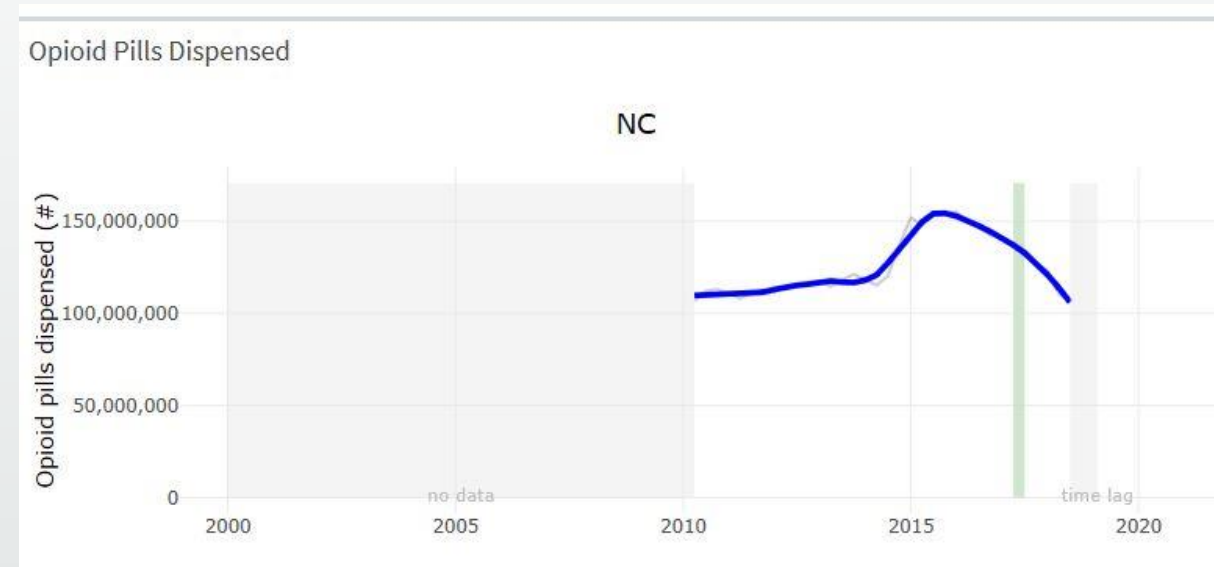
North Carolina

Data Source: North Carolina Division of Public Health, Epidemiology Section, North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), 2008-present See Technical Notes.

Number of Opioid Pills Dispensed (through Quarter 2, 2018)



Brunswick County



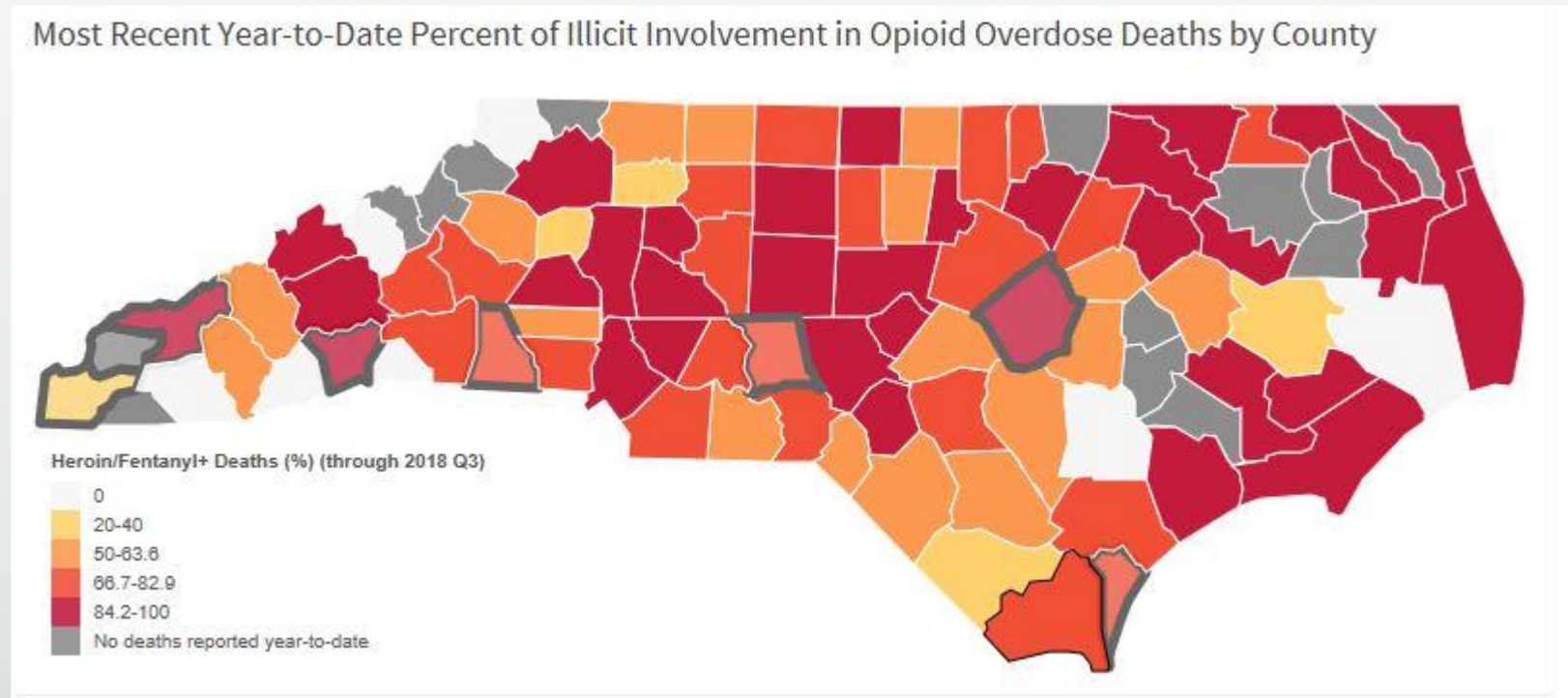
North Carolina

Data Source: North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Controlled Substance Reporting System (CSRS), 2011-present. See Technical Notes.

Involvement of Illicit Substances in Opioid Deaths

i.e. heroin, fentanyl, and fentanyl analogues (drugs that are similar to fentanyl but have been chemically modified in order to bypass current drug laws)

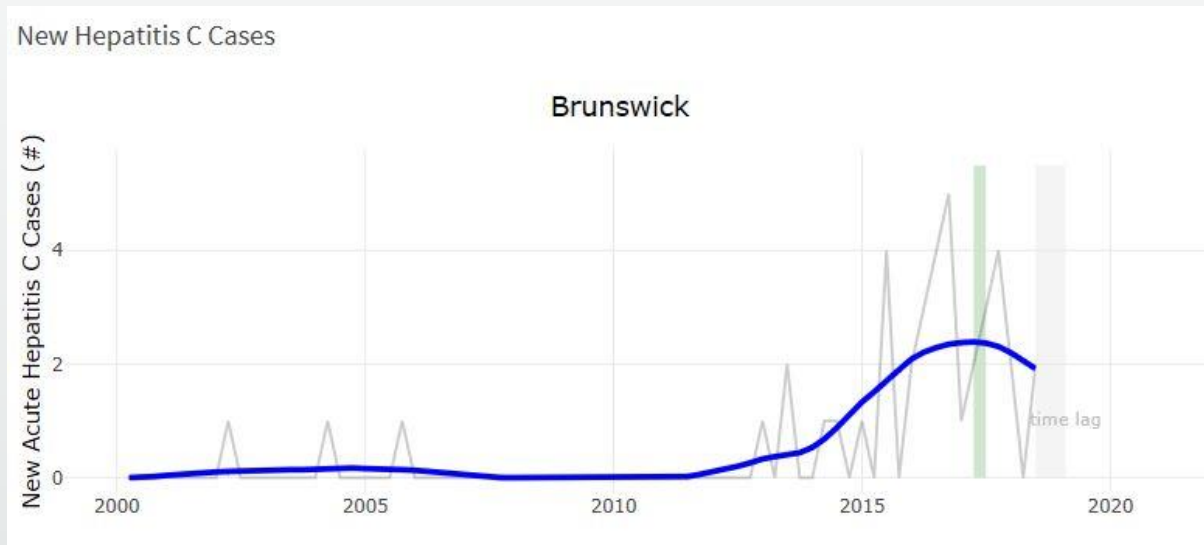
Brunswick County
66.7%



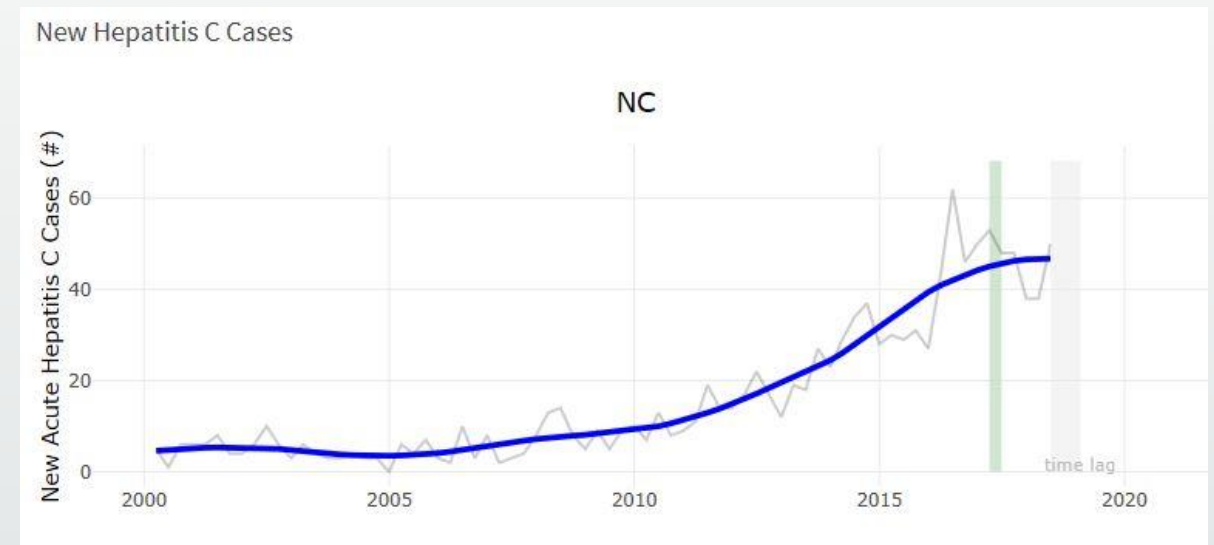
Data Source: North Carolina Office of the Chief Medical Examiner and the OCME Toxicology Laboratory, 2010-present. See Technical Notes.

Number of Acute Hepatitis C Virus Cases (through Quarter 2, 2018)

i.e. The shift to IV drug use by many users may lead to the exchange of blood via needle-sharing



Brunswick County

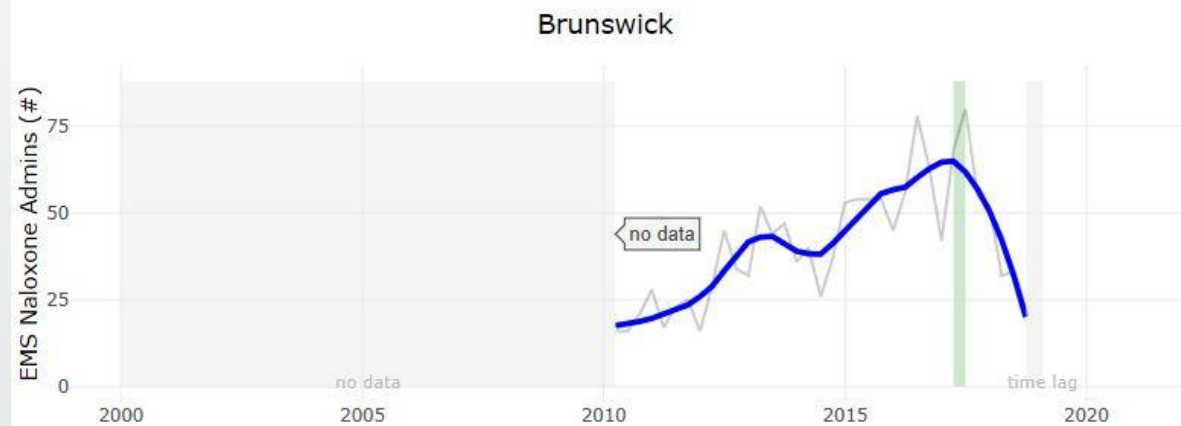


North Carolina

Data Source: North Carolina Division of Public Health, Epidemiology Section, North Carolina Electronic Disease Surveillance System (NC EDSS), 2000-present. See Technical Notes.

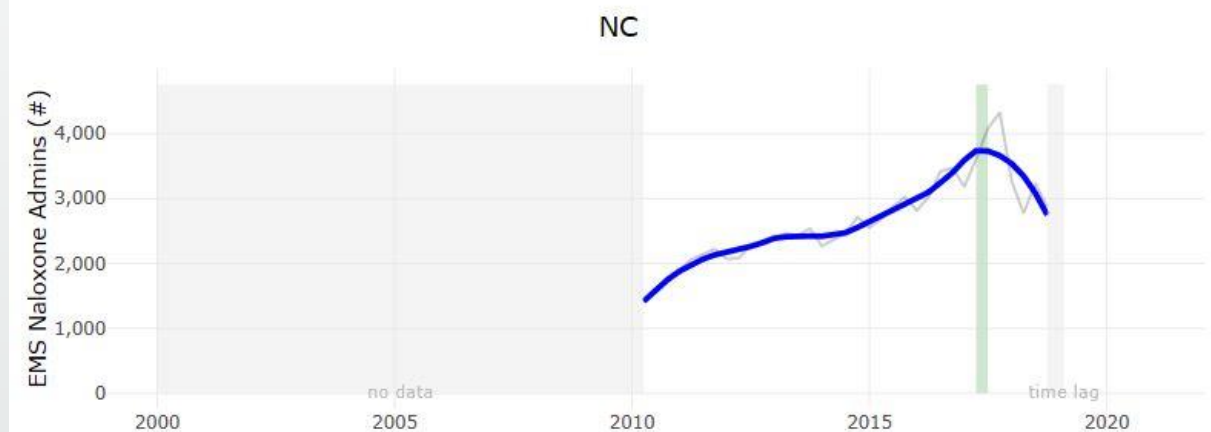
Naloxone Administration by EMS Staff (through Quarter 3, 2018)

EMS Naloxone Administrations



Brunswick County

EMS Naloxone Administrations

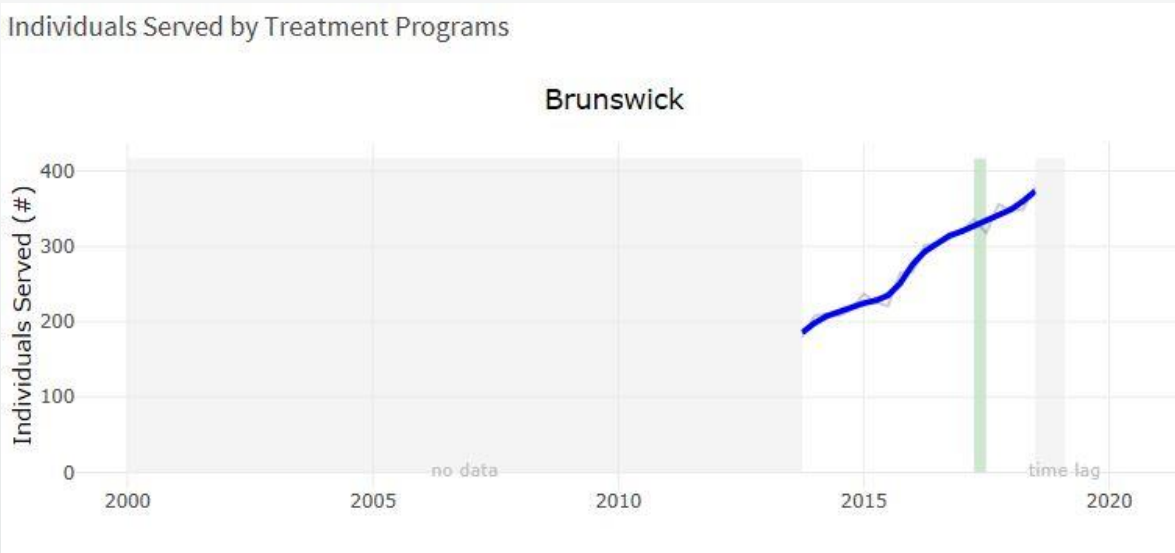


North Carolina

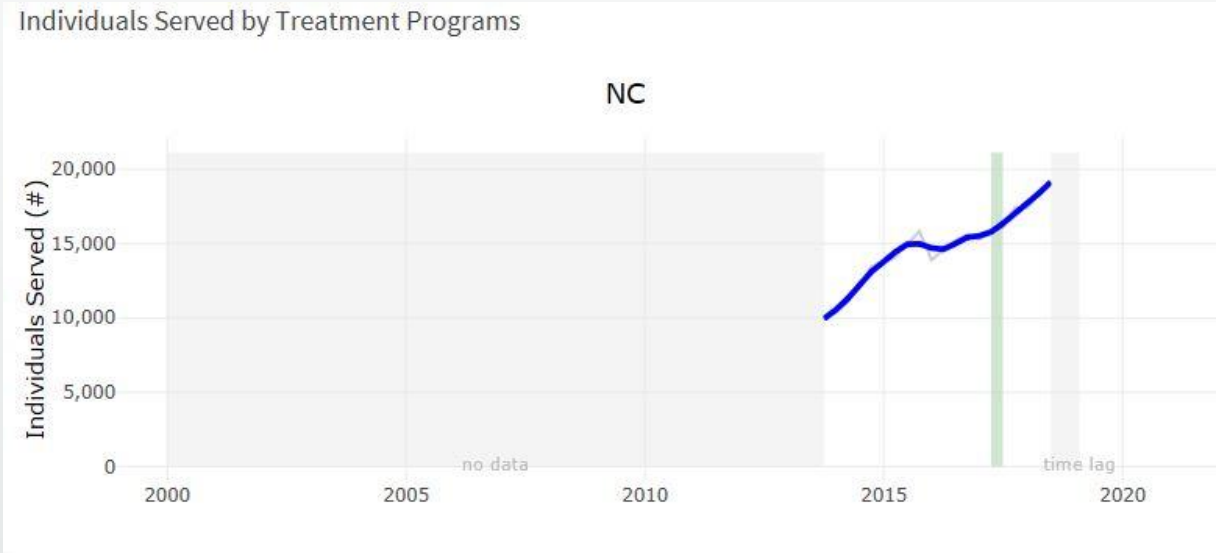
Data Source: North Carolina Office of Emergency Medical Services (OEMS), EMSpic-UNC Emergency Medicine Department, 2012-present. See Technical Notes.

Number of Individuals Served by Treatment Programs

(through Quarter 2, 2018)



Brunswick County



North Carolina

Data Source: North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Claims Data, 2013-present. See Technical Notes.

2019-2020 Goals

Sheriff's Office, Detention Center, 911 Center, and Animal
Protective Services

Sheriff John Ingram V

Sheriff's Office Goals (104310)

- Relieve salary compression issues among mid-level command staff positions
 - Note: yellow indicates higher starting salary for position

Agency Name	Population	# Sworn	Sergeant	Lieutenant	Captain	Major
<i>Brunswick Co. Sheriff's Office</i>	122,765	200	\$ 45,886	\$ 52,125	\$ 58,363	\$ 62,521
<i>Chatham Co. Sheriff's Office</i>	70,928	111	UNK	UNK	UNK	\$ 75,000
<i>Cumberland Co. Sheriff's Office</i>	323,838	313	\$ 46,607	\$ 55,884	\$ 61,177	\$ 70,104
<i>Durham Co. Sheriff's Office</i>	300,952	183	\$ 43,560	\$ 47,916	\$ 52,707	\$ 54,000
<i>Fayetteville Police Dept.</i>	204,759	351	\$ 44,784	\$ 55,060	\$ 66,635	\$ 73,611
<i>Forsyth Co. Sheriff's Office</i>	369,019	220	\$ 56,687	\$ 62,919	\$ 68,494	\$ 79,539
<i>Garner Police Dept.</i>	28,776	66	\$ 52,152	\$ 56,514	\$ 60,395	UNK
<i>Greenville Police Dept.</i>	91,495	191	\$ 54,538	\$ 62,566	\$ 76,794	UNK
<i>Guilford Co. Sheriff's Office</i>	517,600	266	\$ 58,088	\$ 67,244	\$ 77,843	\$ 85,822
<i>Johnston Co. Sheriff's Office</i>	185,660	126	\$ 44,518	\$ 50,802	\$ 57,974	\$ 69,136
<i>New Hanover Co. Sheriff's Office</i>	220,358	356	\$ 46,883	\$ 51,688	\$ 59,846	\$ 69,280
<i>Onslow Co. Sheriff's Office</i>	186,311	180	UNK	\$ 48,702	\$ 50,651	\$ 66,652
<i>Orange Co. Sheriff's Office</i>	141,354	124	\$ 44,126	\$ 48,709	\$ 53,764	\$ 65,506
<i>Pender Co. Sheriff's Office</i>	57,611	101	\$ 41,718	\$ 45,994	\$ 53,244	UNK
<i>Raleigh Police Dept.</i>	458,880	802	\$ 55,742	\$ 51,822	\$ 56,732	\$ 67,529
<i>Wake Co. Sheriff's Office</i>	1,024,000	386	\$ 55,660	\$ 61,226	\$ 67,349	\$ 80,818
<i>Wilmington Police Dept.</i>	117,525	280	\$ 43,347	\$ 49,858	\$ 59,826	\$ 68,796

Sheriff's Office Goals (104310)

- Here are examples of current officers, their years of service, and how far off their current salary is from the mid-point of their pay grade:

BCSO Case Study		
POSITION	YEARS	TO GET TO MID
Deputy 1	13	\$4,458
Deputy 2	13	\$10,185
Deputy 3	17	\$2,752
Detective 1	11	\$10,513
Detective 2	16	\$8,141
Sergeant 1	10	\$13,226
Sergeant 2	12	\$11,926
Sergeant 3	12	\$10,194
Sergeant 4	15	\$12,896
First Sergeant 1	14	\$12,789
First Sergeant 2	26	\$4,858
Lieutenant 1	16	\$11,761
Lieutenant 2	22	\$10,133

Sheriff's Office Goals (104310)

- Create IT Technician position to assist in growing agency and subsequent growing IT service demands
 - Annual and recurring cost (based on FY18/19 pay range):
 - Pay grade 66 (\$43,807) + fringe (\$17,382.92) = **\$61,189.02**

Detention Center Goals (104320)

- Increase each jail shift by four detention officers to provide better service, safety, and support to detention center staff and detainees
 - 16 jailers in total
 - Initial cost (salary, benefits, equipment/uniforms) = **\$835,673.88***
 - Recurring cost = **\$779,019.64***
 - *(based on FY 18-19 pay scale)

911 Center Goals (104375)

- Reclassify three telecommunicator positions to improve retention, morale, and compete with other job opportunities in area

CURRENT 911 CENTER PAY GRADE				
Grade	Title	Starting Salary	# of Positions	Total Cost
60	Call Taker	\$ 31,331.00	3	\$ 93,993.00
61	Telecommunicator I	\$ 33,411.00	17	\$ 567,987.00
62	Telecommunicator II	\$ 35,489.00	4	\$ 141,956.00
63	Telecommunicator III	\$ 37,569.00	4	\$ 150,276.00
			TOTAL (estimate)	\$ 954,212.00
SUGGESTED 911 CENTER PAY GRADE -- SHERIFF				
Grade	Title	Starting Salary	# of Positions	Total Cost
60	Call Taker	\$ 31,331.00	3	\$ 93,993.00
63	Telecommunicator I	\$ 37,569.00	17	\$ 638,673.00
65	Telecommunicator II	\$ 41,728.00	4	\$ 166,912.00
67	Telecommunicator III	\$ 45,886.00	4	\$ 183,544.00
			TOTAL (estimate)	\$ 1,083,122.00
			Salary Difference	\$ 128,910.00

APS Goals (104380)

- Begin the process of expanding current facility to include adoption center building
 - Request approx. **\$10,000** in funding to initiate process with a market analysis/consultation and other introductory procedures to begin adoption center building project.
- Live release rate has increased dramatically since becoming part of Sheriff's Office, increasing need for additional building
 - 2011 intake total = 5,569 – live release rate = 19% (1,113)
 - 2018 intake total = 4,425 – live release rate = **74% (3,201)**

Cyber Security Focus

Steve Randone, MIS Director

Cyber Security

- Experts say local governments have been disproportionately targeted because they typically lack the resources to respond to cyber incidents—making it all the more likely that they will pay the ransom.
- 95% of all attacks on enterprise networks are the results of successful spear phishing.
- A University of Maryland study found that hackers are attacking computers and networks at a “near-constant rate”, with an average of one attack every 39 seconds.
- Brunswick County blocks approximately 8,000 malicious emails and 1,249 brute force attempts per day.

Brunswick County MIS will continue to deploy tools and policies to combat cyber-crime of all various forms including brute force, phishing attempts, social engineering, virus', etc. Along with necessary security measures deployed in the 2018-19 Budget Year, Brunswick County is testing additional resources for recommendations to the 2019-20 Budget Year. Beginning with the current budget year, Brunswick County MIS recommends Penetration Security Testing to be conducted annually.



Brunswick County Schools

Bond Update



\$152 MILLION IN PROJECTS
SERVING ALL SCHOOLS

February 18, 2019

Why did we need a bond?

- Key Drivers:
 - Overcrowding & Safety
 - Building and Site Improvements
 - Athletics
 - Early College High School
 - Career Technical Education
 - Technology Improvements

BOND ISSUANCE #1

FY 2018

- Construction of 6 classroom addition at Town Creek Elementary School
- Construction of Town Creek Middle School
- Lincoln Elementary School improvements
- Athletics-Technology-Interior & Exterior Improvements

Where Are We?

CURRENT STATUS

Town Creek Elementary School

Construction of the addition is ongoing, with structural steel, exterior wall studs and sheathing, roof decking, and the mechanical mezzanine installed. Work continues on interior electrical and mechanical rough-ins

Budget

Starting Contract Amount \$2,410,000

Current Contract Amount \$2,410,000

Schedule

Contractual Substantial Completion Date May 28, 2019

The project remains on schedule for occupancy by students in August 2019



Town Creek Elementary Addition

Where Are We?

Current Status

Town Creek Middle School

The storm-water pond is installed, with site, fire hydrants, and sanitary sewer nearing completion. Building footings are approaching 50%, and wall construction in the gym area is ongoing. Paving sub-base is being installed on selected parking and traffic areas to support emergency vehicle access around the building.

Budget

Starting Contract Amount \$23,782,995

Current Contract Amount \$23,782,995

The project remains within budget.

Schedule

Contractual Substantial Completion Date: May 22, 2020



Town Creek Middle School

Where Are We?

Current Status

Lincoln Elementary School

The storm-water pond is complete, with site storm-water piping 50% complete. Phased work continues with footings, underground plumbing and the concrete slab completed in the section of the addition that ties into the c-wing. Work continues on completing the footings and remainder of the concrete slab. Required changes associated with the new water and sanitary tie-ins to infra-structure are under engineering review.

Budget

Starting Contract Amount..... \$3,507,300

Current Contract Amount..... \$3,575,807

The project remains within budget.

Schedule

Contractual Substantial Completion Date May 13, 2019



Lincoln Elementary School Addition

Where Are We?

Athletic Improvements

Construction of the new athletic buildings at NBHS and SBHS are progressing. At NBHS Floor slabs, load bearing walls, roof steel and decking are complete at the wrestling and weight room additions; and brick veneer has started. Steel erection is 50% complete at the field house. Rework of the NBHS football field will start this month. At South, progress at the wrestling room is similar to that of North. Masonry walls at the field house are 50%.

Budget

Starting Contract Amount	\$6,550,750
--------------------------	-------------

Current Contract Amount	\$6,550,750
-------------------------	-------------

The project cost remains within budget.

Schedule

Contractual Substantial Completion Date	April 19, 2019
---	----------------

Delays associated with Hurricane Florence and excessive rain are currently under review, and will be presented at the February Operations Committee/March Board meeting. The project remains on schedule for occupancy by students in May 2019.



North Brunswick High School Field House



South Brunswick High School Field House



North Brunswick High School Soccer Field

Where Are We?

Other Projects

New playground equipment has been installed or is in progress at 4 of the elementary schools, equipment has been ordered for several others, and equipment selection is in process those remaining.

The landscape architect has generated site plans delineating landscaping activities, to include the removal of damaged or deficient plantings and the planting of native vegetation that does not cause security issues and is low maintenance

Technology Upgrades-Wireless and Security upgrades--1.8M

In support of the district 1:1 initiative to equip every student with mobile technology in the classroom, the Technology Department began a wireless upgrade project in the Spring of 2018. This project upgraded all wireless infrastructure in the classrooms and Media Centers for faster throughput and better performance. This phase of the project was completed in Summer 2018. To provide a more secure network for our students and staff, a state of the art security system powered by Cisco was purchased and will be deployed in Spring 2019.



Tech infrastructure and playground equipment





BREAK

Brunswick Community College Update

Dr. Gene Smith, President

STATE OF THE COLLEGE



BRUNSWICK
COMMUNITY COLLEGE

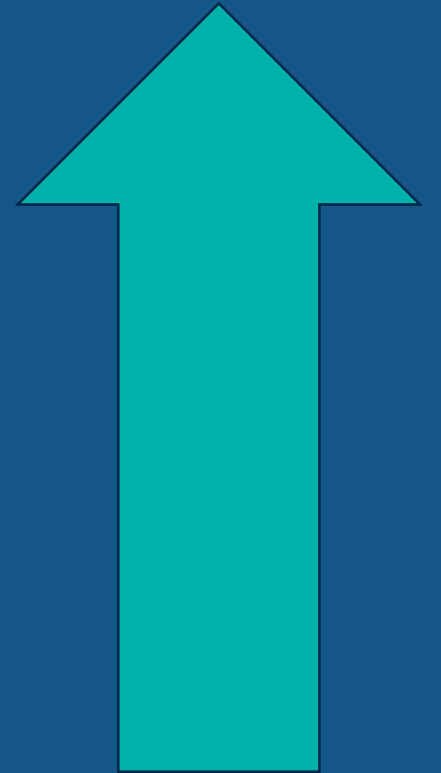


BRUNSWICK **GUARANTEE**

SCHOLARSHIP PROGRAM

2018 Brunswick Guarantee Highlights

- 2017 Applications 62 / 2018 Applications 83 ↑ 46.15%
- 2017 vs. 2018 Scholarships Awarded ↑ 35.76% (\$135,496 to \$256,000)
- 2017 Local High School Enrollment 12.4% / 2018 Local High School Enrollment 21.6%



WHERE

Our students are from

			2016	2017	2018
	West Brunswick	Number of students in graduating class	299	306	312
		Number of students who attended BCC	45	57	70
		Percent of graduating class who attended BCC	15.1%	18.6%	22.4%
		Brunswick Guarantee Funded (new to BCC)	8 (2.7%)	8 (2.6%)	16 (5.1%)
	North Brunswick	Number of students in graduating class	211	233	227
		Number of students who attended BCC	11	15	48
		Percent of graduating class who attended BCC	5.2%	6.4%	21.1%
		Brunswick Guarantee Funded (new to BCC)	4 (1.9%)	10 (4.3%)	14 (6.2%)
	South Brunswick	Number of students in graduating class	228	268	275
		Number of students who attended BCC	12	28	58
		Percent of graduating class who attended BCC	5.3%	10.4%	21.1%
		Brunswick Guarantee Funded (new to BCC)	9 (3.9%)	8 (3.0%)	16 (5.8%)

2017-2018	
Students	62
Budget	\$200,000
Tuition	\$100,403
Books	35,093
Marketing/ Admin	50,000
Subtotal	\$185,496
Balance	\$14,504

Fall 2018	Spring 2019
89	76*
\$216,000	\$169,490
70,718	60,507*
40,792	44,000*
25,000	25,000
\$136,510	\$129,507
\$79,490	\$39,983

12/18 Addt'l
\$90k Allocation

Est. Funds
for Summer
2019
Enrollment

Addt'l Allocation of
\$16k Co-Req

Projected Budget

*Estimated

Brunswick Community College / Brunswick County Schools Career and College Promise

- The purpose of Career and College Promise (CCP) is to offer structured opportunities for qualified high school students to be concurrently enrolled in community college courses.
- Provides tuition waived pathways that lead to a certificate, diploma, or degree as well as entry-level jobs skills.
- Open to all eligible Brunswick County Schools, private, and home school juniors and seniors.

CCP Pathway Options

College Transfer Pathways

Earning credits toward an Associate in Arts, Associate in Science, Associate in Engineering or Associate Degree Nursing

Career and Technical Education Pathways

Earning credits toward an entry level job credential, certificate or diploma.

Workforce Continuing Education Pathways

Earning entry level job credential, no high school credit given.

CCP Student Benefits (2018)

- Students **explored** more than 69 academic programs.
- High school students **earned** over 2,022 hours of college credit.
- More than 354 high school students **saved** approximately \$446,862 in college tuition.

CCP Data / Facts

- Jan. 2018 - 105 students compared to Jan. 2019 - 192 students
 - South Brunswick 20 students in Spring 2016 to 70 students in Spring 2019
 - North Brunswick increased from 16 students in Spring '16 to 47 students in Spring '19
 - West Brunswick increased from 23 students in Spring '16 to 33 students in Spring '19
- Career Coaches added at the high schools and grant was renewed for 3 additional years (thru June '22)
- 24 Homeschooled and Private School students enrolled.
- Enrolled 71 students in Summer Term Courses
- Buses run from traditional high schools to BCC twice a day.

CCP Student Success Fall 2018

**CCP ACADEMIC SUCCESS - 93.2% WITH STUDENTS
EARNING A, B, C IN THEIR COURSES.**

Number of Students	Grades	Percentage
160	A	49.70%
102	B	31.70%
38	C	11.80%
8	D	2.50%
14	F	4.3%

Facilities and Capital Projects

Allied Health Building

Funding Source	Amount
County	\$2,907,320
NC Connect Bond	\$2,857,328
State Equipment	\$285,830
Total Budget	\$6,050,478

Estimated Groundbreaking is March, 2019

Estimated Completion is May, 2020

Facilities and Capital Projects

- New Roof on Building A – Administration
 - \$90,000 county approved
 - Currently design documents at SCO for review/approval
 - Estimated start is April, 2019
 - Estimated completion is May, 2019
- Asphalt Re-surfacing
 - \$60,000 county approved
 - Most of Auditorium and all of Administration parking lot completed - \$13,503
 - Campus-wide pothole patching scheduled for February 8, 2019-estimate \$3,440
 - East section of College Rd and remainder of Auditorium scheduled for March 18, 2019 with an estimate of \$38,000

Odell Williamson Auditorium

- Danielle Graves - Director of the OWA and Campus Events at BCC after the passing of Mike Sapp
- OWA finalized the planning of the 2019-20 season to include a variety of 9 shows instead of 8 as in previous years
- The auditorium continues to be strong in national dance competition rentals and public school activities such as graduations, choral & band concerts
- FEMA was stationed here free of charge from September 28, 2018 through December 1, 2018. Hurricane Florence also allowed us to host the DSS DSNAP in our facility from September 28, 2018 through October 6, 2018
- OWA has 2 season shows left for this season including The 5th Dimension on February 15 and Rhythm of the Dance on March 22nd

Gore Fitness and Aquatics Center

Growth in Membership

- Feb 2017.....2652
- Feb 2018.....2754
- Feb 2019.....3008

Questions?

Brunswick Senior Resources Inc.

Jim Fish, CEO BSRI

Annie H. Phelps

- Wilma Baker Family land donation for a future Senior Center (2012)
- Donated 3 Acres, Brunswick County purchased remaining 5 for 30k (2013)
- Name the Senior Center the Annie H. Phelps Brunswick Center at Ash
- Annie H. Phelps family donated a significant portion of the land for the Waccamaw School



Community Needs

- Consolidated Services Location
- Improved & Dedicated Senior Space
- Law Enforcement Sub Station
- EMS Services
- Disaster Response Staging Area
- Food Pantry
- Human Services Rendezvous Location – New Hope Clinic / BFA, etc.
- ATM
- Retail Space
- Park Integration

Senior Community Needs

- Expanded Senior Resources & Permanent Space
- Improved & Modern Kitchen
- Consolidated Meals on Wheels Assistance
- Consolidated Senior Housing
- Integrated Health Services
- Consolidated Transportation
- Improved Parking

Current Senior Site



Current Senior Site

- Daily break down & set up
- Non-ADA compliant restrooms
- Limited growth potential
- Obsolete Building for Senior Related Activities
- Fire escape for only 50% of the Building
- Climate control units obstructing escape
- Exterior Fencing
- Soft Dirt Passage
- Entire interior constructed of wood
- Poor Lighting
- Failing Windows

Current Senior Site



Current Senior Site



Current Senior Site



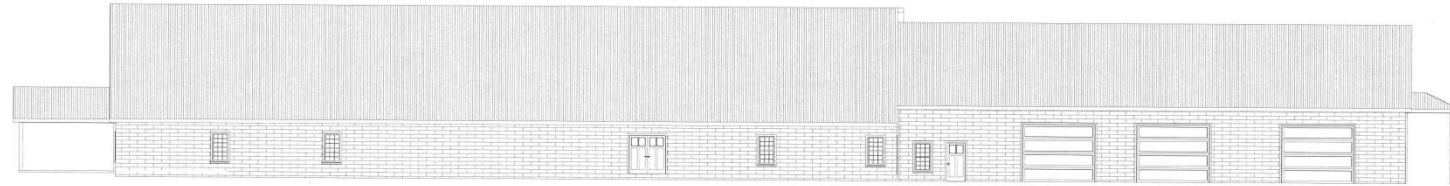
Current Senior Site



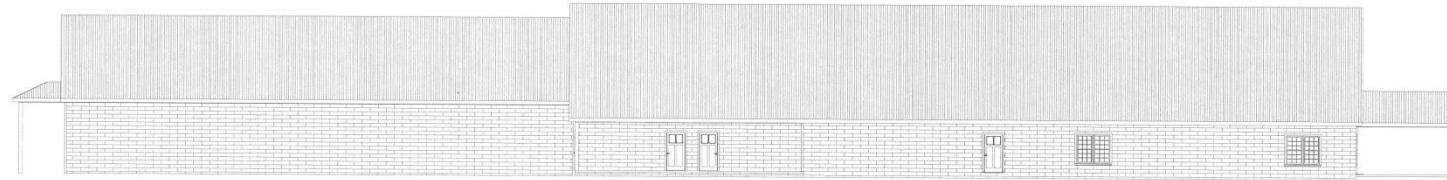
Proposed Community Center

Drawings

FRONT



REAR



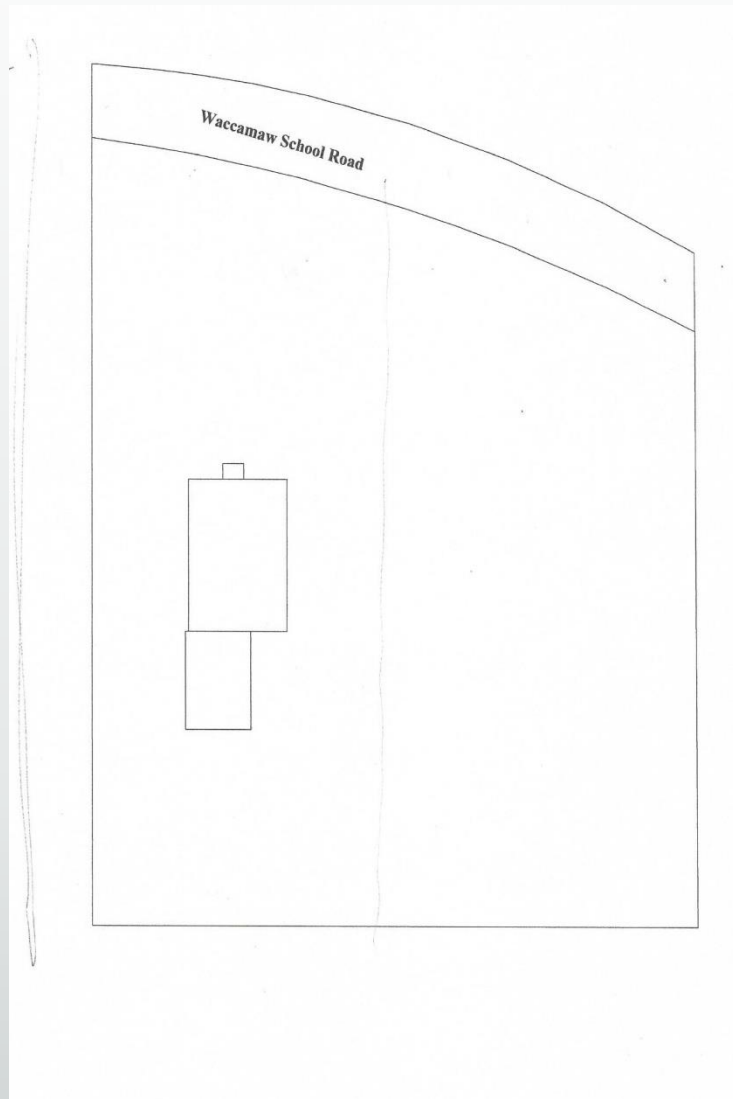
LEFT

**ANNIE A PHELPS
BRUNSWICK CENTER AT ASH**

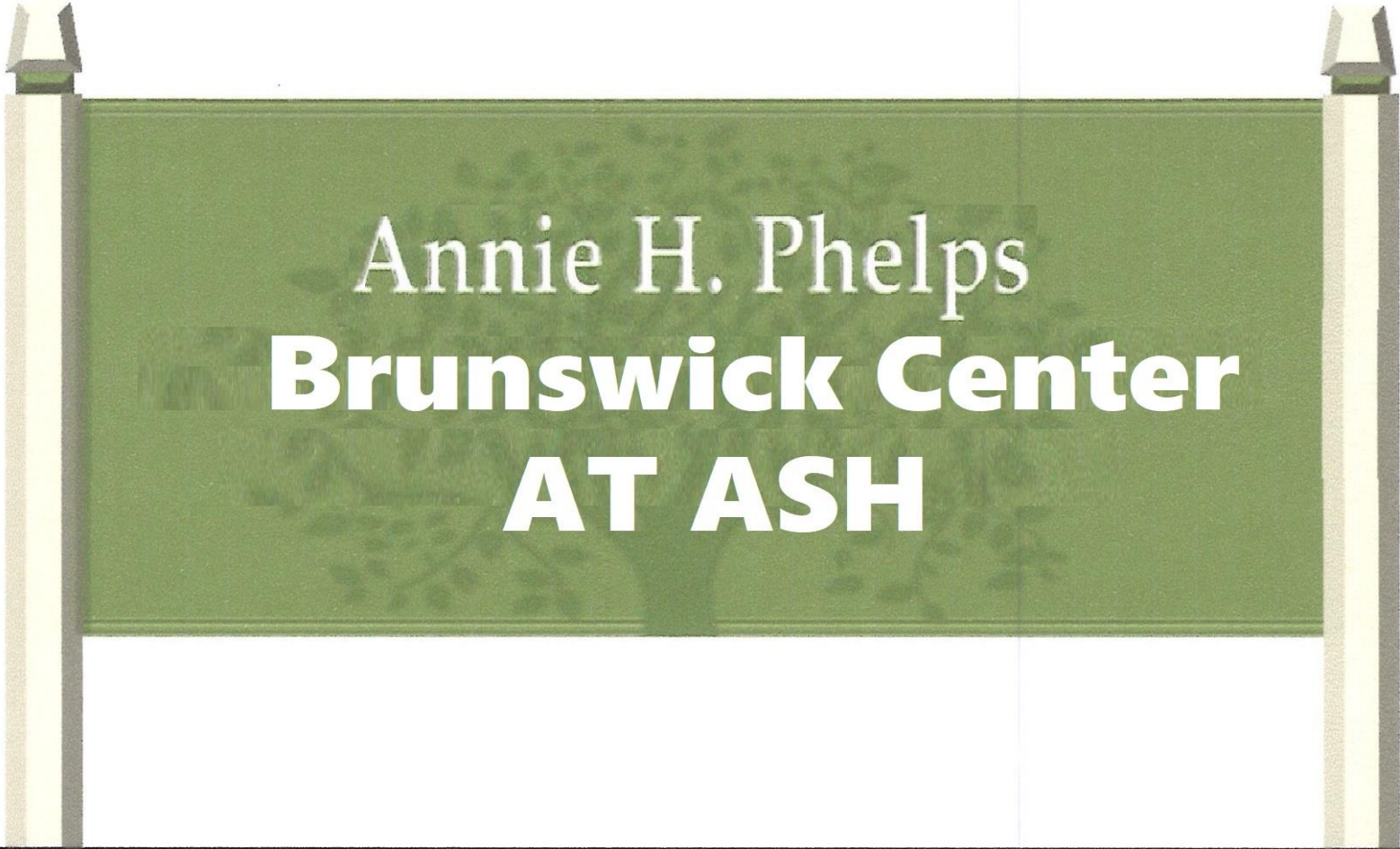
RIGHT



Proposed Community Center



Annie H. Phelps



Annie H. Phelps
Brunswick Center
AT ASH

Site Advantages

- Seamless integration with Waccamaw School & Park
- Site is acquired with simple MOU for signage
- Site was prepped during Waccamaw Park Renovation (2015)
- Water
- Fire Hydrants
- Electrical
- Phone/Internet
- King Farming Inc. Will allow spray field on their property

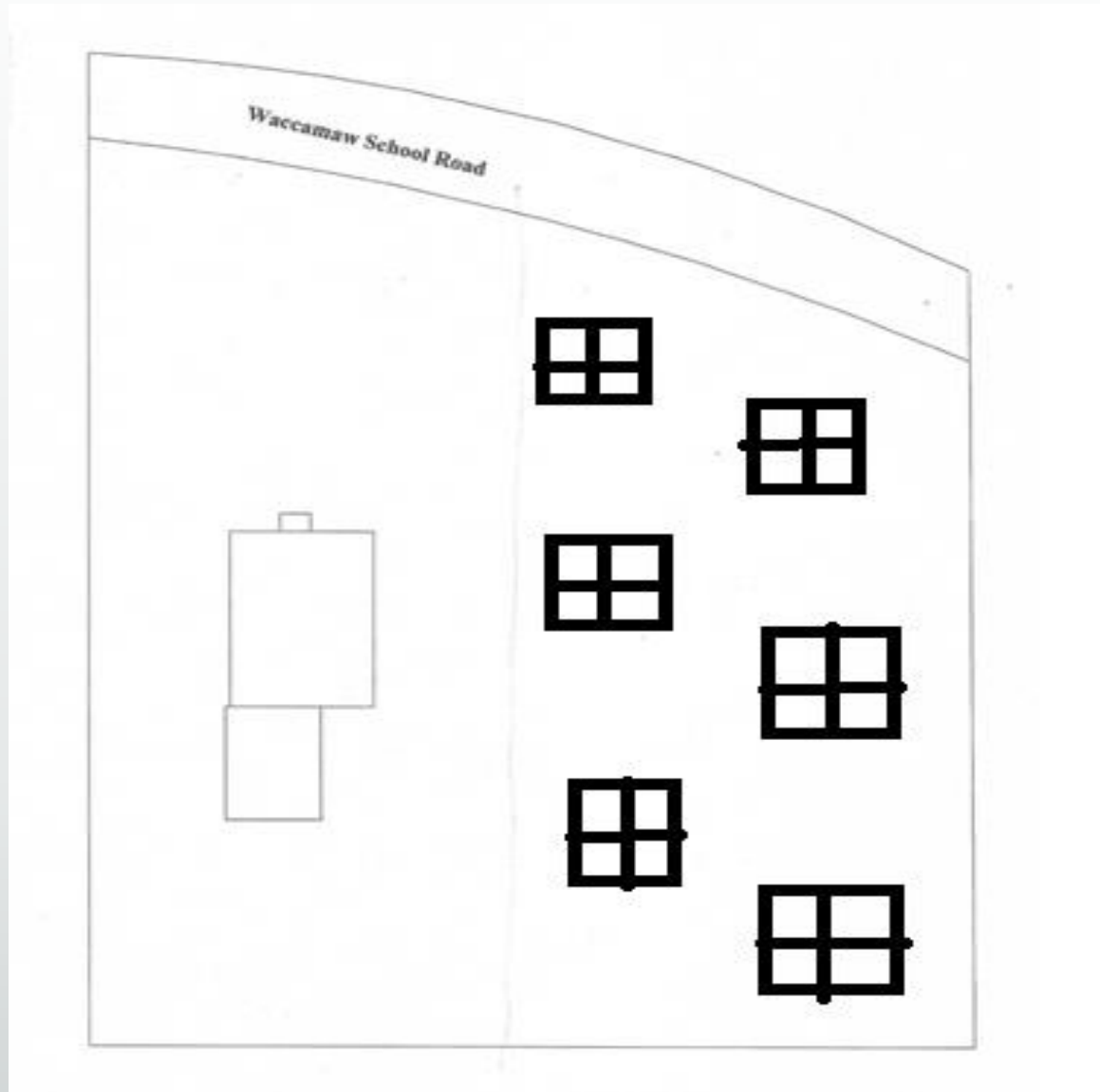
Site Advantages



Looking Ahead

- Senior Housing (Quads)
 - Hundreds of Substandard Mobile Homes & Temporary Housing
- Senior Participation with Park Activities
- Senior Participation with School Activities

Proposed Senior Housing



Questions?



Bill Early, Executive Director

Review of 2018

Brunswick Business & Industry Development's Mission is, "To promote economic development and create an effective climate for business development that will benefit the citizens in Brunswick County, North Carolina by creating, retaining, and expanding jobs that facilitate economic growth, enhanced wealth, and provide coordinated and planned capital investment."

For 2018, our first year in partnership with Brunswick County government, Brunswick Business & Industry Development engaged Greenfield, an economic development research and consulting firm to conduct a thorough study of Brunswick County's assets, challenges and strategy to move Brunswick County forward in a positive direction.

This plan is near completion and will provide a framework for moving forward to achieve the goals and objectives of the MOU between Brunswick County and Brunswick Business & Industry Development.

Observations From 2018

Brunswick Business & Industry Development (BBID) received 66 Requests For Information (RFI) during 2018.

BBID responded to 42 of the RFI's

24 RFI's, 36%, were not responded to due to a lack of product

Of the 42 submitted, 2 were eliminated due to a lack of infrastructure being readily available.

Identified Needs

Brunswick County lacks existing buildings suitable for manufacturing and distribution facilities.

Two areas of need:

- 100,000 + square feet along US 74/76 corridor

- 50,000 square feet in or near the Leland Industrial Park

(We are finding existing businesses operating around the Leland Industrial Park are outgrowing their existing space, and most are growing into needs of 50,000 sf)

Identified Needs

BBID staff has met with 6 potential developers of spec buildings and have received positive feedback on feasibility. Most are seeking a public-private partnership to develop new buildings. This is being evaluated to make a sound recommendation to County officials.

Identified Needs

Second area of Product Development Need is completing infrastructure to Brunswick County's Mega Sites.

BBID has worked with Economic Development Partnership of North Carolina to add the Mid-Atlantic Industrial Rail Park and International Logistics Park to the State's Mega Site webpage.

BBID has completed all required documentation to recertify both industrial parks

Wastewater upgrades are underway and funded by grants received by Columbus County in partnership with Brunswick County to cover the cost of these improvements

Engineering and Design is underway for the extension of water lines to serve the 2 industrial parks

Grant funding has been researched to assist with this extension; however, a company must be committed with new jobs to qualify.

Questions

Commissioners' Goals and Major Focus Areas To Guide Budget Development for FY 20

Ann Hardy, County Manager

Goal: Economic Development

1. Collaborate with the Brunswick Community College Workforce Development Initiatives, Brunswick Business & Industry Development, the four Chambers of Commerce and the Tourism Development Authority to develop a friendly and positive business environment, employ an effective business expansion and retention effort, develop a targeted business/industry recruitment strategy and grow the tourism and hospitality industry while protecting our residential neighborhoods.

Goal: Education

1. Continue the multi-year local funding agreement with the Brunswick County Board of Education to provide for a quality education that prepares our children for college or the workforce.
2. Support and enhance the Brunswick Guarantee Program with BCC Foundation that provides scholarships for county high school graduates to attend BCC.
3. Support the expansion of Allied Health Career Programs at BCC.
4. Facilitate the facility improvements associated with the voter approved 2016 \$152 million school bond referendum.

Goal: Financial Stewardship

1. Adopt a County Budget to maintain one of the lowest tax rates among counties in North Carolina with a population over 100,000.
2. Employ a conservative budgetary philosophy and make strategic decisions on all fiscal matters in order to maintain the positive financial position and credit strength of the county; continue a zero-based budgeting strategy wherever appropriate and feasible.
3. Staff seek out ways to reduce overhead and administrative costs.

Goal: Environmental Stewardship

1. Encourage and incentivize green development and construction to minimize the impact on natural resources while respecting and protecting private property rights.

Goal: Transportation

1. Continue the supplemental financial support for the Brunswick Connector transit service provided by the Cape Fear Public Transportation Authority.
2. Support BTS in continued development of rural transportation services, providing access to services and employment for rural residents.
3. Support the efforts of the NCACC to oppose any transfer of responsibility for transportation funding from the state to counties.
4. Request that NCDOT initiate a comprehensive transportation plan specifically for Brunswick County that includes municipal and other county partners.

Goal: Organizational Improvement/Development

1. Embed a focus on exceptional customer service where it becomes part of the organizational culture.
2. Provide all services in a way that recognizes and values diversity.
3. Recognize that businesses are customers of the county and review the Unified Development Ordinance to develop small business assistance by providing local rules that are clear, simple, easy to understand, that are predictable, reasonable and appropriate for Brunswick County.
4. Revise and implement policies, processes, procedures, and programs focused on ensuring a high performing workforce.
5. Encourage a healthy lifestyle to improve upon individual health of employees, improve productivity and reduce medical costs.
6. Provide supervisory skill building and leadership training opportunities for all supervisory personnel and those with supervisory potential. Expand Training and Skill Development to provide growth opportunities for non-supervisory staff.
7. Develop succession planning for key county positions.
8. Explore opportunities where the private sector or non-profit entities may more economically and efficiently serve the public than government.

Goal: Infrastructure/Development Expansion

1. Develop strategies for continued growth in the number of water and sewer customers by determining methods to increase the number of SAD projects, ~~prioritizing County funded water and sewer mains~~ and acquiring or merging existing private and/or public water and sewer systems.
2. Support the participants of the Lower Cape Fear Water and Sewer Authority in obtaining the raw water capacity to meet the county's long-term potable water needs.
3. Improve communication between the county and its wholesale water customers and utilities that contribute flow to the regional wastewater treatment plants.
4. Explore methods to work with surrounding utilities to reduce operational costs.
5. Support the plant expansion for Southport to become a participant in the West Brunswick Regional Wastewater System to meet the City's capacity needs.
6. Support the plant expansion at the Northeast Sewer System to meet the capacity needs of the participants.
7. Support the expansion and low pressure reverse osmosis advanced treatment at the Northwest Water system to meet the capacity and water quality needs of the county.

Goal: Public/Mental Health

1. Provide education to the public about preventable health issues and diseases and improve Brunswick County's health ranking in the state.
2. Support the Trillium LME/MCO to operate a program for mental health, developmental disabilities, and substance abuse services as they transition to one of the four state entities.
3. Continue to advocate for sufficient state/federal funding to adequately address MH/DD/SAS needs of our residents.

Goal: Community Development

1. Investigate additional policy amendments and enhancements to provide tangible incentives to encourage the development of affordable single and multi-family housing opportunities.
2. Enhance community appearance and protect property values through responsible zoning and code enforcement while recognizing the diversity of our county and respecting private property rights.
3. Support the Community Improvement Plan to remove unsafe and derelict structures.

Goal: Technology

1. Implement the results of the comprehensive in-house evaluation and assessment of the County's technological resources and operations and identify opportunities for departments to improve efficiency and service delivery through the implementation of proven technology applications.

Goal: Public Safety

1. Continue to ensure the safety and security of Brunswick County residents, property owners and visitors, while planning for Brunswick County's growth.
2. ~~Review the recommendations of the Brunswick County Fire Commission and~~
Continue to explore best practices of fire and rescue services while planning for growth in the county.
3. Support the Brunswick County Sheriff with resources to better enable law enforcement efforts while ensuring officer safety.

Closing Remarks

Commissioners



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Jeff Niebauer

9:15 a.m. - Tax Administration - Revaluation Report (Jeff Niebauer, Tax Administrator)

Issue/Action Requested:

Request that the Board of Commissioners receive an update on the 2019 County Revaluation, Aerial Photography Project, and collection rate.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive an update on the 2019 County Revaluation, Aerial Photography Project, and collection rate.

ATTACHMENTS:

Description

☐ Tax Reval PPT

2019 Property Tax Revaluation

Jeffery Niebauer, Tax Administrator

Revaluation

Currently performed every 4 years in Brunswick County.

North Carolina General Statute 105-283 states, “All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words “true value” shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller...”. North Carolina General Statute 105-285(d) states, “The value of real property shall be determined as of January 1” of the County revaluation year.

Progress to Date

Neighborhood Delineation

- Considered one of the most important tools in the revaluation process
 - used in the majority of mass appraisal systems
- Divides Brunswick County into smaller geographic areas
 - Typically, out of 720 neighborhoods, they are 200 parcels or less
- Developed using natural and manmade boundaries
 - Manmade – Interstates, land use & zoning
 - Natural – lakes, creeks, & watersheds
- Analyzing market data is easier, and ensures equity
 - Determine depreciation, market variables & factors
- Maintains consistent values in a manageable market area
- Easier for the public to compare property values within a market area

Progress to Date

- - 148,593 total parcels
- - 148,593 parcels valued

- - 720 Total Neighborhoods
- - 720 Neighborhoods Completed
- - Review in progress
 - (all neighborhoods to be completed by the end of February 2019)
- Parcels visited 50,071

Progress to Date

New buildings

	Residential	Commercial
2015	2083	33
2016	2116	23
2017	2539	34
2018	2319	56

Sales / Market Transactions

Countywide Sales Statistics

	Number of Sales	Ratio
2015 Revaluation		99.6
2015 (year end)	4337	94.4
2016	5060	92.2
2017	5942	87.5
2018	6156	84.8
2019 Revaluation		99.79

Sales / Market Transactions

Single Family Sales Prices

Average Sales Price

2015	\$268,237
------	-----------

2018	\$285,982
------	-----------

Average Market Value

2018	\$265,821
------	-----------

County Growth

Brunswick County -- Market Value increase 11.9

> 10%

Ocean Isle Beach

Oak Island

Caswell Beach

Carolina Shores

Boiling Spring Lakes

Belville

Southport

St. James

Leland

5%-10%

Sunset Beach

Holden Beach

Calabash

Bolivia

Navassa

Varnamtown

Northwest

BHI MSD A & B

<5%

Village of Bald Head Island

Shallotte

Sandy Creek

Calendar of Events

July 16, 2018 Submit Schedule of Values to Commissioners

August 20, 2018 Hold Public Hearing on Schedule of Values

August 30, 2018 Adopt the Schedule of Values

September 6-27, 2018 Publish 4 notices once a week that the Schedule of Values has been adopted

December 2018 / January 2019 Mail revaluation notices --- After storm change end February 2019

January 1, 2019 Effective Date of the 2019 revaluation

January 15, 2019 Informal hearing with property owners begins -- After storm change March 2019

April 9, 2019 Board of Equalization and Review convenes and informal hearings end.

April 30, 2019 Board of Equalization and Review Adjourns

July 2019 2019 tax bills will be mailed to property owners

September 1, 2019 2019 taxes are due

January 6, 2020 Last day to pay 2019 tax bill without interest

Appeals Process

Notices mailed December 2018-January 2019 (storm change - Feb 2019)



Informal reviews with property owners until April 8, 2019

(online, in person, or by mail)



Board of Equalization and Review convenes April 9, 2019



Property Tax Commission



Courts (Appeals & Supreme)

Tax Relief Available

- Elderly or Disabled Requirements (exclusion of \$25,000 or 50% of taxable value, up to 1 acre)
 - Deed in applicant's name or title to residence as of January 1st
 - Must be N.C. resident • At least 65 years of age or totally and permanently disabled
 - Has income for the preceding calendar year of NOT MORE than the income eligibility limit
 - Must apply by June 1, 2019



Tax Relief Available

- Disabled Veterans Homestead Exclusion (first \$45,000 of assessed value)
 - Deed in applicant's name or title to residence as of January 1st
 - Must be N.C. resident
 - Honorably discharged veteran – 100% disabled (service related) or receive benefits for specially adapted housing under 38 U.S.C. 2101
 - There are no age or income requirements
 - Must apply by June 1, 2019



Tax Relief Available

Present use value tax deferment:

10 acres in agricultural production w/\$1,000 average 3 yr. gross income.

5 acres in horticultural production w/same income requirement.

20 acres of forestland in sound management.

3 year rollback if property loses eligibility.

**Must have applied by February 1, 2019 or
within 30 days of value change or 60 days of a transfer.**

Challenges

- Time
- Storm Damage (damaged properties, reviewing permits)
- Staffing Changes

Aerial Photography project



Aerial Photography project



Aerial Photography project



Aerial Photography project



Aerial Photography project



Aerial Photography project



Aerial Photography project



Aerial Photography project

Who can benefit from Oblique Imagery?

DOT & Public Works

Police Department

Fire Department

Engineering

E-911

Property Valuation

GIS/Mapping

Planning & Zoning

Legal Departments

Environmental Health

Economic Development

Aerial Photography project

Brunswick County has a six year contract which includes 3 flights.

We plan to fly every two years.

Timing our flights with New Hanover County provides savings to both Counties.

First flight will be complete by the end of February 2019. Aerials delivered within 60 days from completion.

In case of a natural disaster flights can be conducted for free and/or reduced cost.
For ex. Hurricane at a category 2 or higher

Collections

End of the year collections
County tax year

2012	2013	2014	2015	2016	2017
94.81%	95.28%	95.67%	96.83%	97.60%	98.15%



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Andrea White

Action Item # 2. -
9:30 a.m. - Administration - Midyear Financial Update (Ann
Hardy, County Manager)

Issue/Action Requested:
Request that the Board of Commissioners receive the midyear financial update.

Background/Purpose of Request:

Fiscal Impact:
Reviewed By Director of Fiscal Operations

Approved By County Attorney:

ATTACHMENTS:

Description

- ▣ Mid Year Financial Update - workshop 2-18-19

MIDYEAR FINANCIAL UPDATE

Summary Information for General Fund as of January 31, 2019

Revenues:

Total revenues are \$151.3 million for a 3.7% or \$5.4 million increase over the prior year. As compared to the prior year, collections are up for Ad valorem Taxes \$4.0 million or 3.5% and Local Options Sales Tax \$0.5 million or 4.4%. Total revenues collected are 75.5% of the current budget. Preliminary projected total revenues at June 30, 2019 are \$209.9 million. This forecast assumes the County collects hurricane related reimbursements in the current year.

	Audited June 30, 2018	Current Budget	January 31, 2019	Prior Yr January 31, 2018	Projections June 30, 2019
Revenues:					
Ad valorem taxes	\$ 124,318,739	\$ 124,680,301	\$ 117,930,420	\$ 113,973,649	\$ 128,000,000
Local option sales taxes	23,986,670	24,754,123	11,627,749	11,139,383	24,754,123
Other taxes and licenses	6,006,050	4,653,000	3,135,277	3,273,829	5,480,063
Unrestricted intergovernmental revenues	3,767,405	2,859,275	183,251	109,626	3,648,000
Restricted intergovernmental revenues	15,952,297	26,750,632	7,453,890	8,343,578	29,240,627
Permits and fees	4,704,274	3,998,110	2,683,470	2,631,353	4,677,476
Sales and services	11,045,810	11,353,124	7,080,202	5,710,770	12,055,214
Investment earnings	467,170	200,650	409,048	208,860	701,225
Other	2,056,327	1,274,856	839,444	598,332	1,311,630
Total revenues	<u>192,304,742</u>	<u>200,524,071</u>	<u>151,342,751</u>	<u>145,989,380</u>	<u>209,868,358</u>

Summary Information for General Fund as of January 31, 2019

Expenditures:

Total Expenditures are \$110.7 million and are 53.7% of the current budget. Expenditures are up \$12.7 million or 13.0% in comparison to the same period in the prior year or 4.2% net of the hurricane related expenditures. Preliminary projected total expenditures at June 30, 2019 are \$200.4 million.

	Audited June 30, 2018	Current Budget	January 31, 2019	Prior Yr January 31, 2018	Projections June 30, 2019
Expenditures:					
Salaries	45,202,932	51,422,199	31,727,271	26,064,758	50,119,862
Fringe benefits	20,880,129	25,728,113	14,321,075	12,259,095	24,414,234
Operating costs	89,298,391	110,807,889	60,283,215	51,319,466	107,599,949
Capital outlay	3,993,531	4,786,194	2,908,137	2,663,173	4,786,194
Debt Service	13,952,380	13,460,707	1,442,309	5,625,867	13,460,707
Total expenditures	<u>173,327,363</u>	<u>206,205,102</u>	<u>110,682,007</u>	<u>97,932,359</u>	<u>200,380,946</u>

Summary Information for General Fund as of January 31, 2019

Other Financing Sources (Uses):

- Net transfers to other funds are \$2.8 million: Grant advance funding for Cape Fear Regional Jetport \$1.8 million and Landfill closure \$750k.
- Revenues and net transfers are greater than expenditures by \$37.8 million as compared to \$46.8 million in the prior year. Current fund balance projections indicate an increase of \$1.4 million to \$77.3 million mainly due to growth in the county partially offset by increased expenditures related to Hurricane Florence. This forecast assumes the county collects the hurricane related reimbursements in the current year.

	Audited June 30, 2018	Current Budget	January 31, 2019	Prior Yr January 31, 2018	Projections June 30, 2019
Revenues over (under) expenditures	<u>18,977,379</u>	<u>(5,681,031)</u>	<u>40,660,744</u>	<u>48,057,021</u>	<u>9,487,412</u>
Other Financing Sources (Uses):					
Issuance of long term debt	505,057	-	-	505,057	-
Transfers from other funds	10,510	-	-	-	-
Transfers to other funds	(17,198,089)	(6,936,275)	(2,814,190)	(1,741,030)	(8,067,540)
Appropriated fund balance	<u>-</u>	<u>12,617,306</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total other financing sources (uses)	<u>(16,682,522)</u>	<u>5,681,031</u>	<u>(2,814,190)</u>	<u>(1,235,973)</u>	<u>(8,067,540)</u>
Net change in fund balances	2,294,857	<u>\$ -</u>	<u>\$ 37,846,554</u>	<u>\$ 46,821,048</u>	1,419,872
Fund balance, beginning of year	<u>73,609,688</u>				<u>75,904,545</u>
Fund balance, end of year	<u>\$ 75,904,545</u>				<u>\$ 77,324,417</u>

Sales Tax Analysis

	2019 Year to Date	2018 Year to Date	2018-2019 Year to Date Increase	FY 2019 Estimate & % Increase Over FY 2018
Article 39 (1%)	\$5,073,175	\$4,950,635	\$123,145 or 2.5%	\$10,167,912 or 3.0%
Article 40 (1/2%)	3,227,131	3,001,086	226,045 or 7.5%	7,559,397 or 3.5%
Article 42 (1/2%)	3,327,443	3,188,267	139,176 or 4.4%	7,026,814 or 3.2%

Note: Very preliminary projections for FY 19 based on 5 months sales tax received. Total projected FY 19 sales tax projection is \$24.8m and of the total, the School's portion of Article 40 and 42 is \$6.0m.

School GO Bond Debt Service Projections

Fiscal Year	Existing GO		\$152.0 million New GO Debt Includes Financing Cost					GO Existing & New Debt		New and Existing		New Debt	
	GO Debt	Cents on Tax Rate	July 2018 52.95 million	July 2020 47.55 million	July 2022 51.5 million	New Debt TOTAL *	Cents on Tax Rate	Total Debt	Cents on Tax Rate	Taxpayer		Taxpayer	
										\$ 25,000 Car	\$ 200,000 Home	\$ 25,000 Car	\$ 200,000 Home
2019	5,418,365	1.9541	-	-	-	-	-	5,418,365	1.9541	4.89	39.08	-	-
2020	5,181,125	1.8685	5,636,172	-	-	5,636,172	2.0326	10,817,297	3.9012	9.75	78.02	5.08	40.65
2021	4,579,250	1.6515	4,291,060	-	-	4,291,060	1.5475	8,870,310	3.1990	8.00	63.98	3.87	30.95
2022	983,750	0.3548	4,166,060	5,886,750	-	10,052,810	3.6254	11,036,560	3.9802	9.95	79.60	9.06	72.51
2023	768,350	0.2771	4,041,060	4,579,000	-	8,620,060	3.1087	9,388,410	3.3858	8.46	67.72	7.77	62.17
2024	-	-	3,916,060	4,460,000	6,373,125	14,749,185	5.3192	14,749,185	5.3192	13.30	106.38	13.30	106.38
2025	-	-	3,791,060	4,341,000	4,956,875	13,088,935	4.7204	13,088,935	4.7204	11.80	94.41	11.80	94.41
2026	-	-	3,666,060	4,222,000	4,828,125	12,716,185	4.5860	12,716,185	4.5860	11.46	91.72	11.46	91.72
2027	-	-	3,541,060	4,103,000	4,699,375	12,343,435	4.4515	12,343,435	4.4515	11.13	89.03	11.13	89.03
2028	-	-	3,428,560	3,984,000	4,570,625	11,983,185	4.3216	11,983,185	4.3216	10.80	86.43	10.80	86.43
2029	-	-	3,328,560	3,865,000	4,441,875	11,635,435	4.1962	11,635,435	4.1962	10.49	83.92	10.49	83.92
2030	-	-	3,242,935	3,746,000	4,313,125	11,302,060	4.0760	11,302,060	4.0760	10.19	81.52	10.19	81.52
2031	-	-	3,170,435	3,627,000	4,184,375	10,981,810	3.9605	10,981,810	3.9605	9.90	79.21	9.90	79.21
2032	-	-	3,096,060	3,503,125	4,055,625	10,654,810	3.8426	10,654,810	3.8426	9.61	76.85	9.61	76.85
2033	-	-	3,020,435	3,384,375	3,926,875	10,331,685	3.7260	10,331,685	3.7260	9.32	74.52	9.32	74.52
2034	-	-	2,943,560	3,265,625	3,798,125	10,007,310	3.6090	10,007,310	3.6090	9.02	72.18	9.02	72.18
2035	-	-	2,864,810	3,146,875	3,669,375	9,681,060	3.4914	9,681,060	3.4914	8.73	69.83	8.73	69.83
2036	-	-	2,784,185	3,028,125	3,540,625	9,352,935	3.3730	9,352,935	3.3730	8.43	67.46	8.43	67.46
2037	-	-	2,702,310	2,909,375	3,411,875	9,023,560	3.2543	9,023,560	3.2543	8.14	65.09	8.14	65.09
2038	-	-	2,619,810	2,790,625	3,283,125	8,693,560	3.1352	8,693,560	3.1352	7.84	62.70	7.84	62.70
2039	-	-	2,494,280	2,671,875	3,154,375	8,320,530	3.0007	8,320,530	3.0007	7.50	60.01	7.50	60.01
2040	-	-	-	2,553,125	3,025,625	5,578,750	2.0119	5,578,750	2.0119	5.03	40.24	5.03	40.24
2041	-	-	-	2,434,375	2,896,875	5,331,250	1.9227	5,331,250	1.9227	4.81	38.45	4.81	38.45
2042	-	-	-	-	2,768,125	2,768,125	0.9983	2,768,125	0.9983	2.50	19.97	2.50	19.97
2043	-	-	-	-	2,639,375	2,639,375	0.9519	5,278,751	1.9037	4.76	38.07	2.38	19.04
2044	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	\$ 16,930,840		\$68,744,532	\$ 72,501,250	\$ 78,537,500	\$ 219,783,282		\$239,353,498					

Avg Weekly 1.54 1.33

Note: Model Assumes no Growth Rate

Average Cents on Tax Rate 3.26

New Debt

3.52

Existing and New Debt

FY 20 Estimate \$ 2,772,845 Value of 1 cent est.

Preliminary 2019 - Value Estimates

BRUNSWICK COUNTY	FY 2019	FY 2020
	<u>2018 VALUE ESTIMATE</u>	<u>2019 VALUE ESTIMATE</u>
Date of Estimate		2/11/2019
Gross Real Property	\$ 24,034,619,745	\$ 26,688,829,541
Exempt Property	1,313,227,360	1,362,656,320
Taxable Real Property	22,721,392,385	25,326,173,221
Land Use Deferred	493,000,000	451,776,800
Net Taxable After PUV	22,228,392,385	24,874,396,421
Working Waterfront Deferred	2,650,000	3,500,000
Elderly Exemptions (Personal)	86,800,000	93,000,000
Elderly Exemptions (Real)	550,000	550,000
Veteran Exemptions (Personal)	125,000	130,000
Veteran Exemptions (Real)	29,000,000	36,100,000
Beach Club HOA Property	4,300,000	6,200,000
DENR Pollution Abatement	76,890	95,840
Low Income Housing Deferred	34,705,000	37,000,000
Builder Exemptions	55,000,000	55,000,000
Net Taxable Real Property	22,015,185,495	24,642,820,581
Individual & Business Personal	575,000,000	595,000,000
Net Taxable Real/Personal Property	22,590,185,495	25,237,820,581
Public Utilities	1,650,000,000	1,680,000,000
Total Property Value	24,240,185,495	26,917,820,581
Estimated Reductions - PTC	8,000,000	175,000,000
Estimated Reductions - Board of E & R	9,000,000	20,000,000
Net Forecast Property Excluding MV & Boats	24,223,185,495	26,722,820,581
Motor Vehicle Value	1,350,000,000	1,500,000,000
Estimated Total Tax Base	\$ 25,573,185,495	\$ 28,222,820,581

Note: Estimated Total Tax base is a 10.4% increase over 2018 values

Preliminary 2019 Levy Estimates and School Funding

	FY 19 Approved (1/2018 Levy) at FY 19 tax rate	FY 20 projection (1/2019 Levy) at FY 19 tax rate	Estimated Change From FY 19 BUDGET	FY 19 Approved (1/2018 Levy) at FY 19 tax rate	FY 20 projection (1/2019 Levy) at Revenue Neutral	Estimated Change From FY 19 BUDGET
Tax Rate Estimate	0.4850	0.4850		0.4850	0.4525	
Real Property Value Estimate	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086
Motor Vehicle Value Estimate	1,350,000,000	1,500,000,000	150,000,000	1,350,000,000	1,500,000,000	150,000,000
Total Valuation Estimate	\$25,573,185,495	\$28,222,820,581	\$ 2,649,635,086	\$25,573,185,495	\$28,222,820,581	\$ 2,649,635,086
Motor Vehicle Value Estimate	\$ 1,350,000,000	\$ 1,500,000,000	\$ 150,000,000	\$ 1,350,000,000	\$ 1,500,000,000	\$ 150,000,000
Collection Percentage for Motor Vehicles	100.00%	100.00%		100.00%	100.00%	
Tax Generated From Motor Vehicles	\$ 6,547,500	\$ 7,275,000	\$ 727,500	\$ 6,547,500	\$ 6,787,500	\$ 240,000
Real Property Value Estimate	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086	\$24,223,185,495	\$26,722,820,581	\$ 2,499,635,086
Collection Percentage for Real Property	98.00%	98.15%		98.00%	98.15%	
Tax Generated From Real Property	\$ 115,132,801	\$ 127,207,975	\$ 12,075,174	\$ 115,132,801	\$ 118,683,729	\$ 3,550,928
Total Tax Generated From Property	\$ 121,680,301	\$ 134,482,975	\$ 12,802,674	\$ 121,680,301	\$ 125,471,229	\$ 3,790,928
Value of 1 cent	\$ 2,508,872	\$ 2,772,845	\$ 263,973	\$ 2,508,872	\$ 2,772,845	\$ 263,973
General Government Debt Service (Excluding School Debt Funded By Sales Tax or Lottery)	\$ 10,019,267	\$ 15,258,944	\$ 5,239,677	\$ 10,019,267	\$ 15,258,944	\$ 5,239,677
Ad Valorem Revenue After Debt	\$ 111,661,034	\$ 119,224,030	\$ 7,562,997	\$ 111,661,034	\$ 110,212,285	\$ (1,448,749)
Schools (Under Funding Agreement)	\$ 40,756,277	\$ 43,516,771	\$ 2,760,494	\$ 40,756,277	\$ 40,227,484	\$ (528,793)
County Funds After School & Debt Budget	\$ 70,904,756	\$ 75,707,259	\$ 4,802,503	\$ 70,904,756	\$ 69,984,801	\$ (919,956)

Note: County and School revenue is an estimated 6.77% increase at the current tax rate and a 1.30% decrease at the calculated revenue neutral rate. The current tax rate would be sufficient to offset the additional (2) GO School Bond debt issues.

General Fund Budget Pressures

- Market and Merit Increase - \$1.7m
- Retirement Rate Increase 1.20% - \$0.6m
- Debt Service School GO Phase 1 - \$5.6m; Phase 2 - \$5.9m; Phase 3 - \$6.4m
- Landfill Transfer - \$0.5m
- Voting Equipment - \$1.1m

Other Budget Pressures (costs unknown):

- Hurricane Mitigation – Unfunded by HMPG
- Opioid Epidemic
- Fire Services
- Shoreline Protection
- Growth in Waste Collection
- Increased Operating Costs for Schools & County Buildings and Parks
- BSRI Expanding Services
- Increased Support for Development Services (Planning, Fire & Building Inspections, MIS, Environmental Health, Engineering, and GIS)
- Increased Support for Public Safety (Sheriff's Office, Detention, Animal Protective Services, 911 and Emergency Services)

Summary Information for Enterprise Fund as of January 31, 2019

Water Fund:

- Total water fund revenues decreased 3.2% or \$0.5 million under the same time last year to \$15.2 million. Wholesale water sales decreased 1.1% or less than \$0.1 million mainly due low irrigation needs partially offset by an increase in the PPI rate. Industrial water sales decreased 10.8% or \$0.2 million. From one year ago, retail customers increased 1,383 for a total of 42,291 customers. Preliminary total projected revenues are \$29.0 million at June 30, 2019.
- Total expenditures in the water fund increased \$0.5 million or 4.6% net of the hurricane related expenditures . Year to date expenditures are 46.7% of the current budget. Preliminary total projected expenditures are \$25.0 million at June 30, 2019.
- Net Transfers to water capital projects are \$0.8 million compared \$0.6 million in the prior year.
- Revenues are \$2.5 million more than expenditures and net transfers as compared to more than by \$4.6 million due to low irrigation needs in the current year and increases in expenditures due to hurricane Florence. Preliminary projected revenues over expenditures and net transfers are \$3.2 million at June 30, 2019. This forecast assumes the county collects hurricane related reimbursements in the current year.

Water Fund:	Audited June 30, 2018	Current Budget	January 31 2019	Prior Yr January 31 2018	Projections June 30, 2019
Revenues:					
User charges	\$ 24,141,941	\$ 23,072,000	\$ 14,762,296	\$ 15,164,300	\$ 24,087,046
Restricted intergovernmental	216,000	3,797,331	-	216,000	4,118,733
Investment earnings	142,897	70,000	157,127	70,451	229,573
Other	<u>601,302</u>	<u>476,468</u>	<u>237,866</u>	<u>200,089</u>	<u>576,207</u>
Total revenues	<u>25,102,140</u>	<u>27,415,799</u>	<u>15,157,289</u>	<u>15,650,840</u>	<u>29,011,559</u>
Expenditures:					
Salaries	4,563,616	5,142,948	3,152,951	2,585,195	5,123,545
Fringe benefits	1,957,864	2,410,992	1,347,683	1,138,620	2,189,985
Operating costs	6,739,172	11,769,864	4,908,020	3,957,995	11,028,747
Repairs and maintenance	1,796,403	1,587,336	651,113	1,023,289	1,424,227
Capital outlay	1,611,908	2,318,195	1,189,979	809,250	2,318,195
Debt Service:					
Principal	1,179,148	1,220,861	82,103	253,670	1,220,861
Interest	<u>1,068,790</u>	<u>1,021,068</u>	<u>572,354</u>	<u>599,046</u>	<u>1,021,068</u>
Total expenditures	<u>18,916,901</u>	<u>25,471,264</u>	<u>11,904,203</u>	<u>10,367,065</u>	<u>24,326,628</u>
Revenues over (under) expenditures	<u>6,185,239</u>	<u>1,944,535</u>	<u>3,253,086</u>	<u>5,283,775</u>	<u>4,684,931</u>
Other Financing Sources (Uses):					
Transfer to Water Capital Project	(2,715,507)	(3,368,607)	(790,000)	(635,000)	(790,000)
Transfer from Water Capital Project	173,000	-	-	-	-
Budgetary Financing Sources (Uses):					
Appropriated fund balance	<u>-</u>	<u>1,424,072</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total other financing sources (uses)	<u>(2,542,507)</u>	<u>(1,944,535)</u>	<u>(790,000)</u>	<u>(635,000)</u>	<u>(790,000)</u>
Revenues and other financing sources over (under) expenditures and other financing uses	<u>\$ 3,642,732</u>	<u>\$ -</u>	<u>\$ 2,463,086</u>	<u>\$ 4,648,775</u>	<u>\$ 3,894,931</u>

Sewer Fund:

- Total revenues for the Sewer Fund increased 7.4% over the same time last year to \$15.0 million. Retail sewer sales increased \$0.3 million or 4.4% in comparison with the prior year. Capital recovery and Transmission fees decreased \$0.4 million under the same time last year. Total revenues are 61.7% of the current budget for the fiscal year. Preliminary total projected revenues are \$29.9 million at June 30, 2019.
- Total expenditures for the Sewer Fund have increased \$1.1 million or 13.0% over the same period in the prior year net of the hurricane related expenditures mainly due to capital outlay. Total expenditures are 36.3% of the budget for the fiscal year. Preliminary total projected expenditures are \$29.4 million at June 30, 2019.
- There are less than \$0.1 million net transfers from sewer capital projects due to the transfer in from the participant capital and replacement fund in the current year compared to net transfers in of \$0.8 million in the same period of the prior year.
- Revenues are greater than expenditures and net transfers by \$4.2 million as compared to \$6.1 million in the prior year. Preliminary projections indicate revenues are greater than expenditures and net transfers by \$0.6 million at June 30, 2019 down from the prior year due to the increase in capital outlay and prior year SAD revenue. This forecast assumes the county collects hurricane related reimbursements in the current year.
- Retail sewer customers billed in January 18,145 up 952 customer from one year ago.

Sewer Fund:	Audited June 30, 2018	Current Budget	January 31 2019	Prior Yr January 31 2018	Projections June 30, 2019
Revenues:					
User charges	\$ 26,830,561	\$ 23,269,098	\$ 14,669,705	\$ 13,710,518	\$ 28,456,014
Restricted intergovernmental	-	760,762	-	-	923,635
ARRA interest subsidy	120,086	91,833	46,264	59,946	91,833
Special Assessments	2,026,174	13,000	56,855	65,007	56,855
Investment earnings	127,646	50,000	151,110	58,727	220,029
Other	174,437	102,400	67,028	62,144	174,816
Total revenues	<u>29,278,904</u>	<u>24,287,093</u>	<u>14,990,962</u>	<u>13,956,342</u>	<u>29,923,182</u>
Expenditures:					
Salaries	2,481,261	2,942,760	1,778,069	1,431,008	2,889,362
Fringe benefits	989,586	1,304,848	721,159	578,873	1,171,883
Operating costs	4,130,740	5,536,085	2,923,425	2,269,264	5,490,828
Repairs and maintenance	1,986,908	1,773,751	1,028,363	963,271	1,685,063
Capital outlay	1,975,825	4,457,906	1,661,410	622,060	4,457,906
Debt Service:					
Principal	9,840,547	10,014,492	830,464	810,934	10,014,492
Interest	4,027,464	3,688,912	1,856,950	2,027,294	3,688,912
Total expenditures	<u>25,432,331</u>	<u>29,718,754</u>	<u>10,799,840</u>	<u>8,702,704</u>	<u>29,398,447</u>
Revenues over (under) expenditures	<u>3,846,573</u>	<u>(5,431,661)</u>	<u>4,191,122</u>	<u>5,253,638</u>	<u>524,735</u>
Other Financing Sources (Uses):					
Transfer to Wastewater Capital Project	(634,012)	(325,558)	(325,558)	(634,012)	(325,558)
Transfer from Wastewater Capital Project	1,638,171	375,000	375,000	1,445,452	375,000
Budgetary Financing Sources (Uses):					
Appropriated fund balance	-	5,382,219	-	-	-
Total other financing sources (uses)	<u>1,004,159</u>	<u>5,431,661</u>	<u>49,442</u>	<u>811,440</u>	<u>49,442</u>
Revenues and other financing sources over (under) expenditures and other financing uses	<u>\$ 4,850,732</u>	<u>\$ -</u>	<u>\$ 4,240,564</u>	<u>\$ 6,065,078</u>	<u>\$ 574,177</u>

Hurricane Florence – Damage and Claims Status

<u>Damage Category:</u>	Estimates			
	Damages	Insurance	FEMA 75%	State/Other
Category A - Debris Removal	\$ 8,736,000	\$ -	\$ 6,552,000	\$ 2,184,000
Category B - Emergency Protective Measures	5,345,500	-	4,009,125	1,336,375
Category C - Roads and Bridges	20,000	-	15,000	5,000
Category E - Building and Equipment	1,093,650	763,543	247,580	82,527
Category F - utilities	3,379,515	-	2,534,636	844,879
Category G - Parks, Recreation, and other facilities	681,000	-	510,750	170,250
Category Z - Management Costs	300,000	-	225,000	75,000
	<u>\$ 19,555,665</u>	<u>\$ 763,543</u>	<u>\$ 14,094,091</u>	<u>\$ 4,698,030</u>
<u>Proceeds and Claims Status:</u>				
Insurance proceeds received to date	211,092	211,092	-	-
Projects complete and submitted to FEMA	501,247	-	375,935	125,312
Expected FEMA submission within 30 days	14,462,811	552,451	10,432,770	3,477,590
Expected FEMA submission greater than 30 days	4,380,515	-	3,285,386	1,095,129
	<u>\$ 19,555,665</u>	<u>\$ 763,543</u>	<u>\$ 14,094,091</u>	<u>\$ 4,698,030</u>

* Expenditures to date: General Fund \$8.5 million; Enterprise Fund \$2.7 million

* Engaged CSRS Disaster Recovery Management, LLC for PA and Mitigation consulting services January 24, 2019

* Past experience: 10 to 12 months from the date of event to closeout projects and receive FEMA reimbursement

* Estimate Florence final closeout to be no earlier than 2 years or greater with hazard mitigation

Hurricane Florence - 404 HMPG Hazard Mitigation Letters of Interest Submitted

- Novant Health Brunswick Medical Center Alternative Water System \$224,350
- Shelters and Senior Centers Generators \$2,804,000
- Water and Sewer Laboratory Operations Building \$100,000, and Secondary Water Line \$1,100,000
- Fueling Sites, Re-Fueling Trailer, and High Clearance High Capacity Fuel Truck \$1,152,000
- County Buildings Flood Mitigation and Safe Rooms \$935,000
- Communication Towers Monitoring System- \$30,000
- Total \$6,345,350

Hurricane Florence – 407 Expedited Properties(Buyout)

- Municipal Application Deadline December 14, 2018
- Unincorporated property applications submitted-Total 5
- Joint application with Town of Leland through agreement
- Town of Leland submitted 25 applications for a total of 30 applications
- Received notice of approval from State to “Build Out” all properties on application
- Deadline for completion is March 1, 2019
- NOT ALL PROPERTIES ON INITIAL APPLICATION WILL REACH FINAL APPROVAL
- Total estimated \$6,390,530

Questions and Discussion



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Melanie Turrise

Action Item # 2. -
9:45 a.m. - Human Resources - Employee Compensation,
Recruitment, Staff Training, Retention, Benefits (Melanie Turrise,
HR Director, and Staff)

Issue/Action Requested:
Request that the Board of Commissioners receive information on employee compensation, recruitment, staff training, retention, and benefits.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:
Recommend that the Board of Commissioners receive information on employee compensation, recruitment, staff training, retention, and benefits.

ATTACHMENTS:

Description

- ☐ Human Resources PPT

2019

Employee Compensation, Recruitment, Staff
Training, Retention, Benefits

Melanie Turrise, HR Director & Staff

—— Employee Compensation Plan ——

Estimated Market & Merit Analysis

Fiscal Year 2019-2020	General Fund	Enterprise Fund	Total
Number of Employees	909	131	1,040
December 2018 CPI Index/pay scale adjustment @ 2%. (including overtime and benefits)	\$1,126,300	\$172,000	\$1,298,300
Estimated 1% merit for employees performing at or above satisfactory. Individual merit dependent on overall performance. Merit range from .25% to 1.35%.	\$563,200	\$86,000	\$649,200
Budget Impact	\$1,689,500	\$258,000	\$1,947,500

LGERS Contribution Update

The Retirement Systems Division of the Treasurer's Office amended its policy for employer contribution rates to LGERS. Effective July 1, 2019, the "base" employer contribution rate with respect to law enforcement officers (LEOs) will increase from 8.50 to 9.70 percent of reported compensation. With respect to all other employees, it will increase from 7.75 to 8.95 percent of reported compensation. Each fiscal year it will go up incrementally by 1.2% through FY 2021.

Below is the impact for this upcoming FY:

Fiscal Year 2019-2020	General Fund	Enterprise Fund	Total
Number of Employees	909	131	1,040
LGERS Contribution increase of 1.2% (mandated additional contribution increase from 8.5% to 9.7% for LEO; 7.75% to 8.95% for general employees)	\$575,000	\$90,900	\$665,900

—— Staff Organizational Support ——

HR Organizational Support

- Continue to support County departments with staffing needs.
 - Recruitment support and assistance
- Provide training opportunities.
- Continue to review and refine any policies as needed.
- Continue to administer policies and procedures with relation to:
 - The performance evaluation system
 - Employee relations
 - Leave and benefits administration
- On-going compensation analysis countywide.
 - Collect data and conduct a pay study of 25% of the county job classifications within the next couple of months

Health Plan Update

Health Plan Highlights

Brunswick County participates in the North Carolina Health Insurance Pool (NCHIP) for our group medical plan.

Medical Plan - Preliminary renewal discussions indicate that there is no increase based on current plan design.

Dental Plan - Preliminary renewal discussions indicate a possible increase in fully insured plan with BCBSNC of 4.3%. Gallagher, our current broker, will continue to negotiate and review all other options.

Budget based on enrollment and coverage level.

FY 20 Budget Projections (no plan design changes)

	FY 19 Budget	FY 20 Projected Budget
Employees Medical <i>Includes coverage on Spouse and Children</i>	\$9,966,924 (996 FTE)	\$9,966,924 (996 FTE)
(Pre-65) Retirees Medical	2,862,600	2,862,600
Employees Dental <i>Includes coverage on Spouse and Children</i>	481,434	502,135
(Pre-65) Retiree Dental	52,482	54,739
Total Budget	\$13,340,860	\$13,386,398

Cost does not increase per FTE for Medical. Budget based on enrollment and coverage level. This table illustrates a comparison, assuming the same enrollment and a 4.3% increase in dental premiums.

Next Steps

1. Board to provide direction on plan design
2. Manager to Develop Recommended Budget Based on Goals of Board
3. Conduct Annual Open Enrollment in May



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Andrea White

Action Item # 2. -
10:00 a.m. - Administration - Preliminary General Government Capital Improvement Plan - (Stephanie Lewis, Operations Services / Aaron Perkins, Parks & Recreation Director / Bill Pinnix, Engineering Services Director / Steve Stone, Deputy County Manager)

Issue/Action Requested:
Request that the Board of Commissioners receive information on the Preliminary General Government Capital Improvement Plan.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:
Recommend that the Board of Commissioners receive information on the Preliminary General Government Capital Improvement Plan.

ATTACHMENTS:

Description

- Preliminary General Government CIP PPT

2019 Preliminary General Government Capital Improvement Plan

Stephanie Lewis, Director of Operations Services

Aaron Perkins, Director of Parks and Recreation

Bill Pinnix, Director of Engineering Services

Steve Stone, Deputy County Manager

2019

Preliminary General Government
Capital Improvement Plan

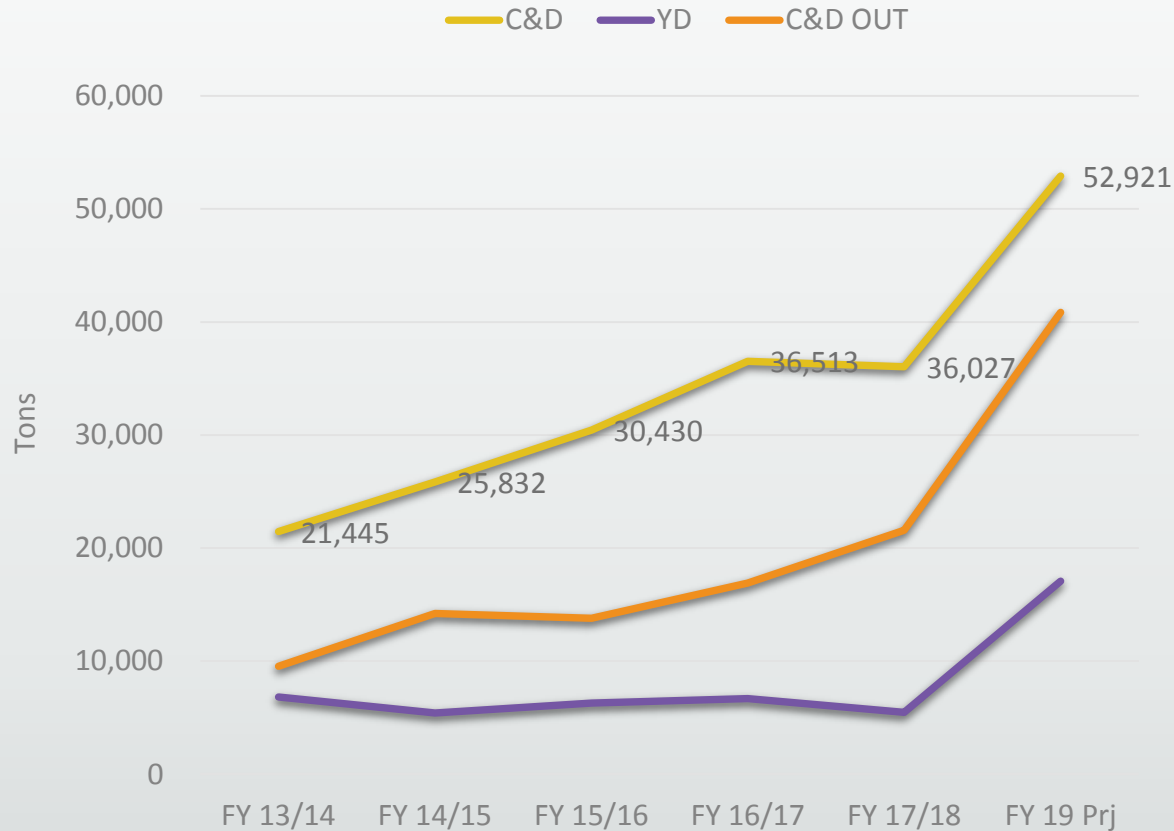
Stephanie Lewis, Director of Operations Services

General Government Improvement Plan

Project FY 2021 – FY 2023 Funding sources are current capital reserve and pay go:

1. C & D Landfill Closure - \$650,000 engineering in FY 21 & FY 22 from capital reserve and construction in FY 23 of \$9,284,355; recommend a reserve transfer of \$417,355 to set aside funds for the balance of the estimated closure costs
2. Landfill Transfer Station – was removed from the CIP due to current negotiations with Waste Industries to construct a new Transfer Station in exchange for a 10 year contract extension (June 30, 2033) with an additional 10 year term (June 30, 2043) to automatically extend unless canceled 90 days prior to the expiration of the current term. An annual payment of \$175,000 will be due to Waste Industries beginning on the first anniversary of the completion date and continuing on each anniversary through June 30, 2043. Waste Industries also agrees to renovate the current Transfer Station once the construction of the new Transfer Station is complete. Once terms are agreed upon for the estimated cost of renovating the current Transfer Station a contract amendment will be submitted for the board's approval.

C&D Waste Stream Update



- 1st qtr of FY19, C&D 8% decrease
- 2nd qtr of FY19, C&D 114% increase
- Prj FY19 C&D to average a 47% increase
- 25% increase for FY 20 = 66,150 tons
- FY20 75% transfer of C&D = \$1.98M, which is a \$945k increase from FY19
 - C&D transfer budget was amended by \$660k to \$1.7M after Florence to maintain the 75% transfer for FY19
- Prj FY19 Yard Debris 68% increase
 - R&M and Motor Fuel lines may exceed budget limits for grinding operation, may be able to offset with excess revenue or absorb
- Prj FY19 MSW 12% increase, historically increases 2 – 4% per year

C&D Pilot Programs Update

- FY19 Sorting Pilot Program
 - Funded at \$13,000 to sort with in house labor & equipment for two months to determine quantity of C&D that could be diverted from the waste stream
 - Sorting was not accomplished in FY19 due to:
 - Hurricane Florence – increased traffic and debris volumes
 - New Landfill Schedule – staff is 1 person short daily, more if there are absences (vacations and sickness)
- FY20 Sorting Pilot Program
 - Request funding at \$25,000 to sort with temporary employees and in house equipment for two months
- FY21 Extraction Pilot Program
 - \$50,000 for test bores or core samples and testing of material
- In lieu of the FY19 Sorting Pilot Program, consider funding a new Feasibility Study and Reassessment of Post Closure Care (PCC) costs
- Current PCC costs are \$45k - \$50k annually
- Proposal for \$9,500 from McGill Associates
 - Assessment of historical PCC data
 - Perform preliminary feasibility analysis of the possible use of new breakthrough technologies that could lower PCC costs, maximize landfill airspace, generate new revenues and/or reduce greenhouse gases
- The study findings will present several PCC reduction options upon review of site data, that may include:
 - Assessing natural attenuation within the landfill
 - Mining the landfill to reduce environmental hazards
 - Treating waste mechanically while *in-situ*, using new bioremediation technology
 - Evaluating landfill reuse scenarios where the airspace could be continually reused

Fuel and Generator Projects

Government Center Main Generator

- Sheriff's Office, Detention Center, Call Center, Administration, Courthouse and EMS have individual generators separate from the main generator
- The main generator services all other campus buildings (which housed personnel from federal and state agencies), including the MIS building (which houses servers for most county functions), the cafeteria (which provides meals), the Board of Education building, the fuel site (which provides fuel for the fleet and all generators), the warehouse (which serves as the Shipping & Receiving point for the county), as well as both the county and school garages
- Current capacity is 2,000 gal, which provides 24hrs of power
- Main diesel tank does not have a direct dispenser and the regular fuel dispenser is too slow to fuel a truck or tank when needed to refuel generators, currently dispenses 7 gal/min
- Current piping on fuel tanks is too small to achieve maximum dispensing speed, but can be corrected by adding submersible pumps to each tank to increase speed of fuel to the dispensers

Project Description

- Eliminate current 2,000 gal tank and add a 10,000 gal tank to the main generator with a dispenser that will allow fuel to be used during non-emergency times to prevent fuel stagnation
 - Provide a 5 day capacity and eliminates staff from having to perform fueling operations in dangerous conditions
- Add a high flow dispenser to the main diesel tank
 - Increase dispensing speed to 50 gal/min (70 gal/min if both hoses are used) and allow staff to fill fuel trucks much quicker when needing to refuel other generators
- Replace the regular dispensers and add submersible pumps to all four main tanks, which will increase dispensing speed to 22 gal/min
- Scope of work will include:
 - Pouring a concrete pad for new 10,000 gal tank
 - Installing bollards around new tank
 - Piping generator to new tank
 - Installing new dispensers, including electrical and plumbing
 - Engineering/Permitting and Spill Prevention, Control, and Countermeasure (SPCC) plans
- Estimated cost is \$250,000

Fuel and Generator Projects

Leland Fuel Site

- Currently has two 3,000 gal tanks, one gas and one diesel
- One of the oldest fuel sites with lower capacity and tanks are in poor condition
- Serves the north portion of the county, including the Northwest Water Treatment (NWT) plant, and was quickly depleted of fuel once the flooding created land locked areas
- NWT plant was without power for 8 days and ran critically low on diesel for the generator
- Flooding and a damaged tank prevented the Leland site from being refueled in a timely manner and the NWT plant was dependent on a fuel vendor that had one truck also land locked in this area
- Current dispensing speed is very slow due to older equipment and no submersible pumps in the tanks

Project Description

- Replace current gas tank with a 5,000 gal tank
- Replace current diesel tank with a 20,000 gal tank
- Add a high flow dispenser to the diesel tank
 - Increase dispensing speed to 50 gal/min (70 gal/min if both hoses are used) and allow staff to fill fuel trucks much quicker when needing to refuel other generators
- Replace current dispensers and add submersible pumps to both tanks to increase fueling speed
- Scope of work will include:
 - Pouring a concrete pad for new 20,000 gal tank
 - Installing new tanks, submersible pumps and dispensers
 - Crane rental
 - Electrical and plumbing work
 - Engineering/Permitting and Spill Prevention, Control, and Countermeasure (SPCC) plans
- Estimated cost \$280,000

2019

Preliminary General Government
Capital Improvement Plan

Aaron Perkins, Director of Parks and Recreation

General Government Improvement Plan

Current projects – Funding sources are current capital reserve, grants, and pay go:

- 1. Ocean Isle Beach Park – Complete Spring 2019**
- 2. Smithville Park – Multi-Purpose Field, Walking Trail and Batting Cage**
- 3. Brunswick County Waterway Park – Bidding & In-House Construction Spring 2019**

Ocean Isle Beach Park Phase 2



Ocean Isle Beach Park Phase 2



Smithville Park Phase 1



Smithville Park Phase 2



Brunswick Waterway Park



Brunswick Waterway Park



Parks & Recreation Operating Capital Plan

1. **10 Year Comprehensive Master Plan - \$70,000**
2. **Shallotte Park Concession Stand/ Restrooms, Security Park Lighting & Paving Upgrade - \$485,000**

Parks & Recreation Operating Capital Plan

FY 18 Updates

- 1. Brunswick Nature Park Electrical Upgrades**
- 2. Navassa Park Concession Stand & Picnic Pavilion**

Coastal Events Center Proposed Property off Highway 211

- Prospective Planning for 823 Acre Track



2019

Preliminary General Government Capital Improvement Plan

Bill Pinnix, Director of Engineering Services

Current Courthouse Related Projects Underway

Courthouse Addition and Renovation

- a) Schematic design phase complete based upon space needs study
- b) Design development phase underway to prepare final layout drawings along with HVAC, electrical, fire, and plumbing plan sheets
- c) An addition is planned for the north side of the building along with renovation of existing building spaces
- d) Emphasis has been on increasing the space efficiency of the building to maximize usable space
- d) Project budget is \$11,201,550 inclusive of design fees - (funding source current capital reserves and pay go)
- e) Two items not in current project budget:

1) Existing HVAC chiller replacement

- Building was built with one 500 ton water cooled chiller (approximately 18 years old)
- Only county building with a chilled water system and cooling tower
- Chiller is significantly oversized
 - Existing building = 181 tons (36% loading)
 - Existing building with spaces renovated = 211 tons (42% loading)
 - Renovated building plus new three story addition = 253 tons (50% loading)
- No redundancy for backup operation in case of shutdown or failure
- Chiller is experiencing surging and vibration due to being significantly oversized for the building load
- Architect's mechanical engineer recommends replacement with two 253 ton air cooled chillers which would be correctly sized for the load, provide 100% redundancy for the building, and remove all of the refrigerant handling from the building which solves a safety issue
- Chiller operation would alternate to ensure even wear and aging of the units
- Estimated additional cost to the project is \$750,000

Current Courthouse Related Projects Underway

Courthouse Addition and Renovation –continued:

2) Structured data cabling for renovated building

- Architect is providing design and documents for the conduit, raceways, data rooms, data racks, cabling, and cable terminations. Equipment specification and installation is not provided
- Per standard procedure the county IT department will need to engage a firm(s) for all structured cabling installation, audio / visual installation, security cameras, door security system, video arraignment, etc., as a separate contract from the construction contract. This will include:

Fiber

Structured cabling (for both county and AOC services)

Copper (Fax, Alarms, Etc.)

Phones

Duress Button Alarm Systems

Security cameras with monitoring and recording capabilities

Wireless network

Network equipment (computers, switches, etc.)

Audio / Visual for all courtrooms

Video Arraignment – selected courtrooms

Door security system

- This structured cabling related items for the E911 Communications Center was approximately \$1,100,000
- The estimated structured cabling contract for courthouse items is approximately \$1,600,000

Current Courthouse Related Projects Underway

Courthouse Parking Lot

- a) Project is fully designed and permitted
- b) Project will be advertised for bidding late February
- c) Project budget is \$1,057,369 (currently funded)

Large diameter storm drainage pipe replacement

- a) Existing 48-inch corrugated metal pipe (CMP) is old and in poor condition
- b) Will be replaced with 48-inch reinforced concrete pipe (RCP)
- c) Pipe is critical complex drainage infrastructure – routes large volumes of water around our buildings and roads and discharges directly to the NCDOT culvert under Old Ocean Highway
- d) Part of pipe runs through area of the proposed courthouse parking lot
- e) Bid opening on 1/24/19 – low bid was \$143,523.75 for labor, stone for pipe bedding, dewatering, and other incidentals for pipe replacement – county is providing the new 48-inch RCP material

Complex Buildings and Renovation Study

Complex Buildings and Renovation Study

- a) Proposed study of older complex buildings and old Highway Patrol building area
- b) Goal is to evaluate existing buildings and spaces for needed space efficiency and renovations
- c) Will not include:
 - Administration building
 - Courthouse building
 - E911 Communications building
 - Law Enforcement Center building
 - Building L (garage and warehouse area)
 - Building M (law enforcement)
 - Building N (Cooperative Extension)
 - Brunswick County Schools Building
- d) Old Highway Patrol area proposed use is for Parks and Recreation Department long term storage needs and vehicle parking
- e) Study cost is estimated at \$100,000

2019

Preliminary General Government Capital Improvement Plan

Steve Stone, Deputy County Manager

Shoreline Protection and Waterways

Waterway Dredging Reserve \$200,000 ▪ Annual funding for 50% of estimated local share of routine Lockwood Folly Inlet maintenance projects.

In FY 19 \$410,000 was appropriated for funding for 25% of the estimated local share of a major project to dredge a 12' deep Lockwood Folly Inlet Ocean Bar navigation channel with a pipeline dredge vessel and provide and place approximately 250,00+ cubic yards of beach quality sand. A \$2,700,000 NC Division of Water Resources Shallow-Draft Inlet Grant has been tentatively awarded to the County to pay for two-thirds of the project. The County has been negotiating with a potential shoreline project partner to fund the remaining 75% local share and receive the sand.



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Kirstie Dixon, Planning Director

Action Item # 2. -
10:20 a.m. - Planning - New Comprehensive Land Use Plan
(Kirstie Dixon, Planning Director / Aaron Perkins, Parks & Recreation Director)

Issue/Action Requested:
Request that the Board of Commissioners receive information on a new Comprehensive Land Use Plan.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:
Recommend that the Board of Commissioners receive information on a new Comprehensive Land Use Plan.

ATTACHMENTS:

Description

- ▣ Comprehensive Land Use Plan PPT

2019 Planning

Kirstie Dixon, Planning Director

Planning

New Comprehensive Land Use Plan

- **Land Use Plans are community blueprints for guiding growth and development.**
 - Includes Future Land Use Plan Maps.
 - Creates community vision.
 - Demonstrates how resources will be provided in the future.
 - Describes how to reach community vision through development patterns, infrastructure, and programs.
 - Prepare and accommodate future growth.
 - Promote desired outcomes.
 - Land Use Planning Required by CAMA Act.
- **Brunswick County has changed since current plans were adopted.**
 - Brunswick County CAMA CORE Land Use Plan (2007).
 - Brunswick Tomorrow (2004).
 - Current plans not meeting the communities vision and needs as a lot has changed.
- **Estimated Cost: \$200,000**

Planning

The Planning Department and the Parks & Recreation Department proposes an innovative and cost-saving approach to land use and parks planning by joining their plan processes together.

Results in Better Plans

More Efficient

Shared Vision, Goals, and Data

Provide Cost Savings

Estimated Cost Savings of \$70,000

Plans Separately: \$300,000

Proposed Budget: \$230,000



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Kirstie Dixon, Planning Director

10:30 a.m. - Planning - Community Enforcement Update (Kirstie Dixon, Planning Director)

Issue/Action Requested:

Request that the Board of Commissioners receive information on the Community Enforcement Division.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information on the Community Enforcement Division.

ATTACHMENTS:

Description

- ▣ Community Enforcement PPT

2019 Community Enforcement

Kirstie Dixon, Planning Director

Community Enforcement

Balancing Citizen Complaints with Protecting Owners Rights while fulfilling Brunswick County's responsibilities to ensure Brunswick County is safe, healthy, and an appealing place to live, work, and play.

Positive & Proactive Approach to Enforcement

Education & Outreach Focus

Community Improvement Solutions (CIS) Program

Encourage Voluntary Compliance

Compliance Remediation Procedures

Next Steps Up for Discussion & Feedback

Target Specific Areas

Campers

Temporary Signs



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:

Andrea White

Action Item # 2. -
10:40 a.m. - Morning Break

Issue/Action Requested:

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Bob Shaver, County Attorney

10:55 a.m. - County Attorney - Legislative Matters (Bob Shaver,
County Attorney)

Issue/Action Requested:

Request that the Board of Commissioners receive an update on legislative matters.

Background/Purpose of Request:

Fiscal Impact:

Reviewed By Director of Fiscal Operations

Approved By County Attorney:

Yes

County Manager's Recommendation:

Recommend that the Board of Commissioners receive an update on legislative matters.

ATTACHMENTS:

Description

- ▣ 2019 Legislative Update PPT

Legislative Update

Bob Shaver, County Attorney

Session Details

- Session began January 30, 2019
- Deadline for Local Bills:
 - March 14 for Senate (to drafting by February 27)
 - March 28 for House (to drafting by March 6)

Deadline for Public Bills is approximately 3 weeks later.

Crossover deadline is Thursday May 9, 2019. The crossover deadline is the date by which most bills must have cleared the chamber in which they were introduced in order to be considered during the session.

November Election Impacts

- No veto-proof majorities in House or Senate
- Per NCACC: 23 former county commissioners in House and 6 in Senate
- 6 Constitutional Amendments on Ballot; 4 passed:
 - Voter ID
 - Right to Hunt and Fish
 - Victims' Rights
 - Max Income Tax Rate at 7%

Recent Bills of Local Interest

Meals Tax

House Bill 17 Local Option Meals Tax / Brunswick Co. Municipalities

<https://www.ncleg.gov/BillLookup/2019/H17>

Filed 01/31/2019 Iler, Butler

- + Would be one-half percent (0.5%) of sales price of prepared food and beverages sold within municipality at retail.
- + Can be enacted by municipality by resolution after public hearing
- + Municipality may enter into agreement with County to administer and collect the tax or may do it themselves.

Recent Bills of Local Interest

Rezoning Decisions

(not yet introduced – to be sponsored by Butler and Iler)

- AN ACT TO ALLOW FOR PLANNING BOARDS TO HOLD HEARINGS AND MAKE FINAL DECISIONS FOR ZONING AMENDMENT REQUESTS IN BRUNSWICK COUNTY AND MUNICIPALITIES LOCATED ENTIRELY OR PARTIALLY WITHIN BRUNSWICK COUNTY.
- The board of commissioners may, by ordinance, delegate to the planning board the authority to conduct the public hearing required under this Article and make the final decision on zoning map amendment proposals, including the adoption of a consistency statement pursuant to G.S. 153A-341. The board of commissioners may prescribe procedures for the public hearing that are not inconsistent with this Article. The planning board shall make its final decision by majority vote of the members of the planning board. Any person with standing may appeal a decision of the planning board made pursuant to this subsection to the board of commissioners by providing written notice to the county clerk within 15 days of the final decision. On appeal, the board of commissioners shall review the decision of the planning board de novo. If no notice of appeal of the planning board decision is provided to the county clerk within 15 days, then the decision of the planning board shall be final and equivalent to the final decision of the governing body. The board of commissioners may, by ordinance, rescind or modify any authority delegated to the planning board pursuant to this subsection.

School Construction

House Speaker Tim Moore proposes a \$1.9 billion [bond referendum](#). Governor Cooper supports the proposal, saying the bond referendum will not force cuts to other areas.

Republican Senator Harry Brown proposes using money from the State Capital and [Infrastructure Fund](#) (formed 2017) to fund capital improvements to schools. The fund currently receives 4% general fund tax revenue yearly.

S5 Building North Carolina's Future. 01/31/2019

<https://www.ncleg.gov/BillLookup/2019/S5>

Senator Rabon has signed on to Senate Bill 5.

School Calendar Flexibility

+ Has become the subject of numerous local bills

Current statute: Open no later than Monday closest to August 26; Close not later than Friday closest to June 11

Issues:

- Lining up school and community college calendar to ease enrollment transition.

- Being able to have winter exams before Christmas break.

- Winter storm impacts in western counties

- Tourism in coastal counties

Counties Seeking School Calendar Flexibility

Alamance

Anson

Caldwell

Catawba

Charlotte-Mecklenburg

Cherokee

Clay

Columbus

Davie

Duplin

Forsyth

Graham

Granville

Johnston

Macon

Moore

Johnston

Onslow

Person

Randolph

Richmond

Robeson

Sampson

Scotland

Wayne

Voting Sites

House Bill 24 **Ensure Student Safety at School Voting Sites**

02/05/2019

<https://www.ncleg.gov/BillLookup/2019/H24>

Change statutory authorization to use schools as voting sites to say local board of education “may, but is not required to, consent to use of a school as a voting place.”

Medicaid

House Bill 5 / Senate Bill 3 **Close the Medicaid Coverage Gap**

01/31/2019

<https://www.ncleg.gov/BillLookup/2019/H5>

<https://www.ncleg.gov/BillLookup/2019/S3>

Medicaid expansion. 37 states have already expanded Medicaid.

Expansion could cover 500,000 to 600,000 people who fall between the gap in qualification between Medicaid and the Affordable Care Act.

Expansion votes in NC have tended to stay along party lines.

Minimum Wage

House Bill 46 **Economic Security Act of 2019**

02/11/2019 <https://www.ncleg.gov/BillLookUp/2019/H46>

Raise the minimum wage in stages:

(2019 \$8.00) (2020 \$9.50) (2021 \$11.00)

(2022 \$13.00) (2024 \$15.00)

- + Mandate equal pay for equal work
- + Restore earned income tax credit
- + Repeal restrictions on public employee collective bargaining
- + “Ban the box” - no criminal history inquiry until conditional offer of employment

Last But Not Least

H30 A Bill to Adopt Ice Cream as the Official State Frozen Treat

H39 A Bill to Adopt the Osprey as the State Raptor



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Lyle Johnston, EMS Deputy Director

11:05 a.m. EMS - Community Paramedic Program Update (Lyle Johnston, EMS Deputy Director)

Issue/Action Requested:

Request that the Board of Commissioners receive an update on the Community Paramedic Program.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive an update on the Community Paramedic Program.

ATTACHMENTS:

Description

- EMS Community Paramedic Program Update

2019 Community Paramedic Program

Lyle Johnston, Deputy Director of EMS

Community Paramedics

- Partnership with Brunswick Novant Hospital
- Improved Healthcare for Selected Disease Processes
- Decreased Non Payment for Hospital Readmissions
- Initial Startup Cost: \$300,000.00
- Recurring Costs: \$225,000.00
- Functional Needs Program vs Community Paramedics



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Malcolm Smith

Action Item # 2. -
11:15 a.m. - Emergency Services - Hurricane Florence & BNP
REP Exercise After Action Reports (Malcolm Smith, Interim
Emergency Services Director/Fire Administrator)

Issue/Action Requested:

Request that the Board of Commissioners receive the After Action Reports from Hurricane Florence and the Brunswick Nuclear Plant (BNP) Radiological Emergency Preparedness (REP) Exercise.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive the After Action Reports from Hurricane Florence and the Brunswick Nuclear Plant (BNP) Radiological Emergency Preparedness (REP) Exercise.

ATTACHMENTS:

Description

- ☐ Hurricane Florence & BNP REP PPT
- ☐ Brunswick County Florence AAR
- ☐ Brunswick County BNP REP Exercise AAR

Hurricane Florence After Action Report

Malcolm Smith - Fire Administrator/ Interim Emergency Services Director

Continued Improvement & Evaluation Process

EnviroSafe, Inc. was selected to perform a comprehensive After Action Report for Brunswick County after Hurricane Florence.

Stakeholder Meetings

Stakeholder meetings were held with different groups to receive feedback on the different aspects of response and recovery to Hurricane Florence.

- What Went Right/Worked
- What Went Wrong/Didn't Work
- What can we do better and what needs to be changed or improved.

Recommendations

- Additional attention and emphasis is needed to emergency sheltering operations and managing local emergency shelters, as well as planning and preparedness for emergency sheltering.
- State emergency plans should be revisited with regard to sheltering services; local solutions should be sought.
- Plans and training protocol should be revisited to ensure all personnel are proficient in their area of support.
- Continuity of operations plans were tested by this event and should be revisited and adjusted to manage through storms of this magnitude.
- Enhancements to coordination of public information, particularly with utilizing a joint information center (or JIC) were identified.
- Staffing levels and dual role responsibilities of emergency operations center (EOC) staff was also identified as a core element needing attention.

Improvement Plan

- The After Action Report has provided a template and a start of an improvement plan based on the information received during the stakeholder's meetings.
- A more comprehensive plan will be developed to address the short, medium, and long term goals needed for improvement.
- This plan will need to be a collaborative effort from all of the stakeholders involved.

Brunswick Nuclear Plant Radiological Emergency Preparedness Exercise After Action Report

Exercise Date: July 31, 2018

Malcolm Smith - Fire Administrator/ Interim Emergency Services Director

Bi-Annual Exercise

- Route Alerting
- Waterway Warning
- Medical and Hospital Plan
- Evacuation and Collection Point at North Brunswick H.S.
- E.O.C. Activation Exercise (Relocated E.O.C. to Leland Cultural Arts Center due to E.O.C. HVAC Project)

Exercise Report Conclusion

- All five exercise objectives were met and no level 1 or 2 findings were noted.
- Continued Training and Evaluation of Personnel.
- Continue Planning and Training with all Partners.



Brunswick County, North Carolina

Hurricane Florence Response
After-Action Conference
After-Action Report
October 30-31, 2018
December 3, 2018



EXECUTIVE SUMMARY

On October 30, 31, 2018 and December 3, 2018, Brunswick County, North Carolina sponsored several after-action conferences to review the area's jurisdictional response to Hurricane Florence. The conferences were conducted in Bolivia, North Carolina. EnviroSafe provided an evaluator and a scribe to facilitate, document, and otherwise staff this conference. Participants were asked to provide their opinions on Hurricane Florence response operations within the context of several designations: what went well, areas for improvement, training needs, equipment needs, and other [items for consideration]. These participant statements are organized in Section Two of this report by emergency support function and priority.

Several recurring issues were identified and discussed by participant groups during the conference:

- The most significant feedback centered on emergency sheltering. Additional attention and emphasis is needed to emergency sheltering operations and managing local emergency shelters, as well as planning and preparedness for emergency sheltering.
- State emergency plans should be revisited with regard to sheltering services; local solutions should be sought.
- Plans and training protocol should be revisited to ensure all personnel are proficient in their area of support.
- Continuity of operations plans were tested by this event and should be revisited and adjusted to manage through storms of this magnitude.
- Enhancements to coordination of public information, particularly with utilizing a joint information center (or JIC) were identified.
- Staffing levels and dual role responsibilities of emergency operations center (EOC) staff was also identified as a core element needing attention.

Each county department and partner agency participating in the conference should be commended for their continuous improvement efforts to prepare and plan for a severe weather event in their jurisdiction. The county's willingness to permit third-party facilitated discussion on existing processes and systems demonstrates a forward-looking approach to preparedness, and a genuine commitment to provide the most up-to-date, effective programs for citizens of, and visitors to, Brunswick County.

The conference conduct resulted in a productive discussion, with response agency and local municipal leadership sharing their own observations regarding strengths and areas for improvement. The discussion was a collaborative effort, resulting in several example processes

that worked well within the context of response and preparation activities before, during, and after Hurricane Florence. This after-action report (AAR), when compared to previous and/or future AARs can be used to aid in plan development, training practices, and conference practices to achieve Brunswick County's objectives, goals, and listed core capabilities.

HANDLING INSTRUCTIONS

1. The title of this document is the *Brunswick County, North Carolina Hurricane Florence Response After-Action Conference After-Action Report*.
2. The information gathered in this After-Action Report is For Official Use Only (FOUO) and should be handled as sensitive information not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from Brunswick County Emergency Management or EnviroSafe, Inc. is prohibited.
3. At a minimum, the attached materials will be disseminated only on a need-to-know basis and when unattended, will be stored in a locked container or area offering sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.
4. For more information, please consult the following points of contact (POCs):

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SECTION ONE: HURRICANE FLORENCE INCIDENT SUMMARY

General Timeline

September 1, 2018	A weather system develops into a tropical storm in the Atlantic Ocean, over the Cabo Verde Islands, off the coast of West Africa, and is named Florence.
September 4, 2018	Tropical Storm Florence develops into a hurricane with maximum sustained winds of 75mph, becoming the third hurricane to form during the 2018 Atlantic Hurricane Season. By the end of the day, Florence has strengthened into a Category 2 hurricane with maximum sustained winds of 100mph.
September 5, 2018	Hurricane Florence develops into the first major hurricane (Category 3 or higher) of the 2018 Atlantic hurricane season.
September 6, 2018	Hurricane Florence weakens back into a tropical storm.
September 9, 2018	Florence strengthens back into a hurricane.
September 10, 2018	Hurricane Florence quickly grows into a Category 3, then Category 4, hurricane with maximum sustained winds of 140mph. An emergency declaration is made by the federal government in advance of the storm impacting the Carolinas.
September 12, 2018	Hurricane Florence weakens into a Category 2, reducing speed but remaining a large storm.
September 14, 2018	Hurricane Florence makes landfall near Wrightsville Beach, North Carolina as a Category 1 hurricane at 07:15am Eastern time. It is moving a 6mph with maximum sustained winds near 90mph. The storm's advance slows to 3mph, weakening into a tropical storm.
September 15, 2018	Florence is approximately 350 miles wide and drops record amounts of rain throughout North and South Carolina. Wind speed has dropped to 45mph.
September 16, 2018	Florence has inundated parts of the Carolinas with as much as three feet of rain between September 13-16, 2018.

September 17, 2018	River and surface flooding continues, making impassible some 1,200 roads in North Carolina. Tornadoes have developed across North Carolina and Virginia, as the storm further weakens into a tropical depression.
September 18, 2018	Florence is downgraded into a post-tropical cyclone, sustaining winds of just 25mph.

Additional Impacts

- At least 51 people died during, or as a result of, the tropical system.
- Florence is preliminarily considered the wettest tropical system to impact North Carolina.
- Preliminary damage estimates from the storm total \$13 billion.
- Nearly 800,000 people were left without power across North Carolina.
- Nearly 20,000 displaced persons sought temporary housing in shelters across North Carolina.
- State and Federal Emergency Management resources continue to operate recovery centers in North Carolina nearly a month after the storm.

SECTION TWO: CONFERENCE SUMMARY

This section contains a list of participating agencies and departments, and a general summary of the conference discussion. The conference included three days with three morning sessions and two afternoon sessions. A respective summary is provided for each, along with a list of participating agencies that documented their attendance on the registration forms provided.

Emergency Operations Center Session October 30, 2018

Participating Agency/Department

Brunswick County Manager
Brunswick County Emergency Medical Services
Brunswick County Emergency Services
Brunswick County Public Information Officer
Brunswick County Sheriff's Office
Brunswick County Parks & Recreation
Brunswick County Utilities
Brunswick County Department of Social Services
Brunswick County Schools
Brunswick County Health and Human Services
Brunswick County Attorney
American Red Cross

IMPROVE – LONG TERM: LOW PRIORITY

Utilities – Pre-position resources in areas that are likely to be isolated
Supplies for EOC – Paper goods, coffee, food
Human Services – Equipment needs; power support for shelters; also lift stations – Generators
Communication throughout the system
Command & Control Security & housing of staff responding

IMPROVE – LONG TERM: MEDIUM PRIORITY

Plans Section – Structure of conference calls; too many non-group concerns from participants
EMS – equipment needed – better down time areas for crews working long shifts
ESF-8 – Need large emergency services building with more space, include larger EOC, storage & Admin space.
Public Info Officer in the EOC
More resources personnel, equipment
Utilities – Fuel Storage at key facilities
Infrastructure Operation Services – Morning briefing could not be heard @ the phone bank

ESF-8 – Disaster response roles and training for all county employees

ICS Training all depts

EOC Management – Need more buy in on trainings for exercises: partners – WebEOC, Crisis track

EOC table top exercise – annual

IMPROVE – LONG TERM: HIGH PRIORITY

Portable shower facilities more readily available; Temporary laundry facility brought in – would be helpful (roads out)

Command & Control – Training needed; Dealing with facilitating private donations & volunteers.

IMPROVE – SHORT TERM: LOW PRIORITY

Training – High clearance vehicle drivers in Sheriff's Office

ESF-9 – Not enough storage area for supplies

State event channels for mutual aid agencies

IMPROVE – SHORT TERM: MEDIUM PRIORITY

Fuel for generators at Shelters

Generators outside assets identified

Public Info – Need backup PIO

EOC Management – need better logistical tracking; Equip/Crews; Fueling accountability

EMS – need better communication between different agencies

Departments need to work together; i.e. sheriff's office, emergency services, fire, need unified command

Functional needs – Improvement; better patient tracking system

Communication to citizen phone bank needs to be improved. This group often gets info late, if at all, making it difficult for accurate info to be shared with the public

Plans – Identified EOC employees for phones, etc.

IMPROVE – SHORT TERM: HIGH PRIORITY

Utilities – spacing/staffing areas in EOC

Command/Control – Local WebEOC did not work as well as one would hope, need new and revised boards

IMPROVE – ONGOING/UNRATED

Food supplies-house keeping

Utilities – Improve living arrangements for volunteers

EVENTS THAT WENT WELL - SUCCESSES

Human Services – Excellent support from EOC for shelters

Infrastructure – operation services – Road closure map (needed updating as roads re-opened

Utilities – communication with sheriff/highway patrol on traffic and road closures. Enabled deployment in critical needs areas

Command & Control – established relationship

Command & Control – We had very good coordination for all activities with all partners
Command & control – our search and rescue operations went well; commanded & coordinated
ESF-9 – Pre-planning staging personnel and equipment
Forward IC area – i.e. Brunswick plantation
EOC Management – everybody helped and worked together (need ways to bring in additional county staff to assist)
EOC Organization and Operations – communications
Communications – Support Strike Teams (military)
EMS – our EOC seemed to be calm and focused during the event
ESF-8/6 – Response of county administration for closing and opening the EOC
ESF-9 – Resources from other agencies helped
Human Services – collaboration & Communication between HD/DSS/Schools
Human Services – had all of the right people to accomplish tasks here in EOC
ESF-6 – Partnership between American Red Cross and DSS to help shelter residents develop post disaster recovery plans to close shelters relatively quickly
Use of social media to pass along info – to community; Officers in the field getting photos to P10 – people stayed put or evacuated
Resource personnel readily available; task force, strike teams, National Guard, etc.
Social media presence & communication
Liaison in EOC to help pair up and dispatch swift water teams
Response time due to placement of 4x4 teams, high clearance
Plans section – having off site team members with power and internet
Coordination of SoEs and amendments

ADDITIONAL NOTES

Brunswick County during the storm turned out to be 4 islands
911 center failure
The current radio Tower could fall on EOC
All infrastructure being reviewed – following are not hurricane hardened
 911 Call Center
 EMS Facility
 EOC
Server redundancy off site – for entire government complex
Planning function by New Orleans' group by IMT
Incident command & EOC Mgmt. – two separate things – getting the right people to fix an issue
Workload was harsh at times on the County PIO – Sheriff and Schools did their own PIO
Employee EAP needs to be available post critical incident
Aging fleet of ambulances
Generators for infrastructure
Physical cut off of the county, so Showers, generators, and nurses were blocked by water – they were sent to other areas, Bladen, Goldsboro and Brunswick was not told of status by state EM

Brunswick County, North Carolina

Hurricane Florence

DRAFT 1 - After-Action Report

Major delay in nurses being flown in; more air support/ better priorities; could not access resources, got resources out of SC more than NC

Need for Plan A, B, C

Hampered to stage resources prior to hurricane

The four islands – Leland, Bolivia, South End, & [REDACTED]

We know that the “First 72 is on you” – however in this storm, we were in the storm the entire first 72 hours

More than flooding major roads – this storm took out roads which was not typical for Brunswick

Specific weather briefs for Brunswick worked well – best practice

Use microphone on morning briefings and do a notes sheet from briefing

Phone bank morning briefings

SHORT TERM Needs improvement

Need more space for public utilities

Pre-determine resources prior too incident. H2O tankers: In flooding County usually splits into 3 islands, during Florence, county split into 4 islands

LT – Not enough resources for 4 islands; it’s not a cost issues it’s a gathering issue – Equip & Staff was insufficient – what’s the plan to mobilize staff (Short-Term) – Safety issue – where can people be? Mandatory evacuation vs. having staff there prepared for the aftermath.

Time of the hurricane arrival – protective actions; pre-procedures went well and were what they were; Evacuation in day light hours; sheltering – evacuation early; bobbled on what to tell staff; CRES plan is to have no local shelters open – HAD to open shelters

Issue – Homeless – individual organizations have their own plan – close shelter; wrap around is – Adequate? But improvements are needed, message to the public went well

TRAINING

Disaster roles: Employee training

County Trainings? Available – 1 or 2 offered throughout the year

It may be offered but do all agencies require it?

Buy in- ICS 300/400 should be required if agency is part of the EOC

Issue – many have completed, but there are no refreshers

County Employees – what is my role in a disaster?

Role – Daily vs. Disaster – should differ; and should be identified up front (day of hiring); most county employees are dual trained have dual roles, should that be the case in a disaster situation? Can anyone do multiple roles well during a disaster?

Operations/roles/functions

Operations - If everyone had one role there wouldn’t be enough space or room or people to perform (Issues is Long Term medium priority – ongoing)

Donations Management – overwhelmed with the help/supplies while in rescue mode – county needs a plan in place (Long Term High Priority)

Equipment – future training is needed – High Clearance vehicles – additional support needed; relieving county High Water Vehicle drivers (Short Term)

EOC

Room infrastructure

13 days the EOC Ran

The room – 35 people in the room is crowded; the supplies (Future Long Term)

The facility – One shower for each gender; is it safe for a category 4 or 5 (Not a hurricane rated building; not a hurricane ready tower); restrooms; heating/AC; building in a flood plain (both long and short term needs and solutions)

Operational Periods

12 hour shifts for the most part

Went well - New Orleans: Forestry assisted – they fell into county procedures

Unified command – EOC Management (firefighting) successful; fixed issues

Infrastructure – no showers in main building; phones failed; wireless; communications failed – for first responders – 911 center failures; but it did roll over as it should have; 911 had water and roof damage/server room (Short Term High Priority); Saylor services-Verizon went down – 911 center is hurricane rated (Built to code) – captured needs but need action

Operations – Breakout rooms – for Incident Management Team

Incident Management Team: EOC: Dormitory (Long Term – dedicate breakout)

Staff safety – High Priority

Public Affairs

Evacuated out of area but had communication within county; it's only one person-need multiple people – Info funneled through the Sheriff – some school – County is strictly county – no sheriff or school – need coordination with each other

Mental Health – need to let county know how to access it

An unanticipated public affairs issue that emerged was directional information. Brunswick finding routes into their county became a huge issue for outside resources to get them into the county

Security

Sufficient Law Enforcement - everyone was activated and doubled up @ EOC and shelters – brought in outside after so many days

Educate Public – prior to disaster as to their roles/responsibilities; information to them – so they don't clog the phones

Phone bank couldn't hear updates during morning briefings – they could help prescreen – level of messaging-simplifying – maybe create a memo for the phone bank with updates

Public Utility needs more space

Resources: Equipment

Business Normal – yes, they have enough in numbers, but the condition is not up to snuff – ambulances

The number matches what they need, but they are various states of age

Generators

Fuel

Technicians – high level of need

Prioritize resources coming in (Long Term)

Portable showers - got them but they didn't get to Bolivia-EOC-until much later

Extra Nurse – were on the way but didn't get to them until the following Thursday – Communication was a huge issue with the state - needs improvement

Extra firefighters were flown in – would not fly in nurses until much later

State Fuel Plan – holes – County had to go outside of State plan in order to find fuel

Won't get resources until it's too late – plan to stage prior to – 4 islands

Logistics

Directly delivered vs. sorting out

Warning for flooding was good

The actual damage of roads was what caught people off guards

Communications

Emergency system: Brunswick: Viper went down for a while – old radio system – not very good

Communication was limited but still there

Cellular went down – emergency number call volume went way up

Need a separate number for those who wanted to help – coordination line

Patient Tracking

EMS – electronic tracking

Shelter – no tracking, but needs to go to the Electronic tracking

Need to improve system

The county growth is growing faster than the current system can handle – accountability is a need

WebEOC – have the site-need specific (Long Term ongoing – annual just in time – refreshers)

Shelter Services Session October 30, 2018

Participating Agency/Department

Brunswick County Manager
Brunswick County Emergency Medical Services
Brunswick County Emergency Services
Brunswick County Public Information Officer
Brunswick County Sheriff's Office
Brunswick County Parks & Recreation
Brunswick County Utilities
Brunswick County Department of Social Services
Brunswick County Schools
Brunswick County Health and Human Services
Brunswick County Health Services
Brunswick County Attorney
American Red Cross

CONCERNS:

Note: The group identified the ALL of the following areas as LONG TERM – HIGH PRIORITY needs and issues:

Infrastructure

Equipment needs – Need full back up generator power at all schools used as shelters; with fuel supplies; coordination beforehand on critical support needed outside of the “normal” utility priorities (4 comments)
More cots pre-set at shelters
Ensure all shelters up to code
Adequate shelter buildings for storm forecast
After even housing for help
Shelter operations with supplies, etc.
Shelter locations for 1st responders; supplies & safety
Need a lot more Durable Medical Equipment – wheel chairs, walkers, etc.
Pre-landfall shelters do not have cots – as the goal is to shelter as many people as possible for lifesaving purposes – so being deliberate on when we open shelters would help shorten the time residents are without cots

Human Services

Planning how to close shelters (so schools can open again)
Have a plan for what is needed-how it gets there; when it is needed
More resources needed to meet needs of special needs
Need clearly defined responsibilities/roles between shelter partners
Communication distribution of effort

Need EMS staff stationed within shelters

Need local assists that can be deployed to the shelters before the shelters open

Need more robust staffing for shelters – nurses, etc.

Special Needs/PETS

Transportation of special needs personnel – instead of picking up one at a time (how do we get these people to decide)

More nursing staff for special need

Should revisit shelter special needs in general – shelter vs. dedicated special needs shelter

O2 dependency is not a special/functional need if they take care of themselves on a daily basis

Donations to shelters

Need for mental health staff in shelters

Sheltering for pets

Pre-arrange space for animals

Shelter for pets for 1st responders

Planning

Pre-plan map/designation area of shelters

Planning for shelter space utilization in advance

Coordination with American Red Cross on the Brunswick County shelters protocol

Pre-plan for shelters – map/designates areas

Need a tool to capture who is in the shelter – database

Communication

Communications at shelters

Accurate communication with shelters – what resources they had, who was there, what they actually needed

Welfare checks of homes for folks at shelter

Training

Planning sheltering – practice exercise (Tabletop) Animal; when real-life event might occur, plan for opening ahead of execution

No electronic roster of shelter residents

Better training on dealing with minor medical issues in the shelter

Who is in charge at the shelter?

Shelter management training

Additional training beyond annual ARC training for shelter staff

Live Electronic tracking system of evacuees

POSITIVE OUTCOMES:

Notifying sex offenders of procedures
Communication regarding opening shelters
Multiple pet friendly shelters
Implemented video remote interpreting devices into shelter
Having paramedics @ shelters when grounded

Need

Green – good practice

Red – Improvements needed

Was to ID by NCEM Garner was shelter but Wake determined to not open Garner
LJVM & Friday center openings were not conveyed to Brunswick

NCEM Actions & lack of communications have produced a lack of confidence from Brunswick County Government

Need NCEM Debrief/correction

Schools that are shelters need whole school generators. Have 1 (West Brunswick) school with a generator but it is old and needs to be replaced
Generators need to run on natural gas – other generators are partial only
Generators are needed to pull all HVAC equipment and pump stations (High Priority – logistics)

Special needs population – shelters are high demand on services – dialysis; EMS took a much larger role; no private providers; some help from 3 rescue squads

We can survive well for 1-3 days what gets almost impossible is sustaining that second 3 days
Hospitals sent people to shelters (PAs & LNPS) and that was very helpful – a future best practice
Health department staff is not trained to handle medical emergencies

Need to work on having signed standing orders

Brunswick only county to use FAST team

Mental health workers were needed in shelters. Just because workers are DSS does not mean that they are qualified

All County Employees need a disaster role and duty – cross training

Management of shelters – folks from other states don't have local knowledge-local leadership needs to be in place

Pets have worked ok on storms, but not on a storm this magnitude

County had a designated shelter for sex offenders and contacted them before the storm

Infrastructure

Primary – utilized high schools: one on each island

Partner with schools – custodial, kitchen, school staff

Secondary – Middle schools

Close proximity to Primary

West Brunswick High always opens first – medical/special needs; pet friendly – they have a generator that will power entire school plus HVAC – 1st to open and the last to close

Security – SROs already in the high schools

LT – Function well? Improvements needed

IMMEDIATE – Generator power to all facilities

Adequate facilities – both for public & those helping

Will it withstand? – all facilities

Principals at school will dictate which rooms can or cannot be used

Generator – West Brunswick’s generator failed, but they had an electrician on site; need generators at all shelters that run off of natural gas

LT – lack of adequate conditions; HVAC systems aren’t run off 3 of the 4 generators; Educate public who need O2 to have extra bottles with them

Those in Hospice – not considered special medical needs

Pump system is not connected to generator – had to have it staff continuously

Shelter plan – logistic section to cover and capture

CREST Plan – Did not work

Been proven to fail

Public perception – public officials

Once shelter was opened in Brunswick – the CREST Plan was out the window – people will NOT go out of town/county

Regional vs Coastal

Wake County

Sent one thing out – verbally told another

Lack of communications about other county shelters opening

Monday – Wednesday the week of....

CONFIDENCE/TRUST IS LACKIGN AMONGST THE OTHER COUNTIES

LACK OF CONFIDENCE BETWEEN COUNTY AND STATE AND OTHER STATES

They were already behind on Monday in making decisions. By Wednesday all 3 shelters were open – Released staff inland more than potentially keeping staff to assist – safety?

Will people go?

CREST Plan – county man’s shelter out of the county – had to transport residents to out of county shelter

Equipment

Medical – beds, wheel chairs (LT high)

Staffing:

2 nurses @ each shelter – Health department – all hands-on deck – 48 hours no relief

16 RNS, 3 CNS – level of care; challenging; EMS very supportive – 7 days on

EMS had to become facilitators

Brought in extra staff

7 trucks are 24 hours; 3 trucks are 12 hours

Only 1 non-emergency transport

3 local squads assisted – but still overwhelmed

Overnights

Very good at sheltering for 1-2 days

Biggest struggle – length of the shelter being opened

SHOULD BE BEST PRACTICE – hospitals sent mid-level providers (From the clinics) – PAs and LNP – helping and taking a load off the EMS

Health Department Nurses need directives and cannot just administer care

LT – create protocol where MES can direct public nurses; adjustment of current protocol: Director gives Directive

Mental Health needed @ shelter

Evacuation and bring staff back

All county employees need to be a part of the disaster relief

Cross training amongst all county employees

Lack of local resources

Local - out of town help don’t know what to do/how to do it and local needs to bring the leadership – clarity & consistency

Equipment – Cots, blankets, hygiene kits

LE

SROs are able to support shelters – 24-hour presence at shelters

Volume was the issue

Problems were brought into the shelter – but they got through it

Released the last shelter week before last (The week of October 15)

LE Handled the animal piece

Issue – space (500+ animals) – West Brunswick did not have the room or the permission to use rooms

LE Called sex offenders prior to the storm to let them know what they could/couldn't do

Preplanning improvements

ID generator locations

People placement

Principal involvement

School map (highlight where they could or could not go and what goes where)

Set up of the rooms being used prior to getting people into the rooms

FAST teams: functional, accessible

Functional medical vs. special medical – protocol and plans need to occur

WENT WELL

Communicated and problem solved

All shelters were pet friendly

Not a problem – 2-3-day sheltering

IMPROVEMENTS – long term sheltering

PARTNERS

Positive Communication

Ability to monitor status of town “Virtual” w/ WEBEOC/hurricane Evac/ Email/even during evac/communicate with residents

Public information was distributed well and in a timely manner

Off-line communication response – town management

Conference calls were informative, but needed more info on which roads were clear/blocked; although this may have been difficult to accomplish

Road closure map on county website provided the most accurate information available to route traffic through the county

Coordinating conference calls went well

Debris management

Weather updates/briefing – went well

Embedding of a liaison officer EOC during storm allowed facility to stay informed during the storm

Communications with town – conference calls; emails; briefings

EOC phone conference well-coordinated with good information

Positive Teamwork

LE good front line teamwork

24-hour coverage within town with personnel

Sheriff department was spot on for assistance in the field

Fire dept/POA immediate response to blocked roads with trees down/roads washed out

LE Team work between agencies

Good cooperation between/among town/POA/FD/EM team

Backup telecommunications – continued operations after loss of ISP/telephone services – BSL Admin

Man power resources to work emergency – BSL Admin

FEMA Support US&R

Hospital decompressed their patients for discharge or transfer to inland hospitals allowing patients during storm period to have local care

Radio System

Bad – radio system;

Bad – lack of high clearance vehicles

Bad – VIPER System was unusable in our area

Training

Training on how to make requests for assistance during disaster

Better understanding of alternative communication systems

Recommend yearly refresher course on WebEOC

Need more buy-in (including training) on programs used in disasters from locals – Crisis track – damage assessment

Outreach to homeless

Office management needs to be trained in interpersonal communications with public

Resource Management

Town management

Needs improvement - Resource request – mission tracker board on WebEOC

Understanding of where resources come from and how to request them

Recovery efforts and coordination with non-profits – did BFA (Brunswick Family Assistance) receive appropriate support or were they fully prepared? (Donation management)

Shelters

Accessibility (road) to shelters
Performance of hospice in providing shelter for clients
During mandatory evacuation difficulty with Identifying # residents who stayed
Conditions at shelters
Communications hurdles – no cell service or internet (LT High)

Coordination/WebEOC

Municipal interaction with WebEOC was not what it should have been – Partners not able to place resource request EOC not able to track request
Questionable coordination between police and EOC
County WebEOC did not provide a total picture of what was going on in the county for partner agencies
Coordination between the 3 islands and support from central EOC for those islands
Shallotte Fire/Rescue and BCEMS staff had difficulty developing strategy with EMS base #2 in Leland
Some agencies going rogue during response
Web EOC resource request coordination tracking, push to state/fed more timely
LE – pre-staging of resources – when areas become islands

Communication

NOT WELL – Bridge reopen procedures
EQUIPMENT FAILURES – Communications; internet, phones
Process for Media
Communication systems
Outside political interference to County EOC
Communications (timing/#of conference calls) – Reference NWS – Adjust separate meetings to NOAA
Finalize
Improve communication with neighboring towns with resources that could be shared
NOT WELL – planning – forgot to order; overwhelming additional resources early in the event

Municipality Session October 31, 2018

Participating Agency/Department

Brunswick County Manager
Brunswick County Emergency Services
Brunswick County EMS
Town of Shallotte
Ocean Isle Beach
Sunset Beach Fire Department
Town of St James
Town of Leland
Boiling Spring Lakes Police
Boiling Spring Lakes

Introduction/Background

Radio Communication Infrastructure:

Equipment failure occurred.

Intermittent outages.

VIPER went down at some point.

Generators at towers ran out of fuel – not designed for the duration of time.

Disaster Communication:

County is too large and diverse to have a county-wide resident communication with 19 municipalities and 22 fire departments.

Need to share equipment and resources such as dump trucks with adjoining towns – asset inventory not well known to each other or to the county.

The county asks for resource needs, but towns to towns do not have that kind of regular communication – would require funds and staff to work on building the resource board within Web EOC for improved coordination.

When towns make a request to the county for a resource through WebEOC, we need to know if we CAN or CANNOT get the resource. If we cannot get the resource, we need to find another resource. If we are waiting on the state for an answer, just say so.

Formal agreement is needed before resources are sent – statewide mutual aid agreement can be referenced by the municipality.

Daily conference calls at the EOC - There were 13 per day. Calls take a lot of key staff time. County to see what more capacity can be added to the weather service briefings for municipalities. Most of the weather information is on the slides anyway. Some feel the weather calls don't communicate much new

information, re-hash of information. Maybe not opening the call up to everyone would be more efficient use of time. Focus calls on new information and specific local Brunswick issues.

Road Infrastructure:

We were unable to tell people how to get back home due to road closures. Concern that during the next emergency, people will not leave next time because of the bad experience this time.

Road closures were very dynamic and ever changing. The NCDOT TIMS system had data, but it would change every 15 minutes and the system couldn't keep up with the changes. It was not very accurate, and people lost confidence in the system.

EOC could update Brunswick road map and the county pushed it back out on the county web site. However, there was not a link to help know status outside of the county.

Shelters:

Conditions of shelters were not good.

Need for medical care for special needs – EMS not set up to handle special medical needs, including Hospice and dialysis. Hospice needs to be at the table.

Nurses from health department were not trained to do what was needed.

Coordination:

Stronger support is needed when the county is divided into three islands. We were very cut off from everything.

Infrastructure for emergency services facilities was damaged heavily or cut off and required re-location. Typical resources were re-located therefore adverse impacts in service delivery. A plan should be developed for Plan A, B, C for housing of EMS units. Using municipal fire stations should be a part of the plan.

When becoming an island, if EMS has pulled out – we have no advanced life support.

Guard crews responded out of the main EOC which at times were inefficient. Field or sub EOCs could have been helpful IF conditions would have allowed.

Electronic board showing the status of the municipality needs to be kept updated better and show when the last update was posted. Enable Towns to update primary street closures. Maybe link municipality Facebooks as the most timely and simple method to use.

More use of CodeRed and Nextdoor and other social media should be promoted by all.

Could have also used the school system notification system to help push out data and information.

Brunswick Family Assistance (BFA), a non-profit, got supplies and goods out to people. By all accounts, they performed very well. The County selected them to manage donations. The County's donations management plan needs to be re-visited, and re-written. The County Volunteer Coordinator is identified in the plan to manage this aspect. However, the County has not had a volunteer coordinator in five or more years.

Training:

Frequent WebEOC training is needed or made available. Passwords are forgotten and just in time training should continue.

Training is touched on in Hurricane briefing.

Outside support personnel can be used more – if they can get into the county. Preparations of helicopter flight for personnel would be the alternative.

Non-Profit Session December 3, 2018

Participating Agency/Department

Brunswick County Fire Administration
Brunswick County Emergency Services
Calabash Fire Department
Brunswick County Emergency Management
Habitat for Humanity
Brunswick Senior Resources
New Hope Clinic
Brunswick Family Assistance
Brunswick Transit System
Brunswick County Health and Human Services
Brunswick Baptist Association

IMPROVEMENTS NEEDED:

EMERGENCY SERVICES

ESF-4 – Lost total communications at one point – no radio, no phone, no computer; EMS – staging all ambulances at a central location and shutting down services at 2100 hours – no fuel supplied to FD for trucks or generators.

County was divided into 3 different areas due to flooding; need to capture this in GS for future.

Some agencies operated as individual agencies vs working through the EOC.

County should consider tabletop exercise that involves non-profits.

Lost communication, email, phone, radio to some areas of county.

SHELTER

CRES did not work; ARC caused numerous challenges; need to work on plans for in house sheltering plan.

Shelter support (Duration of event) – staffing, supplies, options for after main event.

Disappointed in the American Red Cross; county needs a shelter plan (using local agencies) without the Red Cross. Red Cross didn't come to our aid.

New shelters; maybe better locations – need for facility upgrades (generators) to support more localized efforts – expansion.

Physical supplies – clothing, medicine, blankets, cots, wheelchairs, walkers, etc.

Additional special needs (wheelchair) access transportation.

Fully utilizing wheelchair equipped vehicles (placement and use before/after event).

Infrastructure – transportation.

High Priority – mobilizing vehicles (public) for transporting people to/from shelters beforehand so they could be accessible.

PLANS

Need a plan to assist with resources before the storm; many left for the storm and were not able to return. They system that resources were handled through needs improvement equipment, communications.

Communication to organize needs to improve; needs more training in Emergency Management and resource distribution; cooperation between agencies, department.

Need a long-term recovery plan for the county that involved non-profits; need training: Need NIMS/ICS training; Perhaps give agencies WebEOC training and permissions; A VOAD would solve many of these problems.

There was no defined “relief” plan. We need to have a clear written plan on what is to happen after a storm & who is responsible for what during recovery efforts.

Define available resources that can be used for relief efforts; need table top exercise involved VOAD and Non-profits.

SUPPLY DISTRIBUTION

Recovery supply of distribution coordination; many efforts duplicated; sometimes wrong supplies for time Development of plan to direct distribution of items/supplies for individuals and families immediately following incident – the implementation of furthering planning for phase II.

We need distribution points probably 5 already set up with some supplies (not all) so we can assist our residents with water, food, etc.

Need few prearranged distribution sites; planning for the relief and recovery efforts; prearranged agreement on executables.

Distribution mgmt.; supply chain.

DONATIONS

Initial handling of donations was confusing.

Use or utilization of volunteers (management) Need for VOAD; distribution of donations & Funding.

Fund raising efforts.

COMMUNICATIONS

We need more clarity about each other’s roles – a clearer process for communicating with non-profits.

Post Florence communications could have been better. Having conference calls similar to those pre-Florence could have improved this.

Support agencies have not felt the need to participate in NIMS training; even free 100, 200 level. Any agency that is part of the system should be receiving this training. Some agencies never been asked to this before.

Need better communication with Human services agencies – post storm; a lot of good work going on but EOC not informed; prevents us from sending those who contact us to the agencies (not local agencies, the outside response).

Communications between public and agencies – Ad hoc not setup to deal with number of volunteers.

Generators for the Senior Centers.

Calabash, Leland, Shallotte, Southport, Supply

GENERAL COMMENTS:

Shelters – working of the shelters: needs after – transportation, healthcare; food; supplies.

Explanation to non-profits = ongoing education to learn = plain codes across the board.

Pets showing up – a problem.

Communications: Post communications – clarity of roles, EOC not informed prevents us to assist.

Conference calls: Correct people on it?

Set up/where are the working from/ where to send people asking for assistance? Checking in? Are they checking in with other agencies?

Feeding unit: For Red Cross – 8 sites set up EOC could not advertise due to duplication of services

How to help County Employees understand what they can do to asset.

Outside group did not understand the problems in Brunswick so Wilmington got the publicity

Meals are still needed, but seemed to not be able to communicate to public

Baptist Association – gaining access for a non-profit was extremely difficult: 1 week after hurricane – referred to 3 people: then just calling in to get someone

Not set up to work with non-profit – Ad hoc decisions were made – field experience

VOAD – a mechanism to filter and foster need formalized organization that will encompass all other non-profits

When 911 system went down, a big problem.

Ad hoc hurricane Florence FB page – Habitat Administrator – posting information from EOC page.

Formalize shortcomings, etc. – bring all non-profits in a room and figure out their duties/missions.

Everyone wants to help but need to coordinate by one person.

One EOC Coordinator between state and non-profit, etc.

At one time there was a Volunteer Coordinator at the EOC.

Future best practice – formalize soft communications.

EOC to handle social media.

JIC – Joint Information Center – funnels to all agencies – all social media & non-emergency phone calls.

Publication from the public of true needs.

Functional meeting for VOAD for non-profits.

VOADs is actually up and starting to run – need information from all agencies.

SHELTERS – CRES did not work, Plan for in house, Generators, supplies, donation management

When hurricane hits – need to shelter 1st responders – difficult to bring them in: frustrating to not being able to assist them in charging equipment and phones, etc.

Senior Centers need generators – centers are owned by county – 5 locations.

Lost a lot of food due to lack of generator.

Chattanooga, TN had shelters ready to go but the issue, was transportation to get them there and home again – formalize transportation.

Transportation – handicap to and from – addressed but needs improvement.

County knew they needed to evacuate, but State did not activate CRES plan soon enough - when County had to open shelters – residents will not leave.

State was unable to release resources b/c of the storm.

Pre-planning with non-profits: nurses/healthcare.

Folks asked to leave and getting them back but couldn't.

If asked to stay – need/want to provide safe sheltering for staff – “Can't be guaranteed that I/family will be safe if I stay.”

Donation management – need VOAD – distribution of money – Red Cross came in/did okay: needed more local support; disparity between need for supplies, etc. and actual receiving money – FEMA grants – where is the money? Level of expertise was so much better than from Red Cross.

Supplies distribution – no plan; right people right supplies? POD; county – logistics/trained EM to manage – logistics – county called BFS to help who had no notice and pre-arrangement- called other agencies to help set up distribution centers; did fly by the seat of their pants – got the call from the Managers Officer; need a formalized plan and coordination.

Meeting is need for this (Supplies distribution and Donation management).

Plans: Resources – before storm; system resources/communication; training – DOT: Search where they can find other training – organization ER planning/Training – not connected with EOC; Statewide site to provide training is there, may need to invite non-profits; coordination between agencies; defined available resources; no relief plan for after storm

County should plan a TTX with non-profits in order to deal/work through system
Long term recovery plans.

The best states to get training from – FL/CA.

Are there models that non-profits can find from other county/states?

FL gets hit a lot – county AAR for certain past hurricanes could help.

Emergency Services – 3 areas/islands-no fuel/trucks & access; EMS-central locations; Lost communications- 911, cell, internet, etc.(VIPER – had backup which was not test prior too – had communication with at one time but the backup plan did not reach all areas – lost fuel & towers; had plans but had to revamp plan due to unexpected flooding); individual agencies not within ICS

Many new places that will be ID as a flood potential – water has to go somewhere
Policy decisions at county level – what will non-profits' response be to these policies.

Population has increase on the coast as more and more people are residing at the coast
Combo Fire departments (Volunteer and Paid).

1100 to 1200 volunteers came forward to assist.
Want to locally handle funds – get rid of Red Cross.

STRENGTHS:

The storm was taken very seriously from early on giving residents ample time to prepare and evacuate –
Emergency services did an excellent job here.

Cooperation among all groups.

Shutting down services when wind reached 50 mph – trying to get residents to evacuate ahead of storm.

Prevented loss of life – emergency transport.

Ability to get support on the fly – many agencies around to step outside their comfort zone to assist.

Sheriff's Department did an excellent job with flooding in south end. Resources were there if not acquired quickly.

Deployment of emergency services resources was appropriate throughout county.

Dividing Fire Departments up on different talk groups by geographic areas.

Social media management.

Communication – getting the word out as to delivery sites for relief – communication prior to landfall.

Media releases to the community to help keep the public informed.

Communications – to Emergency Orgs & to public – especially use of social media.

Communications – Direct contact was great; logistical support – fuel, food, etc.

Communications amongst municipalities & service agencies pre-Florence.

Conference Calls to fire departments to get information out.

Daily conference calls to keep everyone in the loop and on the same page.

People volunteering.

Donated supplies were available to those that needed them.

Local partner agencies always willing to step up and assist as needed.

Desire to collaborate and come together to meet needs of citizens.

Elected Officials Session December 3, 2018

Participating Departments/Agencies

Sandy Creek – Mayor
Brunswick County – Commissioners
Brunswick County Deputy Manager
Caswell Beach
Town of Bolivia
Calabash
Brunswick County Emergency Services
Brunswick County Communications

IMPROVEMENTS NEEDED:

Communications

- No contact due to total loss of all types of communications.
- Need more radio talk groups so as to not busy repeaters.
- Schedule communication sessions – timelier and more often.
- Points of locations to learn information as in go to fire house to get information as to what is being done.
- Need the public to take an evacuation seriously.
- Small towns were completely cut off and could not participate in daily calls. If you don't hear from a town come check or deliver a message. Don't go with the "no news is good news".
- Fear of looting – people would not leave. How can we communicate?
- Make sure we know where staff is located so that they are fed – such as deputies.
- A communications person operated outside the storm area and kept our communication up. It was a best practice. Using video was effective because areas could not be accessed.
- Need 30 sec – 60 second video of what a Cat 1 Storm looked like to help convince people how bad this can be for a Cat 2 and Cat 3. Prepare the public proactively.

Systems

- Do a better job of identifying and utilizing resources offered by our municipal partners – The Leland Town Hall could serve as a backup EOC in the northern part of the county – Identify that location as a possible site and adjust plan as needed.
- Need bigger helicopter – have a VH58 Jet Ranger which has a pay load of 600 lbs. wet; need a larger helicopter to use for relocation of personnel, supplies – add to possible ferry equipment – Purchase vs Lease.

Need better intelligence as to the rate of water depth following the storms; instead of just visual – need more stream and water depth monitors.

Helicopter we use is limited in what it can do. Need to carry people and equipment. Could we use the military more? Could we lease the helicopter instead of purchase? Need for a helicopter that can help with water transport for forestry fire.

Alternate EOC – space available in Leland and possibly Southport. Additional discussion and planning warranted.

County has 3 water level gauges with the weather service. Maybe mitigation funds will help. The gauges can provide early warning.

Infrastructure

Removal of storm water on roads need to be improved.

Long term removal of debris was slow by contract debris management company.

County needs to select roads to clear debris not Contractors.

Bridge much too low. Flooding problem.

Roads – also issue with waterways.

Review contracts in place for debris removal, county, billing, etc.

Sewer issues on “islands.

Roads have to be shut down often. Need road construction infrastructure.

County needs to designate the routes or path for cleanup – not the cleanup contractor.

No control from municipalities on the cleanup contractor on the pre-positioned contractor. NO schedule for cleanup and creating problems for towns. County needs to govern prioritization of routes – with 10 municipalities.

The mosquito plan worked well and everyone knew what was going on. Need to follow that model.

Sewer Vacuum systems have to be closed down when there is flooding.

Need for high water signs at the bridges that typically flood - until they are replaced – Calabash.

Could have used barriers like the Corps of Engineers used in South Carolina. It could have kept highway 17 open.

SC may have more involvement from local officials with their DOT.

Volunteers/Non-profits

Donations – VOAD Brunswick Family Assistance.

Recovery Personnel volunteer coordinator.

Possible bench mark on Pender County – Donations Management.

Plan in advance to engage non-profit partners, handle donations and volunteers, etc. We did it well this time, but it was on the fly.

Dual Role vs Dual Trained – no multi hazard, no volunteer coordinator, no planner in staff. Need to replenish Emergency Services positions that have been cut in recent years.

We didn’t have a plan. We asked a non-profit to step up. Brunswick Family Assistance (BFA). They took it and handled it. Need a plan ahead of time.

Commissioners need to come up with a plan – see Pender County’s Plan. They used a form. Volunteer work, cash donations. Links on Web site. Need one person responsible. Commissioners need to be more active. Personnel with Emergency Management has been depleted. Do not have planners on staff. No nuclear planner, no multi hazards planner, no volunteer coordinator. Everyone is cross-trained. Get back to basics and make sure plans are in place. WE need to drill and exercise.

Shelters

Mental Health issues – sheltered not treated with dignity.
Need after action shelters utilized in the senior centers – pre-equipped with generators and supplies.
Bringing in people from New Hanover to Brunswick – was a very bad decision.
Have a cooling center – residents could cool off and be provided with water.
The shelters needed some improvements like generators – Identify alternate shelter locations.
Generators at shelters.
Length of time evacuees are in shelter – identify mitigation strategies for alternative shelters.
Consider County operated shelter vs Red Cross Dependent – Use County Staff.
The group felt that Red Cross did not perform adequately. Red Cross treated Brunswick citizens with disrespect and the group expressed desire to no longer utilize the Red Cross for managing large emergency shelters in Brunswick County.
Staff needs to make recommendation on transition to Senior Centers shift – 3 days? Adversely impacting schools – if school is down all is down.
Senior Centers need generators to be effectively used as shelters.
“I don’t want Red Cross Back in here.” Too academic; need our own plan.
Concern that people won’t leave next time.

Concerns

FEMA Temporary housing issues.
Debris in gated communities created issues – they were turned down, need consideration.
Mitigation money needed to create space to support emergency housing (trailers).
County has property where fairgrounds was to be located that may work for Emergency housing.

STRENGTHS:

Outcomes

Aftermath – Strong response and aid from all County departments.
Sheriff’s office did good work.
Dedication of staff throughout the county. Many didn’t go home for 10 days.
Seamless integration of entities, organizations via communication and relationships established at each level.
Year-round emergency management meetings within our town and plan was effective.

- Capabilities of responders.
- Citizen rescue and safety.
- Cooperation between county departments and sheriff's office and our state partners.
- Good delegation of assets, equipment and personnel.
- Clean-up – immediate cleanup of downed vegetation was done quickly and well to open roads for emergency vehicles.

Communications

- Daily phone data calls.
- Public information – continually communications accurate information to citizens.
- Good overall communication via our PIO and Social media.
- Communication with our evacuated resident went well during and after storm; communication between town and county was excellent before, during, and after storm.
- County manager communications with elected officials.
- Conference call county wide.
- Pre-staged cellular COWS – Cell on Wheels – following storm to provide communication for the public.
- Communication with county – updates were very good – felt others understood how our town was being affected.

Other

- Constantly sending updates and social media.
- County Manager communications were good.

Shelter Concerns

- Complaints – S. Brunswick – people weren't treated with dignity – staff would leave area and get coffee, but evacuees weren't allowed to leave.
- Bathrooms – Sewage issues – people weren't allowed to go to the bathroom – no showers.
- Oak Island – no one allowed back onto the island.
- CONCERN THAT PEOPLE WILL NOT GO BACK TO THE SHELTER DURING THE NEXT STORM.
- Length – amount of time to keep evacuees in place – getting kids back to schools.
- ID other locations in order to provide shelters.
- Health issue within school – had to be dealt with once everyone left.
- Any mitigation project – large facility to utilize.
- Brought in 5 senior centers – need generators: start at schools and move into senior centers.
- People in shelters a lot longer than before.
- Did a great job – some issues beyond our control; county became so divided – 3 islands-transportation became an issue
- New Hanover County – Red Cross wanted to bring them into Brunswick Co, most who had high medical needs – wheelchairs, etc. – Stated they were going to bring in 120 but it was about 30+

more people – and they just left them in Brunswick without a plan to get them back into New Hanover.

Mental Health – need people there to assist with these issues – not enough providers.

May have been an issue with Red Cross – Recommendation from Administration – County Staff able to manage and handle.

RED CROSS CAUSES MORE ISSUES THAN THEY HELPED WITH.

Short term sheltering (1-2 days) vs Long Term Shelter (3+ days).

72-hour dynamic – shift and relocate b/c schools need to get back into sessions, to other shelters, friends, family, back home, etc.

Once you close one school the system will close all the schools.

Main issue – generators: need them at senior centers.

Countywide Connectivity.

WE DO NOT WANT RED CROSS BACK INTO BRUNSWICK – county ended up running the shelter anyway – come up with their own plan.

Citizens who won't evacuate next time will cause more rescues – safety and keeping people in homes.

Volunteers

No plan in place – asked a non-profit to step in – need/want a clear plan – Who, what where... - challenged too much water not enough everything else.

County needs a plan like Pender County – Specifics – onsite; one person to distribute throughout the county.

Commissions should/could be more active.

EM department has been depleted – cross trained individuals in EM – No planning staff – Multi Hazard; Nuclear; Volunteer – a funding issue.

Get back to basics – make sure there are people in place to support.

Cross training is good – one person on plan/procedure is necessary.

Dual role (in your job description) vs Dual Trained (know how to do it).

Infrastructure

Have had roads that were closed – had to shut down nuclear plant b/c the roads were closed.

Debris – county needs to select road – not the contractor – county control the contractor – pre-positioned contract – no control to municipalities (length, time, when) – Contracts need to be a part of the selection prioritization – 19 municipalities.

Monitoring – company has the software to show where they have been.

Mosquito abatement– knew where plane was going.

Sandy Creek – was able to negotiate with debris contractor on the phone – 2 days and able to get word to citizens .

Bolivia – the debris contractor billed for roads that were not in Bolivia.

Storm water – floods sewers so you have to close them.

Bridge is too low – signage to warn drivers – State road DOT.

Flooding on road – Jersey wall/barricade could help with flooding.

Systems

Helicopter is observation – can only carry 600lbs – not meant to carry personnel or equipment –
Lease vs Buy – military – what's their role? Could they help?
Leland – EOC – more communication amongst towns – preposition access.
Nuclear plant – Plan EOC.
Backups – need more communications.
Stream/water gauges – have 3, could use more.

Communication

Talk groups?
Multiple levels – amongst the teams – great; text messages – staff need different information than the elected officials.
Sandy Creek – completely shut off with communication – someone has to go to the town if completely shut off and haven't heard from them in a while.
NO NEWS IS NOT GOOD NEWS!
Good communication/assistance from County manager.
Locations – holding food for deputies didn't happen but needs too.
Public Information officer – had power the entire b/c she was evacuated but was only one person
Media will go where the fire is and b/c they were unable to get into Brunswick they did not come – Prerecorded videos may be able to get info out.
COUNTY: public information officer to make 30-60 second video to describe a Cat 1 storm and Air through the local media during hurricane season in order to educate citizens
Impact is different throughout the county.

STRENGTHS/FINAL THOUGHTS

FEMA – Temporary housing – have yet to hear from them about it; Trailers had to be returned but overall did a good job; Rules/regulations with gated communities – debris related; People turned down who had nothing; None paved roads need consideration; Affordable/temporary housing does not exist; Representative was great – Christopher – explained things well.
More federal disaster funds need to be funneled into the county.
Commissioners need to be more involved.
Coordination between gated communities.
Mitigation for a specified designated area – land for fairgrounds could it be the new EOC or staging area.



APPENDIX A: IMPROVEMENT PLAN TEMPLATE

This template is for use in developing an internal improvement plan. Items within this after-action report can be used, along with any other recommendations.

Objective	Area for Improvement	Corrective Actions	Timeframe for Completion	Personnel Assignment	Completion Date
Effective dissemination of information to the public, governments, media and other groups.		<p>Creation of a Joint Information Center (JIC) and training of personnel, increasing scope and capabilities of personnel.</p> <p>Seek FEMA training for communications staff to work in the emergency response environments.</p> <p>Establish sustainability and redundancy within the communications network</p> <p>Conduct JIC drills and exercises.</p>			

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Hurricane Florence

After-Action Report

Operate effective and efficient emergency shelters	Emergency Operations	<p><u>Comprehensively</u> re-visit plans, procedures, roles and functions for emergency sheltering, including locations and lead agencies that will be responsible for shelter operations in Brunswick County.</p> <p>Consider shelter locations in each of the “islands” that are created within Brunswick County during major storm events.</p> <p>Re-visit Emergency Services Planning position(s) that have been eliminated in recent years.</p> <p>Develop a capital improvement plan to ensure that all identified shelter locations have adequate generators with redundant systems to provide sustained operations.</p> <p>Provide additional review of current day special needs populations and revise shelter plans accordingly.</p> <p>Conduct training, exercises and drills to increase proficiency in managing shelter operations</p>			
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Objective	Area for Improvement	Corrective Actions	Timeframe for Completion	Personnel Assignment	Completion Date
Effectively manage volunteers and donations in a systematic manner.	Volunteer Management	<p>Utilizing lessons learned in this event and successes, re-visit roles and responsibilities for volunteer management and donation management and identify agencies that can accommodate the needs for Brunswick County.</p> <p>Formalize agreements for services during disasters. These agreements should thoroughly describe duties and responsibilities as well as training expectations.</p> <p>Re-visit the volunteer coordinator position that was eliminated in Emergency Services in recent years.</p> <p>Conduct additional training and drills and exercises to test the volunteer and donation management system(s) that are established for Brunswick County.</p>			

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Objective	Area for Improvement	Corrective Actions	Timeframe for Completion	Personnel Assignment	Completion Date
Ensure continuity of operations during crisis and emergency events that affect large areas of Brunswick County.	Continuity of Operations	<p>Revisit Brunswick County's plans and procedures for continuity. Look at the last review of the County's Continuity of Operations Plan (COOP) and establish a more aggressive revision schedule, which will create County staff workload.</p> <p>Place a high priority on the emergency communications (radio) system to ensure that the system has redundancy with generators and the ability to re-fuel or power generators during long periods of time when the area is heavily damaged.</p> <p>Collaborate with communication partners such as wireless companies to determine their capabilities of continuity and explore options to extend emergency operations. Phone service and internet service are important public communication tools during crisis situations.</p>			

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Objective	Area for Improvement	Corrective Actions	Timeframe for Completion	Personnel Assignment	Completion Date
Ensure operations in the Emergency Operations Center (EOC) are seamless and can sustain long periods of performance.	Planning and Preparedness	<p>Re-evaluate the staffing levels in the EOC. Dual training is essential. However, dual or triple roles of personnel working within the EOC may not be realistic.</p> <p>Establish realistic staff and shift schedules for EOC personnel and provide necessary support services for personnel working within the EOC during crisis situations.</p> <p>Conduct EOC drills and exercises frequently to ensure that all persons who report to the EOC have the ability to become familiar with plans and procedures before the event and have the opportunity to use the incident command (ICS) classes that they have been provided.</p>			

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After-Action Report

Objective	Area for Improvement	Corrective Actions	Timeframe for Completion	Personnel Assignment	Completion Date
Brunswick County's business practices are in alignment with plans and procedures as well as clarity of expectations for agencies that are part of the emergency response plan.		<p>For areas noted in earlier recommendations, such as agencies to manage shelter operations, donation management, etc., Brunswick County should establish written performance based contracts with these agencies to ensure that the County and the agencies that are part of the plan understand their role and responsibility within the plan.</p> <p>Resources within local governments in Brunswick County should be frequently reviewed and inventoried so that Brunswick Emergency Management is well-aware of specialized tools and equipment, as well as municipal facilities that may be needed during emergency operations.</p> <p>Agreements, plans and procedures should be tested through exercises and drills.</p>			

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Hurricane Florence

After-Action Report

Objective	Area for Improvement	Corrective Actions	Timeframe for Completion	Personnel Assignment	Completion Date
Responses within the region are coordinated and collaboration is occurring between local governments and state government during crisis situations.		<p>Brunswick County staff should collaborate closely with NC Emergency Management personnel regarding the failures that occurred within this storm, such as the CRES plan not functioning as intended.</p> <p>New plans and procedures should be developed and tested accordingly.</p> <p>Furthermore, a higher level of collaboration is needed with neighboring counties, such as New Hanover County to ensure that persons needing special assistance are not sent into an area that does not have the infrastructure ready to support them when they arrive.</p>			



APPENDIX B: ACRONYM LIST

AAR	After-Action Report
AAR/IP	After Action Report/Improvement Plan
CBRNE	Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive
DHS	U.S. Department of Homeland Security
DoD	Department of Defense
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
EOC	Emergency Operations Center
ESF	Emergency Support Function
ExPlan	Exercise Plan
FBI	Federal Bureau of Investigation
FAC	Family Assistance Center
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
FOUO	For Official Use Only
HazMat	Hazardous Materials
HQ	Headquarters
HSAS	Homeland Security Advisory System
HSEEP	Homeland Security Exercise and Evaluation Program
ICS	Incident Command System
IED	Improvised Explosive Device
IST	Incident Support Team (Urban Search and Rescue)
JIC	Joint Information Center
JOC	Joint Operations Center
JPIC	Joint Public Information Center
JTTF	Joint Terrorism Task Force

MAA	Mutual-aid Agreement
MCI	Mass Casualty Incident
MCIP	Mass Casualty Incident Plan
MOU	Memorandum of Understanding
NDMS	National Disaster Medical System
NIMS	National Incident Management System
NRP	National Response Plan
OP	Operational Period
PAO	Public Affairs Officer
PIO	Public Information Officer
POC	Point of Contact
SitMan	Situation Manual
SME	Subject Matter Expert
SOP	Standard Operating Procedure
TCL	Target Capabilities List
TTX	Tabletop Exercise
US&R	Urban Search and Rescue



Final After Action Report

Brunswick Nuclear Plant

Radiological Emergency Preparedness Exercise

Exercise Date: July 31, 2018

November 2, 2018



FEMA

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Executive Summary

The U. S. Department of Homeland Security, Federal Emergency Management Agency Region IV, Radiological Emergency Preparedness Program staff evaluated a plume exposure pathway exercise for the 10-mile emergency planning zone of the Brunswick Nuclear Plant on July 31, 2018. Those evaluative observations as well as out of sequence activities conducted July 9-13, 2018 are included in this report.

The Brunswick Nuclear Plant is operated by Duke Energy and is located near the City of Southport in southeastern Brunswick County, North Carolina. The 10-mile emergency planning zone encompasses portions of both Brunswick and New Hanover Counties.

The purpose of the exercise was to assess the level of state and local preparedness in responding to an incident at the Brunswick Nuclear Plant. It was conducted in accordance with Federal Emergency Management Agency's policies and guidance concerning the exercise of state and local radiological emergency response plans and procedures. The previous federally evaluated exercise was conducted on July 26, 2016. The original qualifying emergency preparedness exercise was conducted November 13, 1981.

Officials and representatives from participating agencies and organizations demonstrated knowledge of their emergency response plans and procedures and successfully implemented them during the exercise and out of sequence activities. All jurisdictions met their exercise objectives and successfully demonstrated the corresponding core capabilities identified in Section 2.2 of this report. During this exercise, the Federal Emergency Management Agency evaluation team did not identify any level 1 or level 2 findings.

Officials and representatives from the State of North Carolina, Brunswick and New Hanover Counties, National Weather Service, U.S. Coast Guard, U.S. Nuclear Regulatory Commission, and Duke Energy, as well as numerous volunteers and other agencies, participated in this exercise. It was apparent during the exercise that a great deal of training and practice was conducted by the offsite response organizations to successfully demonstrate the ability to provide support and resources as necessary to the Brunswick Nuclear Plant. Both Brunswick and New Hanover Counties used this exercise and out of sequence activities to enhance their current level of preparedness and more importantly, bolster services to the access/functional needs community.

The Federal Emergency Management Agency staff wishes to acknowledge the efforts of the many individuals who participated in the exercise and made it a success. The professionalism and teamwork of the participants was evident throughout all phases of the exercise.

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Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name

2018 Brunswick Nuclear Plant, Radiological Emergency Preparedness Exercise

Type of Exercise

Functional

Exercise Date(s)

July 31, 2018, with out of sequence activities July 9-13, 2018

Program

Department of Homeland Security/Federal Emergency Management Agency

Radiological Emergency Preparedness Program

Mission

Response

Locations

See Appendix C, extent-of-play agreement for exercise locations

Scenario Type

Plume Exposure Pathway Exercise

1.2 Exercise Planning Team Leadership

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Radiological Emergency Preparedness Program

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Wilmington, North Carolina 28403

1.3 Participating Organizations

State of North Carolina

Office of the Governor

Department of Public Safety

- Division of Emergency Management
- State Highway Patrol

Department of Environment Quality

- Division of Marine Fisheries, Marine Patrol
- Division of Water Quality, Law Enforcement

Wildlife Resources Commission

Department of Agriculture and Consumer Services

Department of Transportation

- Division of Highways
- Ferry Division

Department of Health and Human Services

- Division of Health Service Regulation, Radiation Protection Section
- Division of Public Health
- Office of Emergency Medical Services

Risk Jurisdictions

Brunswick County, North Carolina

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- Board of Commissioners
- County Manager's Office
 - Public Information
- Emergency Services
 - Emergency Management
 - Emergency Medical Services (EMS)
 - Fire Marshal
 - Volunteer Center
- Department of Social Services
- Health Department
- Sheriff's Office
 - Communications - 911 Center
 - Public Information
- School District
- Department of Transportation
- Public Utilities
- Operations Services
- Southport Police Department
- Oak Island Police Department
- Boiling Spring Lakes Police Department
- Bald Head Island Public Safety
- Leland Volunteer Fire Department

New Hanover County, North Carolina

- Department of Emergency Management
 - Response Emergency Management Organization
 - Public Safety Communications Center (911)
 - Emergency Public Information Center
- Assistant County Manager
- Public Information Office
- Department of Social Services
- Fire Rescue
- Sheriff's Office
- City of Wilmington Police Department
- City of Wilmington Fire Department
- Schools
- Department of Transportation
- Town of Kure Beach
- Town of Carolina Beach
- Cape Fear Public Utility Authority
- Department of Health

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Federal

Department of Homeland Security, U.S. Coast Guard, Sector North Carolina
United States Nuclear Regulatory Commission
National Oceanic and Atmospheric Administration, National Weather Service

Non-Governmental Organizations

Radio Amateur Civil Emergency Services/Amateur Radio Emergency Services
American Red Cross, Cape Fear Chapter
Duke Energy
The Salvation Army

Section 2: Exercise Design Summary

2.1 Exercise Purpose and Design

The Federal Emergency Management Agency administers the Radiological Emergency Preparedness Program pursuant to the regulations found in Title 44 Code of Federal Regulations parts 350, 351, 352, 353, and 354. Title 44 Code of Federal Regulations 350 codifies sixteen planning standards that form the basis for radiological emergency response planning for the licensee and for state, tribal, and local governments impacted by the emergency planning zones established for each nuclear power plant site in the United States. United States Nuclear Regulatory Commission regulations also codify the sixteen planning standards for the licensee. Title 44 Code of Federal Regulations 350 sets forth the mechanisms for the formal review and approval of state, tribal, and local government radiological emergency response plans and procedures by the Federal Emergency Management Agency. One of the Radiological Emergency Preparedness Program cornerstones established by these regulations is the biennial exercise of offsite response capabilities. During these exercises, affected state, tribal, and local governments demonstrate their abilities to implement their plans and procedures to protect the health and safety of the public in the event of a radiological emergency at the nuclear plant.

The results of this exercise, together with review of the radiological emergency response plans, and verification of the periodic requirements set forth in NUREG-0654/FEMA-REP-1, along with supplements through the annual letter of certification and staff assistance visits, enabled the Federal Emergency Management Agency to provide a statement with the transmission of this final after action report to the United States Nuclear Regulatory Commission, that the affected state, tribal, and local plans and preparedness are: (1) adequate to protect the health and safety of the public living in the vicinity of the nuclear power facility by providing reasonable assurance that appropriate protective measures can be taken offsite in the event of a radiological emergency; and (2) capable of being implemented.

Formal submission of the State of North Carolina and involved local jurisdictions of the radiological emergency response procedures for the Brunswick Nuclear Plant was on July 15, 1981. Formal approval was granted by FEMA on March 17, 1982, and the qualifying emergency preparedness exercise occurred August 17-19, 1981.

2.2 Core Capabilities and Exercise Objectives

Core capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items. Using the Homeland Security Exercise and Evaluation Program methodology, the exercise objectives meet the Radiological Emergency Preparedness Program requirements and encompass the emergency preparedness evaluation areas. The critical tasks to be demonstrated were negotiated with the State of North Carolina and the

participating counties. The core capabilities scheduled for demonstration during this exercise were:

Operational Coordination: Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of Core Capabilities.

Situational Assessment: Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Public Information and Warning: Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available.

On-Scene Security, Protection, and Law Enforcement: Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.

These core capabilities, when successfully demonstrated, meet the exercise objectives. The objectives for this exercise were as follows:

Objective 1: Demonstrate the ability to provide direction and control and make protective action decisions through the state emergency operations centers, county emergency operations centers, and field activities by exercise play and discussion of plans and procedures.

Objective 2: Demonstrate the ability to physically implement protective actions for State and County emergency workers, access/functional needs, schools and the public through exercise demonstration and discussion of plans and procedures.

Objective 3: Demonstrate the ability to conduct independent dose assessment, management of field teams, and mobile or fixed laboratory analysis in response to a radiological release.

Objective 4: Demonstrate the ability to activate Prompt Alert and Notification System (PNS includes sirens & EAS, back-up route alerting) and Emergency Alert System (EAS) through exercise play.

Objective 5: Demonstrate the effectiveness of plans, policies, and procedures in the joint information system for public and private sector emergency information communications.

2.3 Scenario Summary

The following is a summary of the licensee's scenario. This scenario and supporting documents were adequate for the demonstration of the exercise objectives and associated technical criteria identified in the extent of play agreement.

The exercise began at 0800. At approximately 0809, a tube rupture occurred on the feed water heater. At 0813, the spurious closure of a main steam isolation valve occurs resulting in a reactor scram. This closure of the main steam isolation valve results in a small-break loss of coolant accident inside primary containment. At 0815, drywell pressure increased above 1.7 pounds per square inch. Conditions exist to declare an Alert emergency classification level; loss of reactor coolant system barrier.

The feed water heater isolation bypass valves fail to open during an attempt to align condensate for reactor injection at 0945. Drywell radiation monitors exceed 2,000 R/hr. Conditions exist to declare an emergency classification level of Site Area Emergency based on loss of fuel cladding barrier and reactor coolant system barrier. With the Site Area Emergency declaration, the loss of coolant accident leak rate increased.

At 1149 drywell radiation monitors exceed 20,000 R/hr. Drywell conditions exist to declare an emergency classification level General Emergency based on the potential loss of containment barrier and loss of other two barriers. Meteorological conditions were winds at 4 mph from 158 degrees with a stability class E and no forecasted changes. At 1218, a seal leak from residual heat removal pumps result in a radiological release 1218 through the stack.

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Section 3: Analysis of Capabilities

3.1 Exercise Evaluation and Results

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the July 31, 2018, plume-exposure-pathway exercise and out of sequence activities.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities, capability targets and critical tasks, and the underlying Radiation Emergency Preparedness criteria as delineated in the Federal Emergency Management Agency Radiation Emergency Preparedness Program Manual dated January 2016. Exercise criteria are listed by number and the demonstration status of those criteria are indicated by the use of the following terms:

- M: Met (no unresolved level 1 or level 2 findings assessed and no unresolved findings from prior exercises)
- 1: Level 1 finding assessed
- 2: Level 2 finding assessed or an unresolved level 2 finding(s) from a prior exercise
- P: Plan issue
- N: Not demonstrated

3.2 Summary Results of Exercise Evaluation

The Homeland Security Exercise and Evaluation Program evaluation methodology is an analytical process used to assess the demonstration of specific capabilities during an exercise. A capability provides a means to perform one or more critical tasks under specified conditions and to specific performance standards. Core capabilities form the foundation of the Federal Emergency Management Agency Region IV Radiological Emergency Preparedness Program evaluations. The core capability summaries below provide an overall combined assessment of state and local jurisdictions based upon their collective demonstrated performance as it relates to the specific core capability. Each jurisdiction's standalone capability summaries are listed in Section 3.3 of this report.

Operational Coordination: Key leadership personnel from different agencies established and maintained a unified and coordinated operational structure which provided effective direction and control. Overall, the decision making process integrated all critical stakeholders which enabled protective action recommendations to be thoroughly understood. The decision making process allowed for consideration of relevant and appropriate factors, with protective action decisions made in a sensible and timely manner.

Situational Assessment: State dose assessment personnel successfully demonstrated the ability to independently assess radiological and plant conditions. County and state decision makers were provided with relevant and accurate radiological information by state dose assessors throughout the demonstration. The information allowed decision makers to understand the extent of the hazards and cascading effects, and to make the appropriate protective action decisions.

Public Information and Warning: The risk jurisdictions aided by the State of North Carolina effectively demonstrated the activation of the primary alert and notification system. Additional emergency information and instructions were provided to the public and media using a joint information system process, which was defined and supported by each jurisdiction's emergency operations center. These processes enabled coordinated, prompt, and reliable information to be delivered to the public and media.

On-Scene Security, Protection, and Law Enforcement: The U.S. Coast Guard and state and risk county law enforcement representatives demonstrated the ability to coordinate and implement appropriate traffic and access control operations and to conduct coordinated operations to clear the waterways, beaches, and parks within the 10-mile emergency planning zone of the Brunswick Nuclear Plant. This was demonstrated out of sequence during a facilitated/training tabletop exercise.

3.3 Jurisdictional Summary Results of Exercise Evaluation

3.3.1 State of North Carolina

3.3.1.1 State Emergency Operations Center

Operational Coordination Capability Summary:

The North Carolina State Emergency Response Team successfully demonstrated the ability to conduct response operations and direct resources in support of the risk counties surrounding the Brunswick Nuclear Plant.

Notification of the emergency at the Brunswick Nuclear Plant was received by the state warning point, with key staff being notified and responding to the state emergency operations center in a timely manner. The Duke Emergency Management Network was the primary communications system for notifications from the utility and coordination with stakeholders. Redundant communication systems were in place if needed, and all operated without fail. There was ample space, equipment, and supplies to support the response activities associated with this exercise, with same demonstrated during real world emergency activations.

The North Carolina State Emergency Response Team leader immediately established direction and control of the state emergency operations center staff, and kept the staff informed of evolving conditions through frequent situation briefs. State personnel

effectively used and coordinated all available information to support the protective action decision making process for the public and emergency workers alike. Potassium iodide for the public and emergency workers was discussed among the North Carolina State Emergency Response Team and the risk counties. Law enforcement personnel discussed their ability to coordinate and manage impediments at traffic control points in the risk jurisdictions. Throughout the exercise, a unified, coordinated, and collaborative operational response and support structure was maintained.

For this capability the following radiological emergency preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 3.a.1, 3.d.1, 3.d.2.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

Public Information and Warning Capability Summary:

Public information officers demonstrated their ability to provide emergency information and instructions to the public and media. The public information officers, in conjunction with the risk counties and Duke Energy, established a joint information system and disseminated information in a manner consistent with the protective action decisions. Media briefings were relevant, timely, and accurate. The State and counties each established public inquiry systems. Public inquiry personnel provided accurate and timely information to the public and shared information received from the public with each other so that they could identify trends and address rumors. Pre-scripted Emergency Alert System messages were chosen on the decision line, modified by the lead risk county, and broadcast were simulated by staff in the state emergency operations center. State staff were also responsible for activating the tone alert radios through the National Weather Service. Residence within the two mile radius of the plant are provided tone alert radios by the utilities. The siren systems were notionally activated by the risk counties after coordination with the state.

For this capability the following radiological emergency preparedness criteria were MET: 5.a.1, 5.b.1.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None

e. Prior Level 2 Findings - Unresolved: None**Situational Assessment Capability Summary:**

North Carolina Department of Health and Human Services, Division of Health Service Regulation, Radiation Protection Section personnel successfully demonstrated the ability to assess radiological and plant conditions and to provide appropriate recommendations to decision makers in response to a radiological incident at the Brunswick Nuclear Plant.

The dose assessment leader calculated projected doses at various distances downwind from the plant based on plant conditions, release data supplied by the utility, and field team measurements. All projected offsite doses were well below protective action guides; therefore, all recommendations were based on plant conditions. Personnel also monitored plant data and parameters from the utility's plant data system and discussed the data with utility personnel. The Radiation Protection Section Chief briefed state and county decision makers, presenting protective action recommendations and the reasoning for those recommendations.

Following the start of the radiological release, dose projections prepared by the utility and Radiation Protection Section personnel indicated that radioactive iodine was present in the plume, which was later confirmed by field team air samples. Although the concentration of radioactive iodine in the plume was very low, in accordance with procedures, the Radiation Protection Section Chief ordered field team members to ingest potassium iodide and recommended that potassium iodide be ingested by all emergency workers in the 10-mile emergency planning zone. However, since projected thyroid doses offsite were well below protective action guides, the Radiation Protection Section Chief did not recommend that members of the public ingest potassium iodide.

Radiation Protection Section personnel were familiar with administrative and turn back dose limits for field personnel. The Radiation Protection Section State Emergency Response Team coordinator stated that only the Radiation Protection Section Chief or the State Emergency Response Team leader could authorize state personnel to exceed the limits.

For this capability the following radiological emergency preparedness criteria were MET: 2.a.1, 2.b.1, 2.b.2.

a. Level 1 Finding: None**b. Level 2 Finding: None****c. Not Demonstrated: None****d. Prior Level 2 Findings – Resolved: None****e. Prior Level 2 Findings - Unresolved: None**

3.3.1.2 Eastern Branch Office - Regional Coordination Center**Operational Coordination Capability Summary:**

The North Carolina Emergency Management Eastern Branch Office staff demonstrated the capability to manage the regional coordination center by activating personnel to establish and maintain a unified and coordinated response. The Eastern Branch Office transitioned to become the Regional Coordination Center – East upon activation under the direction of the Eastern Branch Incident Commander. Staff effectively managed deployments, tracking and coordination of resources for unmet needs and stakeholder actions.

Multiple communications systems were readily available and allowed for connectivity across the eastern North Carolina area. The Duke Emergency Management Network system, a dedicated line that connected the state, counties, and utility, was used for decision making and conferencing. Voice over Internet Protocol phones and satellite phones were used as secondary and backup communication, with 800-megahertz radios and Radio Amateur Radio Emergency System ham radios also available. Both wireless and wired internet connections were readily available and all operated without fail.

The facility had sufficient space, supplies, and equipment to support emergency response operations for an extended period of time. There were bathroom and feeding facilities to sustain long-term operations, food and water supplies on hand, and natural gas and diesel generators for backup power. Computer-based resource request and tracking programs, with large overhead displays, relevant to the emergency were on display, as well as various maps and other status boards.

For this capability the following radiological emergency preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

3.3.1.3 Emergency Operations Facility

Operational Coordination Capability Summary:

Radiation Protection Section and Division of Emergency Management representatives successfully demonstrated liaison functions. Liaisons were dispatched to the Duke Energy emergency operations facility in Charlotte, North Carolina, for dose assessment, field team monitoring, and emergency management. The liaisons assisted the state and county emergency operation centers in the decision-making processes and necessary coordination to make protective action decisions for the general public.

The liaisons provided timely and correct information to their Duke Energy counterparts. The emergency management liaison participated in conference calls among Brunswick Nuclear Plant, the state, and risk counties. The liaisons transmitted all emergency classification level changes and updates, emergency notification forms, protective action recommendations, meteorological conditions, plant status information, dose projections, and field team results to the appropriate personnel in the emergency operations centers. They provided the emergency operations facility personnel with state/county precautionary actions, evacuation impediments, protective action decisions, and potassium iodide ingestion decisions. Duke Energy, the U.S. Nuclear Regulatory Commission, and state personnel were cooperative and responsive in sharing information and providing feedback to improve the overall process and functions.

For this capability the following radiological emergency preparedness criteria were MET: 2.b.1.

- a. **Level 1 Finding:** None
- b. **Level 2 Finding:** None
- c. **Not Demonstrated:** None
- d. **Prior Level 2 Findings – Resolved:** None
- e. **Prior Level 2 Findings - Unresolved:** None

3.3.1.4 Joint Information System

Public Information and Warning Capability Summary:

A joint information system was established and participants activated a coordination bridge line to support public information and warning activities. The joint information system was led by the New Hanover County and Brunswick County public information staff, in coordination with North Carolina Emergency Management, Duke Energy, and the U.S. Nuclear Regulatory Commission.

When protective action decisions were made, public information officers from New Hanover County, Brunswick County, and North Carolina Emergency Management promptly and accurately communicated those decisions to all joint information system participants on the coordination bridge line. Risk county public information officers then developed relevant and accurate news releases using the one-message one-voice concept. All approved news releases were coordinated amongst the joint information system participants in accordance with plans and procedures.

As previously stated, some participants were unable to fully participate in the media briefings. The observed challenges would not have endangered the health and safety of the public, nor would it have restricted the media from receiving public information.

For this capability the following radiological emergency preparedness criteria were MET: 5.b.1.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

3.3.1.5 Waterway Warning/Clearance

On-Scene Security, Protection, and Law Enforcement Capability Summary:

The State of North Carolina and supporting agencies successfully demonstrated alert, notification, and evacuation of the Cape Fear River and the surrounding marine areas within the 10-mile emergency planning zone of the Brunswick Nuclear Plant. This action was performed during a multi-agency tabletop exercise attended by representatives from: the U.S. Coast Guard, Marine Environmental Protection; North Carolina Emergency Management; North Carolina Marine Patrol; North Carolina Department of Transportation Ferry Division; Brunswick County Emergency Services; Brunswick County Sheriff's Office; New Hanover County Emergency Management; New Hanover County Sheriff's Office; Wilmington Police Department; Kure Beach Fire Department; Carolina Beach Fire Department; and the Carolina Beach Police Department. Each of the above agencies had a portion of the emergency planning zone in their jurisdiction or a significant support role.

North Carolina Wildlife Resources Commission, Law Enforcement, and Brunswick Emergency Services would have established an incident command post in the warehouse which is connected to the Emergency Operations Center. Appropriate equipment, supplies, and communications were available for distribution. All participants were knowledgeable in their use of personal dosimetry and administrative exposure limits.

For this capability the following radiological emergency preparedness criteria were MET: 1.a.1, 1.d.1, 1.e.1, 3.a.1, 3.d.1, 3.d.2.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

3.3.2 Risk County Jurisdictions

3.3.2.1 Brunswick County

3.3.2.1.1 Emergency Operations Center

Operational Coordination Capability Summary:

Brunswick County Emergency Services personnel and support staff successfully demonstrated their ability to integrate all critical stakeholders into a functional emergency operation center.

Due to Brunswick County Emergency Operations Center renovations, a temporary facility was established for this exercise. The facility was set up with redundant methods of communication and adequate equipment, supplies, plans, and displays to support the operation. Information technology personnel established and maintained connectivity and communication capabilities throughout the exercise. This allowed all participants to remain operational and to coordinate response actions with stakeholders. The mobile command post was located outside of the facility to supplement capabilities if the need arose. By using this facility, Brunswick County demonstrated their ability to be flexible and remain resilient when planned facilities are unavailable.

Emergency operations center staff were notified and mobilized in an efficient manner using an electronic notification system. Leadership kept staff informed of incident status and response actions by providing regular briefings and facilitating round table discussions. As the lead risk county, the Brunswick County Emergency Services Deputy Director facilitated decision line calls to discuss protective actions. Appropriate protective action decisions were coordinated over the decision line and concurred upon by all stakeholders prior to implementation. Although different decisions were made for school closures and emergency worker potassium iodide ingestion, they were still coordinated and understood by all involved parties.

Emergency operations center staff were familiar with their plans and responsibilities.

They used position-specific checklists to accomplish their duties with little need for guidance or direction. Law enforcement representatives established and managed traffic and access control during the emergency to support evacuation. Individuals with access and functional needs and school personnel were contacted early in the response so that staff could assess and arrange needed resources for an evacuation. An appropriate exposure control system was in place for emergency workers and they were promptly notified of protective actions.

For this capability the following radiological emergency preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

Public Information and Warning Capability Summary:

Brunswick County Emergency Services staff successfully demonstrated their ability to deliver coordinated, accurate, and actionable information to the public. This was demonstrated in part through their participation in the joint information system.

The alert and notification system, which consisted of sirens, the Emergency Alert System, and tone alert radios, was notionally activated twice during the exercise. New Hanover County activated sirens on behalf of Brunswick County since they were operating out of a temporary facility. Brunswick County's siren activation console was fully functional at the primary emergency operations center and was available if needed. Pre-scripted Emergency Alert System messages were modified by Brunswick County and coordinated with New Hanover County and the state. The state was then responsible for initiating the Emergency Alert System. Tone alert radios were activated by the National Weather Service at the state's request. Backup alert and notification of the public was successfully demonstrated as an out of sequence activity. The demonstration was completed by a member of Brunswick County Emergency Services after notification of a simulated failure of siren B3. The dispatched emergency worker was trained on dosimetry and potassium iodide, knew the route, and after being dispatched, successfully completed it within a timely manner.

The public information officer coordinated the formulation of three press releases with all involved stakeholders. She maintained frequent coordination with her counterparts in the joint information system via a conference bridge line, which was established and remained open for the entire exercise. All messages were reviewed and approved by the Brunswick County Emergency Services Director and Deputy Director before being distributed to media

outlets. The citizen phone bank staff fielded public inquiry calls; they used information gathered from the safety information brochure, press releases, and emergency operations center staff to provide accurate information and instructions to callers.

For this capability the following radiological emergency preparedness criteria were MET: 5.a.1, 5.a.3, 5.b.1.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

3.3.2.2 New Hanover County

3.3.2.2.1 Emergency Operations Center

Operational Coordination Capability Summary:

The New Hanover County Emergency Management staff successfully demonstrated the capability to establish and maintain an operational structure and process that appropriately integrated all county stakeholders. Staff utilized the county's electronic notification system to alert, notify, and mobilize emergency operations center personnel for activation of the facility in a timely manner.

The New Hanover County staff used the Duke Emergency Management Network as the primary means of receiving information from the Brunswick Nuclear Plant and for coordinating protective action decisions. Multiple communication systems were available and operated without fail. The facility had ample space, supplies, and equipment to support 24-hour emergency operations.

County leadership participated in decision line calls to discuss protective actions. Appropriate protective action decisions were coordinated over the decision line and concurred upon by both the state and Brunswick County prior to implementation. Based upon relevant and specific local factors, New Hanover County leadership decided to relocate school staff and students, and chose not to direct emergency workers to ingest potassium iodide as Brunswick County and the state had.

The Director of Public Safety for New Hanover County Schools was interviewed concerning relocating the one school in the 10-mile emergency planning zone. New Hanover County had a comprehensive plan, which provided guidance to school administrators and support staff on emergency and crisis procedures. New Hanover County's Radiological Officer discussed the county's ability to manage radiological

exposure to emergency workers in accordance with established plans and procedures. The mass care representative discussed how they would prepare and provide support to residents with access and functional needs. New Hanover County Sheriff's deputies demonstrated thorough knowledge of the procedures for managing traffic control points and the clearance of impediments.

For this capability the following radiological emergency preparedness criteria were MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

Public Information and Warning Capability Summary:

County public information staff successfully demonstrated their ability to provide accurate emergency information. As part of the joint information system, they coordinated with the public information officers from Duke Energy, North Carolina Emergency Management, and Brunswick County. News releases were reviewed and approved by the New Hanover County Emergency Management Director or Deputy prior to being disseminated to the public.

Social media/rumor control was effectively managed, which ensured that the information contained in approved news releases were immediately restated in social media platforms. Public inquiries were properly addressed by using the news releases and the Brunswick Nuclear Plant safety brochures.

New Hanover County demonstrated a simulated activation of the siren system and participated in the coordination of Emergency Alert System messaging with both Brunswick County and the state. Brunswick County would normally have the responsibility to activate sirens; however, due to Brunswick County operating from a temporary facility for this exercise, that responsibility was delegated to New Hanover County.

New Hanover County Fire Rescue Station #19 personnel successfully demonstrated backup route alerting in the event of siren failure as an out of sequence activity. Fire Rescue personnel deployed five vehicles, each assigned a different location within the alerting zone. Each vehicle completed their primary assigned routes within a timely manner. Using a map of the area, the fire chief equipped the emergency worker teams with their dosimetry equipment and assigned areas of responsibility for each. Each vehicle/team had a pre-written script to announce over the speaker system. The

emergency workers were knowledgeable about dosimetry, exposure limits and requirements for ingesting potassium iodide.

For this capability the following radiological emergency preparedness criteria were MET: 5.a.1, 5.a.3, 5.b.1.

- a. Level 1 Finding:** None
- b. Level 2 Finding:** None
- c. Not Demonstrated:** None
- d. Prior Level 2 Findings – Resolved:** None
- e. Prior Level 2 Findings - Unresolved:** None

Section 4: Conclusion

Overall, the exercise was a success. All five exercise objectives were met and no level 1 or 2 findings were noted. Officials and representatives from the State of North Carolina, the risk counties of Brunswick and New Hanover, Duke Energy, and the U.S. Nuclear Regulatory Commission, as well as many other agencies and numerous volunteers, participated in the exercise. The response organizations and volunteers demonstrated knowledge of their emergency response plans and procedures and successfully implemented them. The cooperation and teamwork of the participants was apparent throughout all evaluated and training activities.

The role of the Brunswick Nuclear Plant Task Force in scheduling and conducting the necessary improvements identified in previous exercises was instrumental in the success of the state's corrective action program and ultimately the exercise. Additionally, a highlight of this exercise was the focus on protecting the health and safety of the access/functional needs population relative to mass care services.

The Federal Emergency Management Agency wishes to acknowledge the efforts of the many individuals who participated and made this exercise a success.

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Radiological Emergency Preparedness Program

After Action Report

2018 Brunswick Nuclear Plant

Appendix A: Exercise Timeline Brunswick 2018

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken						
		NC SERT/ SEOC	Radiation Protection, Dose Assessment	Eastern Branch	Brunswick County EOC	New Hanover County EOC		Joint Information System*
Unusual Event	N/A	N/A	N/A	N/A	N/A	N/A		N/A
Alert	0835	0838	0852	0855	0851	0848		N/A
Site Area Emergency	0947	0953	0954	0956	0953	0952		0950
General Emergency	1154	1159	1159	1201	1200	1158		1158
Simulated Rad. Release Started	1146	1159	1159	1201	1200	1158		1154
Simulated Rad. Release Terminated	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing		Ongoing
Facility Declared Operational	0914	0915	0915	0858	0914	0900		0920
Transfer of Direction & Control to NC SERT	N/A	N/A	N/A	N/A	N/A	N/A		N/A
Declaration of State of Emergency	State	1057	N/A	N/A	1057	1057		1057
	Brunswick	1000	N/A	N/A	1000	N/A		1000
	New Hanover	1040	N/A	N/A	N/A	1040		1040
Exercise Terminated	1332	1337	1337	1340	1336	1337		1332
1st Protective Action Decision: Stay Tuned		1008	N/A	1008	1008	1008		*1104
1st Siren Activation		1015	N/A	1015	1015	1015		N/A
1st EAS Message		1019	N/A		1019	1019		N/A
1st NWS Message		1030	N/A	1030	1030	1030		N/A
2nd Protective Action Decision: Evacuate Zones: 1, 2, 5, 6, 7, 8, 9, 12 Shelter in Place Zones: N/A		1210	1210	1210	1210	1210		*1336
2nd Siren Activation		1224	1224	1224	1224	1224		N/A
2nd EAS		1229	1229	1229	1229	1229		N/A
2nd NWS Message		1239	1239	1239	1239	1239		N/A
KI Ingestion Decision: Emergency Workers – Ingest General Public – No Issue			1236	1252	1237	1252		N/A
		N/A	N/A	N/A	N/A	N/A		N/A

*Times are based on press release times as entered in NC SPARTA.

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Appendix B: Exercise Evaluators and Team Leaders

Regional Assistance Committee Chair: Randall L. Hecht

North Section Chief: JT Ackermann

Site Specialist: DeShun Lowery

Exercise Support: Melonie McGuire-Johnson (FEMA)/ Christy Bennett (ICF)

Technical Team Lead: Joe Harworth

Public Information Team Lead: Glenda Bryson

Location	Evaluation Team	Capability & Activity
State of North Carolina - Director: Mike Sprayberry		
SEOC	McLemore*, Lewis, Rice	Operational Coordination Public Information and Warning
NCEM Eastern Branch Office	Dolder	Operational Coordination
Dose Assessment	Fill	Situational Assessment
FMT Management (training)	Campbell	Environmental Response/Health and Safety
FMT Red (training) FMT Blue (training)	Harworth* Ward	Environmental Response/Health and Safety
Mobile Laboratory (training)	Earnshaw	Environmental Response/Health and Safety
Emergency Operations Facility	Leatherman	Situational Assessment
Alternate EOF/Duke Media Center	Bryson*	Operational Coordination Public Information and Warning
Waterway Warning/Clearance, TCP and Park Clearance (OOS)	Ackermann, Dolder, Lowery	Public Information & Warning On-Scene Security, Protection and LE
Risk County: Brunswick County - Director: Brian Watts		
EOC	Bradley*, Lowery, Nemcheck	Operational Coordination Public Information & Warning Critical Transportation
Backup Route Alerting (OOS)	Nash	Public Information and Warning
RCCC (OOS) (training)	McLemore, Nash, Lowery, Dolder	Environmental Response/Health and Safety Mass Care
Risk County: New Hanover - Director: Steven Still		
EOC	Seward*, Nash, Ivy	Operational Coordination Public Information & Warning Critical Transportation
Backup Route Alerting (OOS)	Dolder, Lowery	Public Information and Warning

*denotes team lead

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Appendix C: Extent-of-Play Agreement

Brunswick Nuclear Power Plant

2018 FULL PARTICIPATION RADIOLOGICAL EMERGENCY PREPAREDNESS EXERCISE

All activities will be demonstrated fully in accordance with respective plans and procedures as they would be in an actual emergency. The Federal Emergency Management Agency (FEMA) Regional Office must receive these plans, guides and procedures at least 60 days before the exercise. This Extent of Play Agreement (EOPA) is written by exception. If it is not listed as an exception it will be demonstrated as described in the plans, standard operating guides (SOGs) and/or procedures (SOPs). Any issue or discrepancy arising during exercise play may be re-demonstrated if allowed by the Regional Assistance Committee (RAC) Chair or as listed herein. This allowance may be granted if it is not disruptive to exercise play and is mutually agreed to by the Offsite Response Organization (ORO) Exercise Controller and FEMA Evaluator. Some activities are requested to be performed as a training-only opportunity, and are identified in the participant description.

Core Capability: Operational Coordination

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (Criterion 1.a.1).

Performance Measure: Responsible OROs must demonstrate the capability to receive notification, contact, alert, and mobilize key emergency personnel in a timely manner, and demonstrate the ability to maintain and staff 24-hour operations.

Local responders must demonstrate the ability to receive and/or initiate notification to the respective emergency management organizations of an incident in a timely manner when they receive information from the licensee or alternate sources.

Responsible OROs must demonstrate the activation of facilities for immediate use by mobilized personnel upon their arrival.

Participants: NC EM (SERT/SEOC, Eastern Branch, JIC/JIS), Brunswick and New Hanover Counties

Note: Participants will not be allowed to enter their assigned exercise location prior to receiving activation/notification in accordance with plans and procedures.

Critical Task: Key personnel with leadership roles for the Offsite Response Organizations (ORO) provide direction and control to that part of the overall response effort for which they are responsible (Criterion 1.c.1).

Performance Measure: Leadership personnel must demonstrate the ability to carry out essential management functions.

Leadership must demonstrate the ability to prioritize resource tasking and replace/supplement resources.

Radiological Emergency Preparedness Program

After Action Report

2018 Brunswick Nuclear Plant

Participants: NC EM (SERT/SEOC, Eastern Branch), Brunswick and New Hanover Counties

Note: Brunswick County is the lead coordinating county until/if the State is requested to assume direction and control.

Brunswick County EOC

Emergency Management Office
3325 Old Ocean Highway
Building C
Bolivia, North Carolina 28422
Date: 31 July 2018
Time: 8:00 am

New Hanover County EOC

Emergency Management Office
220 Government Drive
Wilmington, North Carolina 28405
Date: 31 July 2018
Time: 8:00 am

State of North Carolina EOC

1636 Gold Star Drive
Raleigh, NC 27607
Date: 31 July 2018
Time: 8:00 am

NCEM Eastern Branch Office

3802 Highway 58 North
Suite B
Kinston, NC 28502
Date: 31 July 2018
Time: 8:00 am

Agree

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (Criterion 1.e.1).

Performance Measure: Responsible OROs must demonstrate capability to maintain inventories of KI sufficient for use by: emergency workers, institutionalized individuals, where stipulated by plans, members of transient populations/general public within plume pathways (EPZ)

Dosimetry: Sufficient quantities of appropriate direct-reading and permanent-record dosimetry and dosimeter chargers must be available for issuance to all emergency workers. ORO must demonstrate provisions to make dosimetry available to specialized response teams

Monitoring Instruments: All instruments must be inspected, inventoried, and operationally checked before each use. For Field Monitoring Team (FMT), instruments must be capable of measuring gamma exposure rates and detecting beta radiation

Participants: NC EM (SERT/SEOC, Eastern Branch, JIC/JIS), NC Radiation Protection, Brunswick and New Hanover Counties

The SAV schedule is as follows:

Brunswick County

Location: Emergency Management Office
3325 Old Ocean Highway
Building C
Bolivia, North Carolina 28422
Date: May 10, 2018
Time: 2:00 pm

New Hanover County

Location: Emergency Management Office
220 Government Drive
Wilmington, North Carolina 28405
Date: June 14, 2018
Time: 2:00 pm

Agree

Critical Task: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers, including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (Criterion 2.a.1)

Performance Measure: OROs authorized to send emergency workers into the plume exposure pathway EPZ must demonstrate a capability to comply with emergency worker exposure limits based on their emergency plans/procedures.

Participating OROs must also demonstrate the capability to make decisions concerning authorization of exposure levels in excess of pre-authorized levels and the number of emergency workers receiving radiation doses above pre-authorized levels.

Participants: NC EM (SEOC), Brunswick and New Hanover Counties

Note:**Agree**

Critical Task: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (Criterion 2.b.2).

Performance Measure: OROs must have the capability to make both initial and subsequent precautionary and/or protective action decisions.

ORO must demonstrate the capability to make initial precautionary and/or protective action decisions in a timely manner appropriate to the incident.

Participants: NC EM (SERT/SEOC), Brunswick and New Hanover Counties

Note: NC RPS will only make recommendations for PADs and PARs

Agree

Critical Task: Protective action decisions are made, as appropriate, for groups of persons with disabilities and access/functional needs (Criterion 2.c.1).

Performance Measure: ORO will be expected to make a decision on the need for a PAD (evacuation and/or sheltering), considering appropriate factors and necessary coordination.

Participants: NC EM (SERT/SEOC), Brunswick and New Hanover Counties

Note:**Agree**

Critical Task: OROs issue appropriate dosimetry, KI and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (Criterion 3.a.1).

Performance Measure: OROs must demonstrate the capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record

dosimetry, dosimeter chargers, KI, and instructions on the use of these items. For evaluation purposes, appropriate direct-reading dosimetry is defined as dosimetry that allows an individual(s) to read the administrative reporting limits that are pre-established at a level low enough to consider subsequent calculation of Total Effective Dose Equivalent (TEDE) and maximum exposure limits, for those emergency workers involved in lifesaving activities, contained in the ORO's plans/procedures.

Participants: NC EM, Brunswick and New Hanover Counties

Note:

Agree

Critical Task: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained (Criterion 3.b.1).

Performance Measure: OROs must demonstrate the capability to make KI available to institutionalized individuals and, where provided for in their plans/procedures, to members of the general public.

OROs must demonstrate the capability to accomplish distribution of KI consistent with decisions made.

OROs must have the capability to develop and maintain lists of institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI.

Participants: Brunswick and New Hanover Counties

Note: Management Aspect/counties only

Agree

Critical Task: Precautionary and/or protective action decisions are implemented or persons with disabilities and access/functional needs other than schools within areas subject to protective actions. (Criterion 3.c.1).

Performance Measure: Applicable OROs must demonstrate the capability to alert and notify (i.e., provide PARs and emergency information and instructions to) persons with disabilities and access/ functional needs, including hospitals/medical facilities, licensed day cares, nursing homes, correctional facilities, and mobility-impaired and transportation-dependent individuals.

OROs must demonstrate the capability to provide for persons with disabilities and access/functional needs in accordance with plans/procedures.

Participants: Brunswick and New Hanover Counties

Note: Management Aspect/Counties Only

Agree

Critical Task: OROs/School officials implement protective actions and/or protective actions for schools (Criterion 3.c.2).

Performance Measure: School systems/districts (these include public and private schools, kindergartens, and preschools) must demonstrate the ability to implement precautionary and/or protective action decisions for students. The demonstration must be made as follows: Each school system/district within the 10-mile EPZ must demonstrate implementation of protective actions.

Participants: Brunswick and New Hanover Counties

Note: Management Aspect/Counties Only

Agree

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (Criterion 3.d.1).

Performance Measure: OROs must demonstrate the capability to select, establish, and staff appropriate traffic and access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner.

OROs must demonstrate the capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.

Participants: NC EM (SERT/SEOC), Brunswick and New Hanover Counties

Note: Management Aspect Only

Agree

Critical Task: Impediments to evacuation are identified and resolved (Criterion 3.d.2).

Performance Measure: OROs must demonstrate the capability to identify and take appropriate actions concerning impediments to evacuations. In demonstrating this capability, the impediment must remain in place during the evacuation long enough that re-routing of traffic is required and must also result in demonstration of decision-making and coordination with the JIS to communicate the alternate route to evacuees.

Participants: NC EM (SERT/SEOC), Brunswick and New Hanover Counties

Note: Management Aspect Only

Agree

Core Capability: Situational Assessment

Critical Task: Appropriate protective action recommendations (PARs) are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions. (Criterion 2.b.1).

Performance Measure: During the initial stage of the emergency response, following notification of plant conditions that may warrant offsite protective actions, the ORO must demonstrate the capability to use the appropriate means described in the plans/procedures to develop PARs for decision-makers based on available information and recommendations provided by the licensee, as well as field monitoring data if available. The ORO must also consider any release and meteorological data provided by the licensee.

The ORO must demonstrate a reliable capability to independently validate dose projections

Participants: NC SEOC, Brunswick and New Hanover Counties

Note: NC RPS will only make recommendations for PADs

Agree

Critical Task: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make PADs for the general public (including the recommendation for the use of KI, if ORO policy) (Criterion 2.b.2).

Performance Measure: OROs must have the capability to make both initial and subsequent precautionary and/or protective action decisions.

OROs must demonstrate the capability to make initial precautionary and/or protective action decisions in a timely manner appropriate to the incident.

Participants: NC SEOC, Brunswick and New Hanover Counties

Note: NC RPS will only make recommendations for PADs

Agree

Core Capability: Public Information and Warning

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner (Criterion 1.a.1).

Performance Measure: Responsible ORO must demonstrate the capability to receive notification of an incident from the licensee; verify the notification, contact, alert, and mobilize key emergency personnel in a timely manner, and demonstrate the ability to maintain and staff 24-hour operations.

Local responders must demonstrate the ability to receive and/or initiate notification to the licensees or other respective organizations in a timely manner.

Responsible OROs must demonstrate the activation of facilities for immediate use by mobilized personnel upon their arrival.

Participants: NCEM, Brunswick and New Hanover Counties

Note: Participants may be prepositioned in proximity to their assigned response locations. Participants will not be allowed to enter their assigned exercise location prior to receiving activation/notification in accordance with plans and procedures.

Agree

Critical Task: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. (Criterion 1.d.1)

Performance Measure: OROs must demonstrate that a primary system and at least one backup system are fully functional at all times.

Participants: NC EM, Brunswick and New Hanover Counties

Note:

Agree

Critical Task: Equipment, maps, displays and other supplies are sufficient to support Joint Information System (JIS) operations (Criterion 1.e.1).

Performance Measure: For non-facility-based operations, the equipment and supplies must be sufficient and consistent with the assigned operational role.

Participants: NC EM (JIS), Brunswick and New Hanover Counties

Note:

Agree

Critical Task: Primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. (REP Manual-Exhibit 11-3) (Criterion 5.a.1).

Performance Measure: Responsible OROs must demonstrate the capability to activate established protocols for broadcasting emergency instructions from an EOC to the public through identified broadcast stations and systems. The initial instructional message to the public must include, as a minimum, the elements required by current FEMA REP Guidance with a sense of urgency and without undue delay. (REP Manual-Planning Standard E-Notification Methods and Procedures)

Participants: NC EM (SEOC, NWS Wilmington), Brunswick and New Hanover Counties

Note: North Carolina JIS staff or designee will discuss procedures for the formulation, approval, release, receipt, acknowledgment/validation and broadcast of an EAS message.

EAS message will be generated not broadcasted.

Note: EAS messages will not be released to the media or the public. EAS Messages will only be sent to the NWS. Once the EAS Message is posted in the NCSPARTA Significant Events Board, the EAS message will be considered released.

Agree

Critical Task: Backup Alerting of the public is completed within a reasonable time following the detection by the ORO of a failure of the primary alert and notification system (Criterion 5.a.3).

Performance Measure: Demonstrate the backup physical means of alert and notification of the general public in exception areas or areas of system alerting failure, according to local plans and/or procedures.

Participants: Brunswick and New Hanover Counties

Note:

Agree

Critical Task: Ensure OROs provide accurate emergency information and instructions to the public and the news media in a timely manner (The responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay) (REP Manual-Exhibit 11-3) (Criterion 5.b.1).

Performance Measure: The responsible ORO personnel/representatives must demonstrate actions to provide emergency information and instructions to the public and media in a timely manner following the initial alert and notification (not subject to specific time requirements).

Participants: NC EM (SERT/SEOC, JICS/JIS), Brunswick and New Hanover Counties

Note: Public messaging will not be released to the media or the public. Once the News Release is confirmed to have been posted in the NCSPARTA PIO Board, the message will be considered released.

Agree

Core Capability: Environmental Response, Health and Safety

Note: Field teams and/or responders are not to enter MOTSU installation

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (Criterion 1.a.1)

Performance Measure: Responsible ORO must demonstrate the capability to receive notification of an incident from the licensee; verify the notification, contact, alert, and mobilize key emergency personnel in a timely manner, and demonstrate the ability to maintain and staff 24-hour operations.

Local responders must demonstrate the ability to receive and/or initiate notification to the licensees or other respective organizations in a timely manner.

Responsible OROs must demonstrate the activation of facilities for immediate use by mobilized personnel upon their arrival.

Participants: NC RPS Field Team Management

Note: Training will be conducted and documented to accommodate this criterion.

Agree

Critical Task: ORO's shall establish reliable primary and backup means of communications for licensees, local and state response organizations. These communication systems should be compatible with one another. (Criterion 1.d.1)

Performance Measure: OROs must demonstrate that a primary communications system and at least one backup communications system are fully functional at all times.

Participants: NC RPS Field Team Management

Note: Training will be conducted and documented to accommodate this criterion.

Note: This will be a Courtesy Evaluation

Agree

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (Criterion 1.e.1).

Performance Measure: For non-facility-based operations, the equipment and supplies must be sufficient and consistent with the assigned operational role.

KI: Responsible OROs must demonstrate capability to maintain inventories of KI sufficient for use by: emergency workers, institutionalized individuals, where stipulated by plans, members of transient populations/general public within plume pathways (EPZ)

Dosimetry: Sufficient quantities of appropriate direct-reading and permanent-record dosimetry and dosimeter chargers must be available for issuance to all emergency workers. ORO must demonstrate provisions to make dosimetry available to specialized response teams

Monitoring Instruments: All instruments must be inspected, inventoried, and operationally checked before each use. For FMT, instruments must be capable of measuring gamma exposure rates and detecting beta radiation

Participants: *NC RPS Field Team Management and Brunswick County*

Note: Training will be conducted and documented to accommodate this criterion.

Note: This will be a Courtesy Evaluation

Note: A prop may be utilized for Permanent-Record Dosimetry and KI issuance throughout the training.

Note: NC RPS Field Teams will show storage of KI

Agree

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. EWs periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs (Criterion 3.a.1).

Performance Measure: OROs must demonstrate the capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.

Participants: *NC RPS Field Team Management, Field Monitoring Teams (FMT), and Mobile Radiological Laboratory*

Note: Training will be conducted and documented to accommodate this criterion.

Note: This will be a Courtesy Evaluation

Note: A prop will be utilized for Permanent-record Dosimetry and KI issuance throughout the training.

Agree

Critical Task: Field teams (two or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure (Criterion 4.a.2).

Performance Measure: Responsible OROs must demonstrate the capability to brief FMTs on predicted plume location and direction, plume travel speed, and exposure control procedures before deployment. Teams must be directed to take measurements at such locations and times as necessary to provide sufficient information to characterize the plume and its impacts.

Participants: NC RPS Field Team Management (FMT)

Note: Training will be conducted and documented to accommodate this criterion.

Note: This will be a Courtesy Evaluation

Agree

Critical Task: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low-background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media (Criterion 4.a.3).

Performance Measure: Two or more FMTs must demonstrate the capability to make and report measurements of ambient radiation to the field team coordinator, dose assessment team, or other appropriate authority.

FMTs must also demonstrate the capability to obtain an air sample for measurement of airborne radioiodine and particulates, and to provide the appropriate authority with field data pertaining to measurement.

Participants: NC RPS Field Monitoring Teams (FMT)

Note: Training will be conducted and documented to accommodate this criterion.

Note: This will be a Courtesy Evaluation

Agree

Critical Task: The laboratory is capable of performing required radiological analyses to support protective action decisions. (Criterion 4.c.1)

Performance Measure: The laboratory staff must demonstrate the capability to follow appropriate procedures for receiving samples, including logging information, preventing contamination of the laboratory(ies), preventing buildup of background radiation due to stored samples, preventing cross contamination of samples, preserving samples that may spoil (e.g., milk), and keeping track of sample identity. In addition, the laboratory staff must demonstrate the capability to prepare samples for conducting measurements.

Participants: NC RPS Mobile Radiological Lab

Note: Training will be provided and documented to accommodate this criterion.

Note: This will be a Courtesy Evaluation

Field Monitoring Team & Mobile Laboratory Staging Area

Location: New Hanover County Warehouse
1623 Hewlett Drive,
Wilmington, NC 28401
Date: 31 July 2018
Time: 8:00 am

Agree

Critical Task: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, medical services, and registration of evacuees (Criterion 6.a.1).

Performance Measures: Each reception center should be large enough to provide the necessary services to accommodate 20 percent of the population of the jurisdiction.

Participants: Brunswick County

Note: This will be a Courtesy Evaluation

Agree

Core Capability: Critical Transportation

Critical Task: OROs/School officials implement protective actions and/or protective actions for schools (Criterion 3.c.2).

Performance Measure: Demonstrate the ability to implement precautionary and/or protective action decisions for students in the different levels of education within the jurisdiction.

Participants: Brunswick and New Hanover Counties

Note: Consider including public and private schools, kindergartens and preschools.

Note: No child/adult care facilities will be interviewed

Note: Management Aspect Only

Brunswick County EOC
Emergency Management Office
3325 Old Ocean Highway
Building C
Bolivia, North Carolina 28422
Date: 31 July 2018
Time: 8:00 am

New Hanover County EOC
Emergency Management Office
220 Government Drive
Wilmington, North Carolina 28405
Date: 31 July 2018
Time: 8:00 am

Agree

Core Capability: On-Scene Security, Protection and Law Enforcement

NOTE: This core capability will be validated as courtesy evaluation during a scheduled discussion.

Participants: Waterway Warning – U.S. Coast Guard, NC Wildlife, NC Marine Patrol, MOTSU, NC State Parks and Aquarium, Wilmington Police Department, Brunswick County and

New Hanover County agencies.

Critical Task: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (Criterion 1.a.1)

Performance Measure: Responsible ORO must identify the capability to receive notification of an incident from the licensee; verify the notification, contact, alert, and mobilize key emergency personnel in a timely manner, and the ability to maintain 24-hour operations. Local responders must have the ability to receive and/or initiate notification to the licensees or other respective organizations in a timely manner.

Note:

Agree

Critical Task: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. (Criterion 1.d.1)

Performance Measure: OROs must have knowledge that a primary system and at least one backup system are fully functional at all times.

Note:

Agree

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, and other supplies are sufficient to support emergency operations (Criterion 1.e.1).

Performance Measure: For non-facility-based operations, the equipment and supplies must be sufficient and consistent with the assigned operational role.

KI: Responsible OROs must have knowledge of where inventories of KI are maintained for use by: emergency workers, institutionalized individuals, where stipulated by plans, members of transient populations/general public within plume pathways (EPZ).

Dosimetry: Sufficient quantities of appropriate direct-reading and permanent-record dosimetry and dosimeter chargers must be available for issuance to all emergency workers.

Monitoring Instruments: All instruments must be inspected, inventoried, and operationally checked before each use and reflect this maintenance.

Note:

Training

Location: Duke Energy
1623 Village Road NE
Leland, NC 28451
Date: July 11, 2018
Time: 8:00 am

Interview

Location: Duke Energy
1623 Village Road NE
Leland, NC 28451
Date: July 11, 2018
Time: 8:00 am

Agree

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. (Criterion 3.a.1).

Performance Measure: OROs must identify the capability to provide emergency workers (EW) (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.

EWs should recall the procedure relating to reading and recording findings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs.

Note:

Agree

Critical Task: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel (Criterion 3.d.1).

Performance Measure: OROs must identify the capability to select, establish, and staff appropriate traffic and access control points consistent with current conditions and PADs (e.g., evacuating, sheltering, and relocation) in a timely manner. This includes the capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.

Note:

Agree

Critical Task: Impediments to evacuation are identified and resolved (Criterion 3.d.2).

Performance Measure: OROs must be capable to recall the appropriate actions concerning impediments to evacuations. The discussion should include decision-making and coordination, re-routing of traffic, information to boaters on and off the water and other important information as determined.

Note:

Waterway Warning Discussion

Location: Duke Energy

1623 Village Road NE

Leland, NC 28451

Date: July 11, 2018

Time: 1:30 pm

Agree

Core Capability: Mass Care

NOTE: This core capability will be validated as courtesy evaluation during a scheduled discussion.

Critical Task: Equipment, maps, displays, monitoring instruments, dosimetry, KI, medical services, and other supplies are sufficient to support emergency operations (Criterion 1.e.1).

Performance Measure: Equipment and supplies for non-facility-based operations must be sufficient, consistent and used according to plans, procedures and/or directions for public life sustaining and lifesaving operations.

Participants: Brunswick County

Note: This will be a Courtesy Evaluation

Agree

Critical Task: OROs issue appropriate dosimetry, KI, and procedures, and manage radiological exposure to EWs in accordance with the plans/procedures. (Criterion 3.a.1).

Performance Measure: OROs must identify the capability to provide emergency workers (including supplemental resources) with the appropriate direct-reading and permanent-record dosimetry, dosimeter chargers, KI, and instructions on the use of these items.

EWs should recall the procedure relating to reading and recording findings on the appropriate exposure record or chart. OROs maintain appropriate record-keeping of the administration of KI to EWs.

Participants: Brunswick County

Note:

Agree

Critical Task: KI and appropriate instructions are available if a decision to recommend use of KI is made. Appropriate record-keeping of the administration of KI for institutionalized individuals and the general public is maintained (Criterion 3.b.1).

Performance Measure: OROs must demonstrate the capability to make KI available to institutionalized individuals and, where provided for in their plans/procedures, to members of the general public.

OROs must demonstrate the capability to accomplish distribution of KI consistent with decisions made.

OROs must have the capability to develop and maintain lists of institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI.

Participants: Brunswick County

Note: This will be a Courtesy Evaluation

Agree

Critical Task: Managers of congregate care/reception facilities demonstrate that centers have resources to provide services and accommodations consistent with planning guidelines. Manager demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate before entering congregate care facilities/reception center (Criterion 6.c.1).

Radiological Emergency Preparedness Program

After Action Report

2018 Brunswick Nuclear Plant

Performance Measures: OROs must demonstrate the capability to make decisions on the need for decontamination of the community individuals, follow appropriate decontamination procedures, provide medical assistance (when required), and maintain records of all community individuals and pets, according to appropriate plans, procedures, protocols, regulations and any other authorities for the jurisdiction.

Participants: Brunswick County

NOTE: This will be a Courtesy Evaluation

Reception Center

North Brunswick High School

114 Scorpion Drive

Leland, NC

Date: 10 July 2018

Time: 4:00 pm

Agree



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:

Andrea White

11:30 a.m. - Building Code Enforcement Information - (Ann Hardy, County Manager)

Issue/Action Requested:

Request that the Board of Commissioners receive Building Code Enforcement information.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive Building Code Enforcement information.

ATTACHMENTS:

Description

- ☐ Building Code Enforcement Evaluation PPT
- ☐ Brunswick County NC Final Letter
- ☐ Brunswick County NC Final Report

Information

Ann Hardy, County Manager

Building Code Enforcement Evaluation

- Effectiveness of local building codes can have a profound effect on how structures fare in a natural disaster
- Building-code enforcement can have major influence on economic well-being of a community and citizens
- ISO (Insurance Services Office) helps distinguish amongst communities with effective building-code adoption and enforcement through the Building Code Effectiveness Grading Schedule (BCEGS)
- ISO is an independent statistical, rating and advisory organization that serves the insurance industry
- Communities with well-enforced, up-to-date codes demonstrate better loss experience, and their citizens' insurances rates reflect that
- Brunswick County Code Administration participated in a BCEGS survey on 1/9/2019 with the results of a class 4 for 1 and 2 family dwellings and a class 3 for all other construction

Building Code Effectiveness Grading Point Comparison - Highlights

	2019 Grading		2014 Grading		Improvement	
	Commercial	Residential	Commercial	Residential	Commercial	Residential
Administration of Codes	36.27	35.87	25.55	25.15	10.72	10.72
Plan Review	22.49	14.32	12.96	12.76	9.53	1.56
Field Inspection	21.93	19.87	12.93	13.48	9.00	6.39
Final Score:	80.69	66.94	32.78	30.24	47.91	36.70

Achievement of Class 4 from a Class 8 in 2014

Improvement of 50%





1000 Bishops Gate Blvd., Suite 300
Mt. Laurel, NJ 08054

tel. 1-800-444-4554

January 28, 2019

Mr. Michael Slate, Building Official
Brunswick Co
75 Courthouse Dr. NE, Building 1
Bolivia, NC 28422

RE: Building Code Effectiveness Grading Schedule Results
Brunswick Co, Brunswick County, NC

Dear Mr. Slate:

We wish to thank you for the cooperation given to our representative, Wayne Fox, during our recent survey. We have completed our analysis of the building codes adopted by your community and the efforts put forth to properly enforce those codes. The resulting Building Code Effectiveness Grading Classification is 4 for 1 and 2 family residential property and 3 for commercial and industrial property.

The Insurance Services Office, Inc. (ISO) is an insurer-supported organization with the primary mission of providing advisory insurance underwriting and rating information to insurers. There is no requirement that insurers use our advisory material. Insurers may have adopted, or may be in the process of adopting, an ISO insurance rating program that will provide rating credits to individual property insurance policies in recognition of community efforts to mitigate property damage due to natural disasters. These insurers may use the Building Code Effectiveness Grading Classification we have recently developed for your community as a basis for the credits used. While individual insurers may use different credits or different effective dates, the ISO program will apply credits to new construction within Brunswick Co that has been issued a Certificate of Occupancy in the year 2019 and forward.

We will email our report which provides additional information about our classification process and how we have graded various aspects of your community's building codes and their enforcement.

We want to highlight the fact that the Building Code Effectiveness Grading Schedule is an insurance underwriting and information tool; it is not intended to analyze all aspects of a comprehensive building code enforcement program nor is it for purposes of determining compliance with any state or local law or for making property/casualty loss prevention and life safety recommendations.

If you have any questions about the Classification that was developed, please let us know. Additionally, if you are planning on any future changes in your building codes or their enforcement, please advise us as these changes may affect our analysis and your community's grading classification.

Sincerely,

Cindy Reaves

Cindy Reaves, Community Mitigation Analyst II

Email: creaves@iso.com

Phone: 800.930.1677 Ext 289

Enclosure

cc: Ms. Ann Hardy, County Manager

Building Code Enforcement Evaluation Report

Selections from the reviews of the

Brunswick Co

Building Code Enforcement Agency

In the County of Brunswick

In the State of North Carolina

1/9/2019 Evaluation



Building Code Effectiveness Grading Schedule (BCEGS®)

Table of Contents

Tab	Description
Section 1	Executive Summary
Section 2	Background Information
Section 3	Code Adoption
Section 4	Education, Training and Certification
Section 5	Staffing Levels
Section 6	BCEGS Point Analysis
Section 7	Natural Hazards
Appendix A	Natural Hazard General Information

Section 1 Executive Summary

Not all communities have rigorous building codes, nor do all communities enforce their codes with equal commitment. Yet the effectiveness of local building codes can have a profound effect on how the structures in your community will fare in a hurricane, earthquake, or other natural disaster.

Studies conducted following recent natural disasters concluded that total losses might have been as much as 50% less if all structures in the area had met current building codes. Building-code enforcement can have a major influence on the economic well-being of a municipality and the safety of its citizens. Insurance Services Office (ISO) helps distinguish amongst communities with effective building-code adoption and enforcement through comprehensive program called the Building Code Effectiveness Grading Schedule (BCEGS®).

ISO is an independent statistical, rating, and advisory organization that serves the property/casualty insurance industry. ISO collects information on a community's building-code adoption and enforcement services, analyzes the data, and then assigns a Building Code Effectiveness Classification from 1 to 10. Class 1 represents exemplary commitment to building-code enforcement. The concept behind BCEGS is simple. Municipalities with well-enforced, up-to-date codes demonstrate better loss experience, and their citizens' insurance rates can reflect that. The prospect of minimizing catastrophe-related damage and ultimately lowering insurance costs gives communities an incentive to enforce their building codes rigorously.

The following management report was created specifically for Brunswick Co based on a BCEGS survey conducted on 1/9/2019. This report can help you evaluate your community's building-code enforcement services utilizing benchmarking data collected throughout the country. The report is designed to give your management team an expanded prospective for dealing with the important issues surrounding effective building code enforcement. This is accomplished through comparisons of your code enforcement to that of others in your area and state. The analysis goes further to allow you to compare your jurisdiction to others across the country with similar permit, plan review and inspection activity. ISO thanks you for your participation and we encourage you to take advantage of the information contained in this report to assist in making decisions regarding the level of code enforcement best suited for Brunswick Co.

The survey conducted has resulted in BCEGS class of 4 for 1 and 2 family dwellings and a class 3 for all other construction. More information regarding how this recent survey compares to previous surveys is provided below.

Table 1 details the points your department earned during the most recent survey as well as the points earned in the previous survey including a comparison of the two. This information may be used to track local trends or pin-point improvement target areas.

Table 1

	Building Code Effectiveness Grading Point Comparison						
	Point Totals						
	Current Grading Yr:		Maximum Point Possible	Previous Grading Yr:		Difference	
	2019			2014			
	Com	Res		Com	Res	Com	Res
Section I - Administration of Codes	36.27	35.87	54.00	25.55	25.15	10.72	10.72
Section 105 - Adopted Codes	8.00	7.60	8.00	4.80	4.40	3.20	3.20
Section 108 - Additional Code Adoptions	3.35	3.35	4.00	3.35	3.35	0.00	0.00
Section 110 - Modification to Adopted Codes	0.00	0.00	4.00	0.00	0.00	0.00	0.00
Section 112 Method of Adoption	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Section 115 - Training	9.25	9.25	13.00	4.24	4.24	5.01	5.01
Section 120 - Certification	9.23	9.23	12.00	8.59	8.59	0.64	0.64
Section 125 - Building Official's Qualification / Exp/ Education	2.75	2.75	4.00	2.00	2.00	0.75	0.75
Section 130 - Selection Procedure for Building Official	0.25	0.25	0.50	0.00	0.00	0.25	0.25
Section 135 - Design Professionals	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Section 140 - Zoning Provisions	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Section 145 - Contractor / Builder Licensing & Bonding	0.90	0.90	1.00	0.68	0.68	0.22	0.22
Section 155 - Public Awareness Programs	1.54	1.54	2.50	0.94	0.94	0.60	0.60
Section 160 - Participation in Code Development Activities	0.50	0.50	0.50	0.50	0.50	0.00	0.00
Section 165 - Administrative Policies & Procedures	0.50	0.50	0.50	0.45	0.45	0.05	0.05

Building Code Effectiveness Grading Point Comparison (continued)

	Point Totals						
	Current Grading Yr:		Maximum Point Possible	Previous Grading Yr:			
	2019			2014		Difference	
	Com	Res		Com	Res	Com	Res
Section II - Plan Review	22.49	14.32	23.00	12.96	12.76	9.53	1.56
Section 205 - Existing Staffing	9.00	2.83	9.00	2.81	2.61	6.19	0.22
Section 210 - Experience of Personnel	0.99	0.99	1.50	0.90	0.90	0.09	0.09
Section 215 - Detail of Plan Review	11.50	9.50	11.50	8.50	8.50	3.00	1.00
Section 220 - Performance Evaluation for Quality Assurance	1.00	1.00	1.00	0.75	0.75	0.25	0.25
Section III - Field Inspection	21.93	19.87	23.00	12.93	13.48	9.00	6.39
Section 305 - Existing Staffing	9.00	6.94	9.00	2.61	3.16	6.39	3.78
Section 310 - Experience of Personnel	2.53	2.53	3.00	2.42	2.42	0.11	0.11
Section 315 - Managing Inspection and Re-inspection activity	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Section 320 - Inspection Checklist	1.50	1.50	2.00	0.00	0.00	1.50	1.50
Section 325 - Special Inspections	0.90	0.90	1.00	0.90	0.90	0.00	0.00
Section 330 - Inspections for Natural Hazard Mitigation	1.50	1.50	1.50	1.50	1.50	0.00	0.00
Section 335 - Final Inspections	2.50	2.50	2.50	2.50	2.50	0.00	0.00
Section 340 - Certificate of Occupancy	2.00	2.00	2.00	2.00	2.00	0.00	0.00
Section 345 - Performance Evaluations for Quality Assurance	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Subtotal:	80.69	70.06	100.00	51.44	51.39	29.25	18.67
The final score is determined by a relationship between Item 105 and the balances of the scoring.							
Final Score:	80.69	66.94	100.00	32.78	30.24	47.91	36.70

Section 2 Background Information

Introduction

ISO collects information from communities in the United States on their adoption and enforcement of building codes. ISO analyzes the data using its Building Code Effectiveness Grading Schedule (BCEGS) and then assigns a BCEGS Classification number to the community. The classification number-which ranges from 1 to 10-measures a jurisdiction's commitment to the adoption and enforcement of building codes affecting the construction of new buildings. Class 1 indicates the most favorable classification of commitment to the adoption and enforcement of building codes.

ISO's commitment to polling each building code enforcement agency on a regular basis is important to the program - periodic surveying helps determine if a community has made any significant changes since its last field evaluation. This ongoing effort is designed to re-evaluate each community at approximate 5-year intervals or sooner if changes indicate a potential revision to the classification number.

The purpose of this report is fourfold:

1. To summarize a community's scoring under the criterion contained in the BCEGS program.
2. To identify opportunities for communities desiring to improve their BCEGS classification number.
3. To assist a community in understanding how other jurisdictions with similar needs address building code adoption and enforcement.
4. To provide hazard mapping information important in planning and developing a sustainable community.

Data Collection and Analysis

ISO has evaluated over 14,000 code enforcement departments across the United States. In each of these communities, three elements of building code adoption and enforcement are reviewed. These three elements are the administration of codes, plan review and field inspection.

Administration of Codes:

ISO evaluates the administrative support for code enforcement within the jurisdiction -- the adopted building codes and the modifications of those codes through ordinance, code enforcer qualifications, experience and education, zoning provisions, contractor/builder licensing requirements, public awareness programs, the building department's participation in code development activities, and the administrative policies and procedures. This section represents 54% of the analysis in the BCEGS program.

Plan review division:

Consideration is given to determine staffing levels, personnel experience, performance evaluation schedules, and the level of review of construction documents for compliance with the adopted building code of the jurisdiction being graded. This section represents 23% of the analysis.

Field inspection:

Consideration is given to determine staffing levels, personnel experience, performance evaluation schedules, and the level of the agency's review of building construction. This section also represents 23% of the analysis.

The information necessary to determine the BCEGS classification number was collected from the community building officials through a combination of on-site interviews and completed questionnaires.

Section 3 Code Adoption

Recognizing that building codes are continually being reviewed and updated to reflect emerging technology and best practices, the BCEGS program encourages communities to make every effort to adopt the latest edition of one of the building codes without amendments. The program is sensitive to the reality that building code adoption is not always a local issue, nor do the wheels of progress turn rapidly all the time. To receive maximum BCEGS credit for this very important section a community must adopt and implement the revised code within two years of the publication of the building code.

As detailed in Figure 3-1 below, eight points are the maximum available for the adoption of a building code. The final calculation to determine a jurisdiction's BCEGS classification employs the ratio of the points possible and the points earned in the building code adoption section as a factor for all other points earned in the system. Therefore, a jurisdiction enforcing the latest building code will have a ratio of 1 and no adjustment will be made to the points earned. A department enforcing a building code that was published six years prior to the survey date would have a ratio of 6.88/8 or .86 so the jurisdiction would receive credit for 86% of the points earned throughout the evaluation process.

Table 3-1 Criteria for Building Code Adoption Points

If the published date of the listed codes is within 5 years of the date of the grading:		
Building Code(s) addressing commercial and /or residential construction	8.00	points
If the published date of the listed codes is within 6 years of the date of the grading:		
Building Code(s) addressing commercial and /or residential construction	6.88	points
If the published date of the listed codes is within 10 years of the date of the grading:		
Building Code(s) addressing commercial and /or residential construction	2.21	points
If an earlier edition of the listed codes is adopted:		
Building Code(s) addressing commercial and /or residential construction	0.85	point

For departments surveyed in 2019 the BCEGS program uses the following as the latest edition of Building codes available.

Table 3-2 Latest Edition Available

	Publisher	Publication Year
Commercial Building Code		
Residential Building Code		

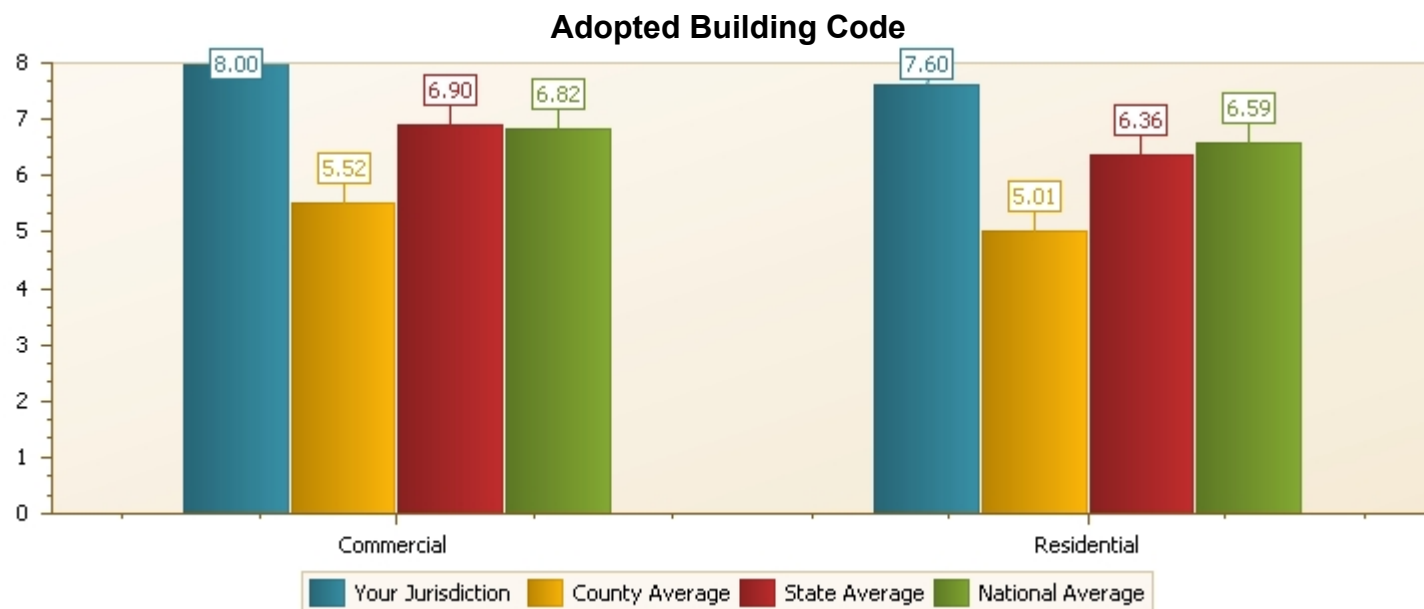
Table 3-3 Building Codes Enforced in Brunswick Co

	Publisher	Publication Year	Effective Year
Commercial Building Code	ICC	2015	2019
Residential Building Code	ICC	2015	2019

The following is the first of many “Benchmarking Information” sections located in this report. The purpose of the benchmarking information is to provide data ISO has collected in the course of its evaluations of code enforcement departments throughout the country. The data should not be considered a standard but rather information which allows you to compare operations in your jurisdiction to those conducted by other jurisdictions with similar conditions. Benchmarking information will be distinguished from other information in this report by a green Benchmarking Information bar above the table or figure.

Benchmarking Information

Chart 3-4 BCEGS points awarded comparison



Item 108. Additional Code Adoptions:

This section reviews the adoption and enforcement of electrical, mechanical, plumbing, energy, and wildland urban interface codes. Adopted codes are evaluated by year of publication including amendments and enforcement efforts. Table 3-5 details the criteria for earning points under this section.

Table 3-5 Criteria for sub-code adoption points

<p>If the published date of the listed codes is within 5 years of the date of the grading: 0.67 point for each of the five subcodes</p> <p>If the published date of the listed codes is within 6 years of the date of the grading: 0.33 point for each of the five subcodes</p> <p>If the published date of the listed codes is within 10 years of the date of the grading: 0.18 point for each of the five subcodes</p> <p>If an earlier edition of the listed codes is adopted: 0.004 point for each of the five subcodes</p>

For departments surveyed in 2019 the BCEGS program uses the following as the latest edition of sub-codes available.

Table 3-6 Latest edition of Sub-Codes Available

Type of Code	Publisher	Publication Year
Commercial:		
Electrical Code	NFPA	
Plumbing Code	ICC / IAPMO	
Mechanical Code	ICC / IAPMO	
Fuel Gas Code	ICC / NFPA	
Energy Code	ICC / ASHRAE	
Wildland Urban Interface Code	ICC	
Residential:		
Electrical Code	NFPA	
Plumbing Code	ICC / IAPMO	
Mechanical Code	ICC / IAPMO	
Fuel Gas Code	ICC / NFPA	
Energy Code	ICC / ASHRAE	
Wildland Urban Interface Code	ICC	

ASHRAE - American Society of Heating, Refrigeration and Air Conditioning Engineers

ICC - International Code Council

IAPMO - International Association of Plumbing and Mechanical Officials

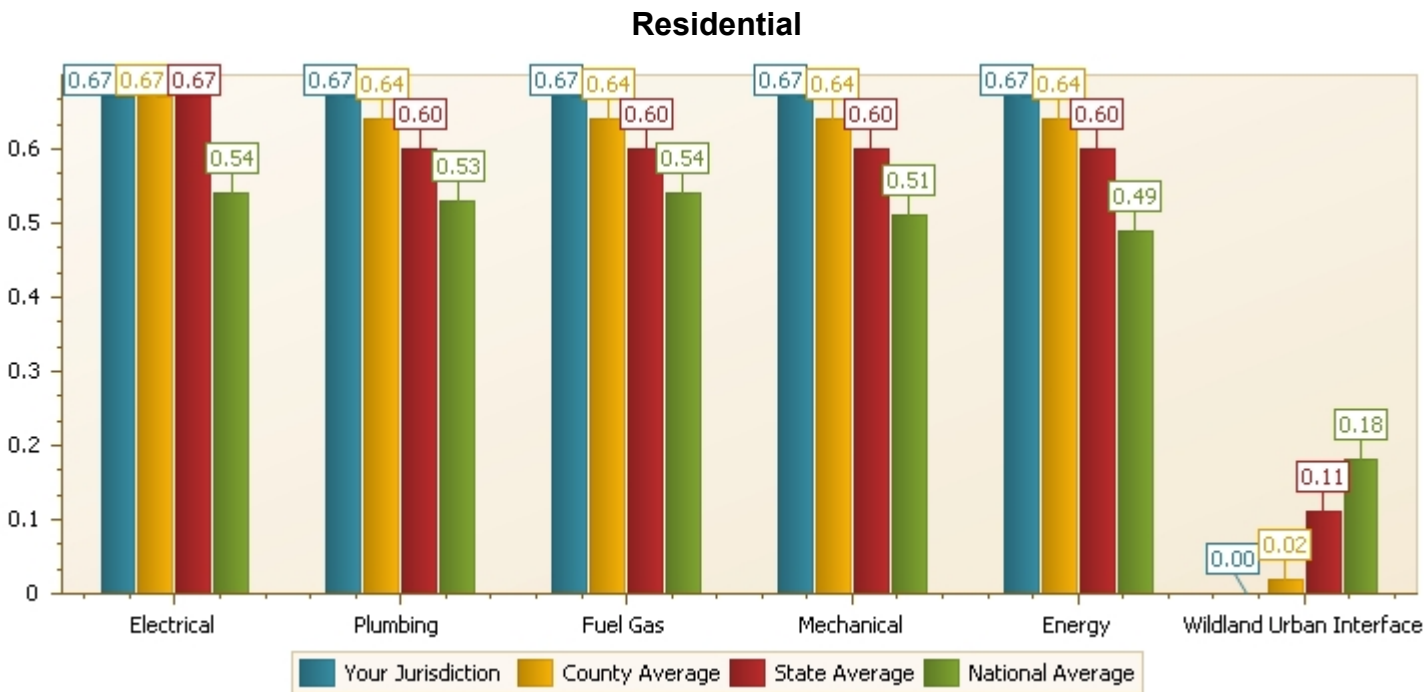
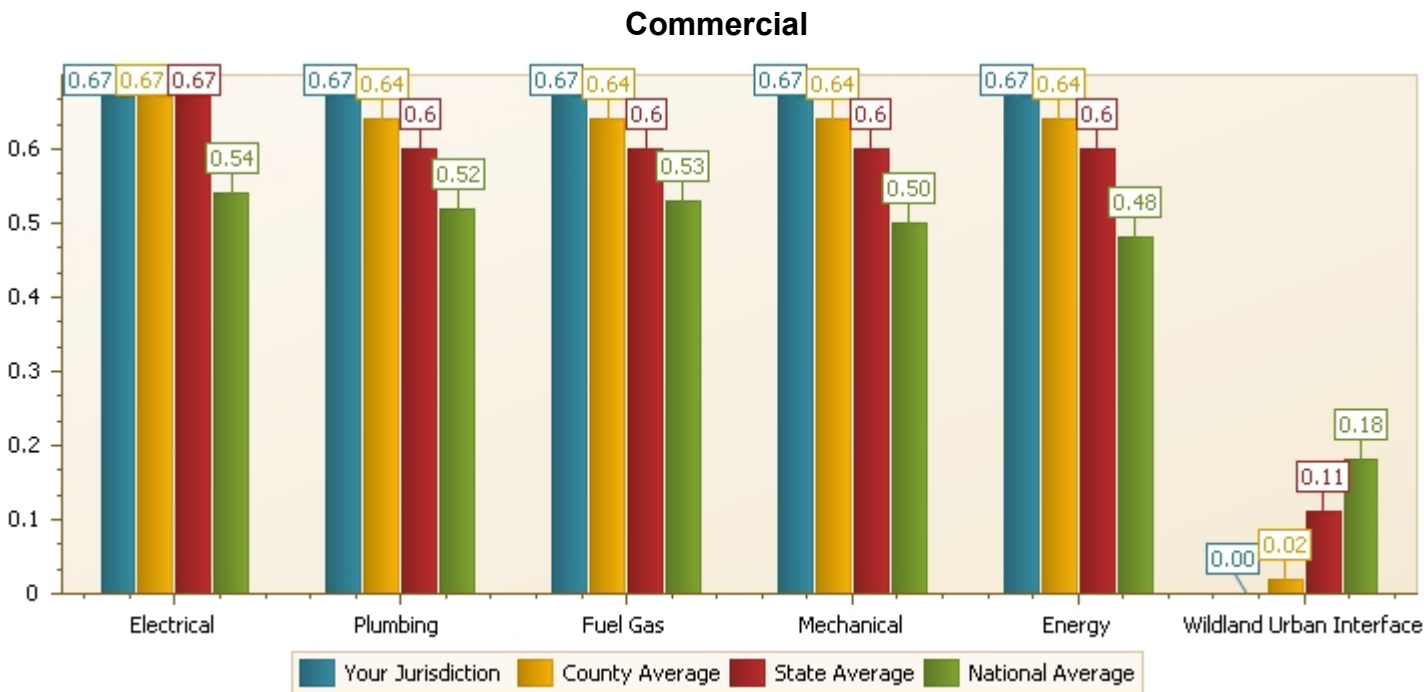
NFPA - National Fire Protection Association

Table 3-7 Sub Codes Enforced in Brunswick Co

Type of code	Publisher	Publication Year	Effective Year
Commercial:			
Electrical Code	NFPA	2017	2018
Plumbing Code	ICC	2015	2019
Mechanical Code	ICC	2015	2019
Fuel Gas	ICC	2015	2019
Energy Code	ICC	2015	2019
Wildland Urban Interface Code			
Residential:			
Electrical Code	NFPA	2017	2018
Plumbing Code	ICC	2015	2019
Mechanical Code	ICC	2015	2019
Fuel Gas	ICC	2015	2019
Energy Code	ICC	2015	2019
Wildland Urban Interface Code			

Benchmarking Information

Chart 3-8 additional code adoption

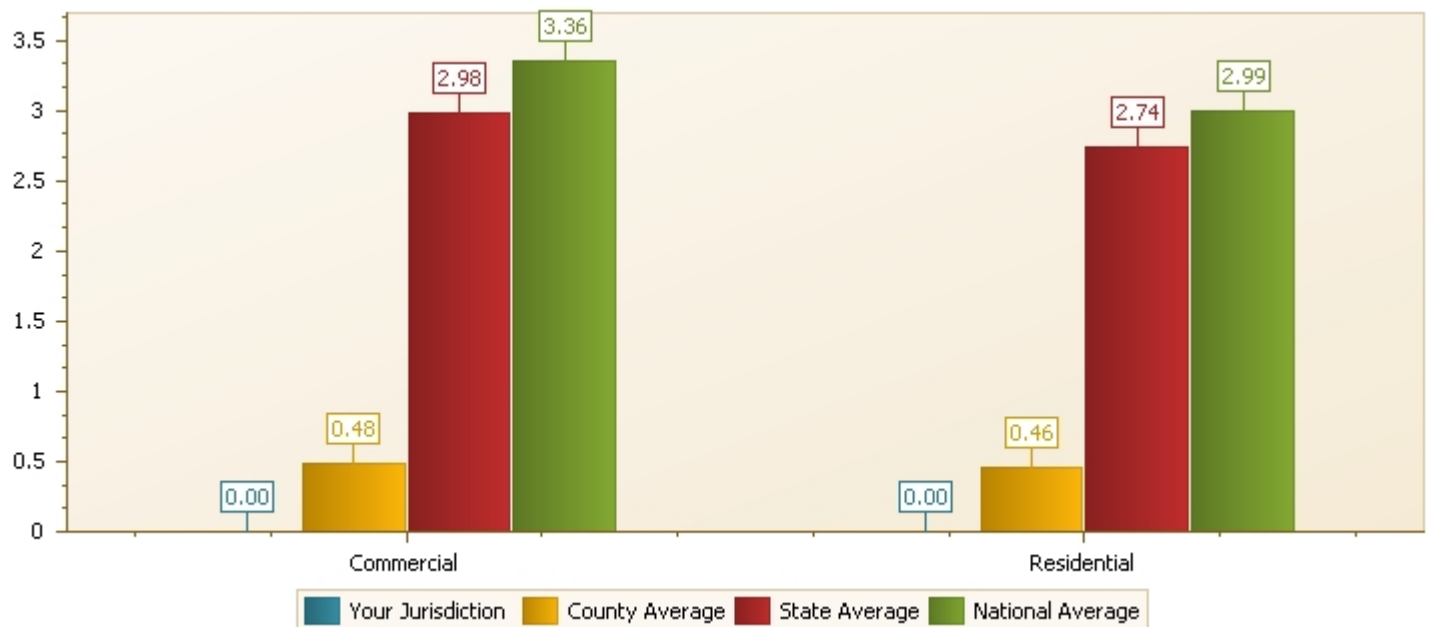


Item 110. Modification to adopted codes:

The BCEGS program encourages timely and unmodified adoption of the latest edition available of the building code. It is not uncommon for a jurisdiction to adopt a code and then modify it in some way. The most common modifications are administrative, which the BCEGS program is not overly concerned with. Some jurisdictions, however, modify the structural aspects of the code. Modifications are viewed as favorable when the intention is to strengthen the code. Due to the difficulty and expense of finitely determining the effect on a code of a specific action which weakens the code, no partial credit is available for this section. Note, however, that due to the formula: $(\text{Points credited in section 105} \times 0.125 \times 4.0)$ the points awarded for this item are reduced if the latest building code is not adopted and enforced. There is a direct correlation between the points earned for the adopted building code and the points available for this section. When modification serves to weaken the intent or effectiveness of the adopted building code relative to structural aspects or natural hazard mitigation features, no points will be awarded for this section.

Benchmarking Information

Chart 3-9 Comparison of Points Earned for Section 110

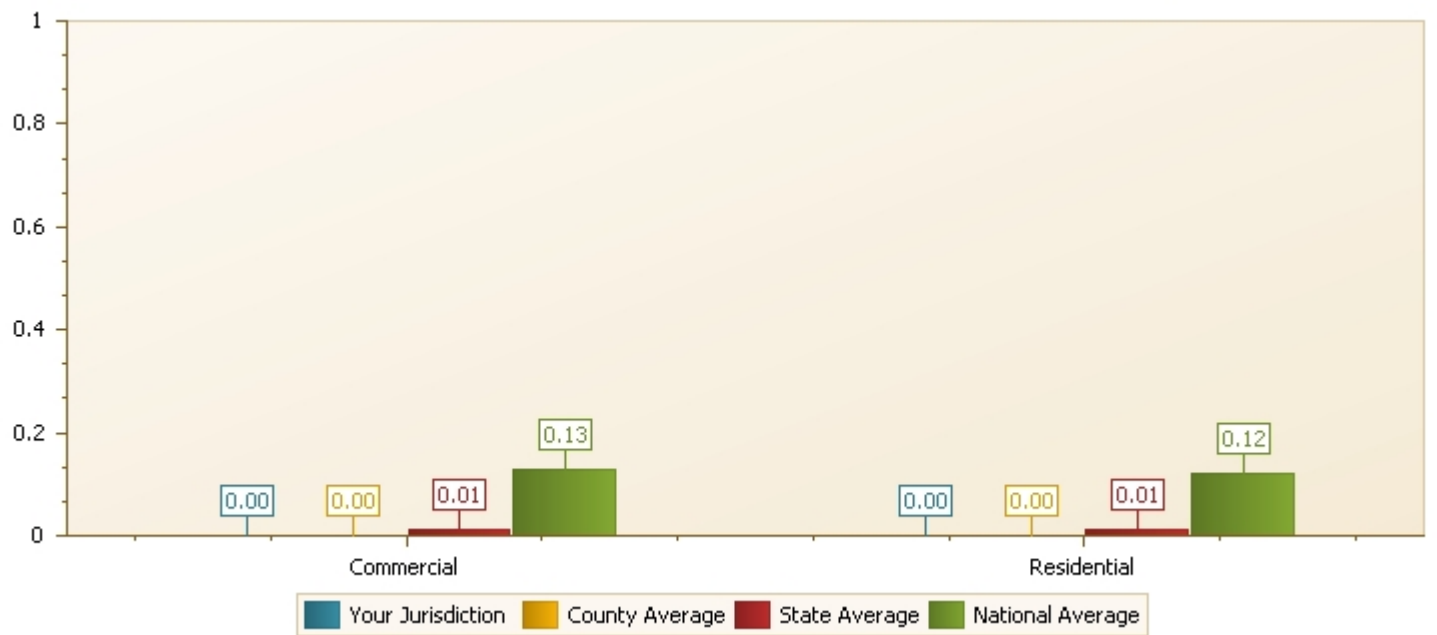


Item 112. Method of Adoption:

Updating the adopted codes to the latest code published by a nationally recognized building code development and publication organization within 12 months of the publication of the code is beneficial for the jurisdiction. It provides the latest and most modern technology for natural hazard mitigation. This section allows the opportunity to recognize the timely un-amended adoption of a nationally promulgated building code

Benchmarking Information

Chart 3-10 Points Earned for Timely (within one year of the publication date) Un-Amended Code Adoption



Section 4 Education, Training, and Certification

The Building Code Effectiveness Grading Schedule reviews the tools available to a building code department to determine what level of protection the jurisdiction has decided to offer. In this section we review the qualifications of the code enforcement personnel. By maintaining highly qualified, well trained staff the building code enforcement department is better equipped to encourage the construction of code compliant buildings.

The BCEGS program does not mandate any level of training certification or experience but it does recognize the technical and evolving nature of construction code enforcement. Therefore, 39% of the available points in the analysis are dependent on education, training and experience. The evaluation is much diversified. For instance, credit can be earned for hours of training taken, dollars spent on training, incentives for outside training, and hiring requirements. After review of this information a building code department may determine that a higher caliber employee or more incentives to current employees could assist them in performing their duties more efficiently and professionally.

The number of personnel is an important factor when comparing and correlating education and training. To standardize these numbers this report converts all employees to full time. Therefore a department with two full time code enforcers the number of employees will be two. If a department has five full time code enforcers and seven part time code enforcers each working twenty hours per week the department will show as eight and one half employees.

Brunswick Co employs 18.50 code enforcement personnel. This staffing level is equal to one code enforcement personnel for each 7,772 citizen or one code enforcement personnel for each 573.46 permits issued. If the jurisdiction was divided equally, each code enforcer would be responsible for an area of 45.78 square miles.

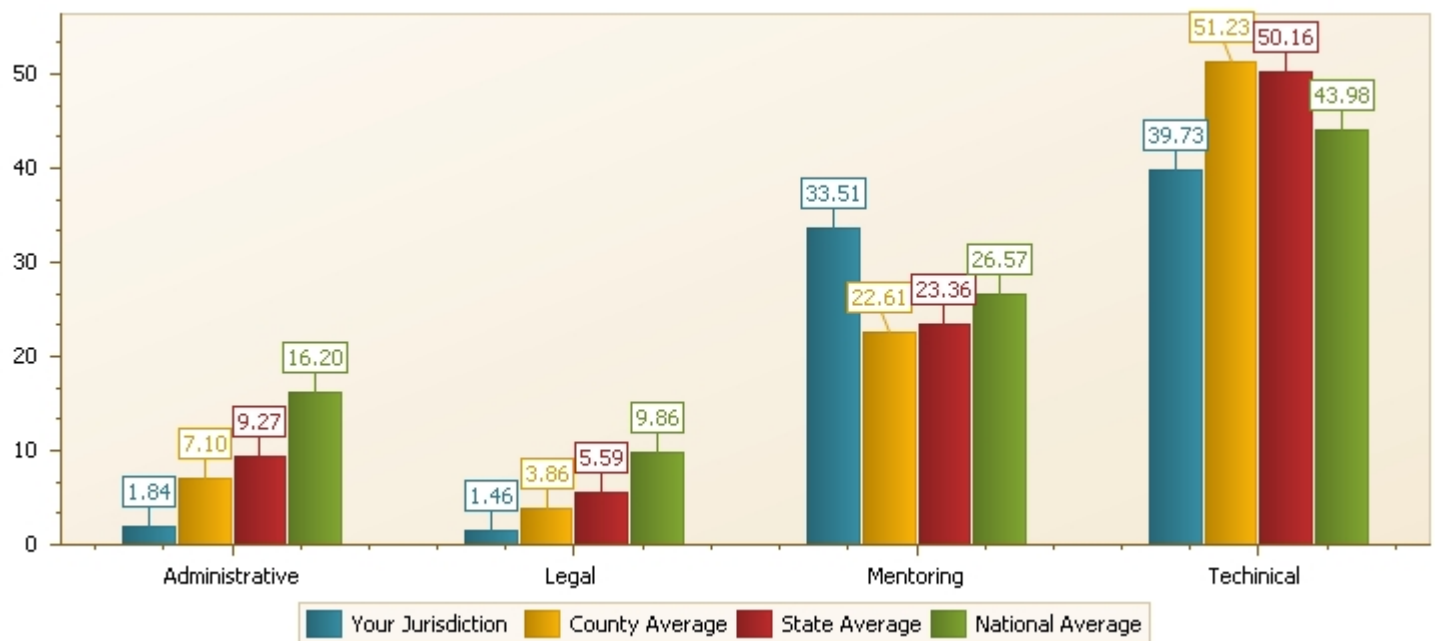
Table 4-1 displays the total and the average number of hours spent in training by code enforcement personnel in Brunswick Co. Training is broken down into four categories; a maximum of 1.25 points may be earned for the first 12 hours of training in administrative aspects of code enforcement, legal aspects of code enforcement, and being mentored in code enforcement. The first 60 hours of training in technical aspects of code enforcement may also earn maximum credit of 4.25 points. To receive the maximum available points in this area each employee must train a minimum of 96 hours per year and the subject must follow the details above.

Table 4-1 Training hours for Brunswick Co

	Total hours for department	Average hours of training
Administrative	34.00	1.84
Legal	27.00	1.46
Mentoring	620.00	33.51
Technical	735.00	39.73

Benchmarking Information

Chart 4-2 Comparison of average hours of training



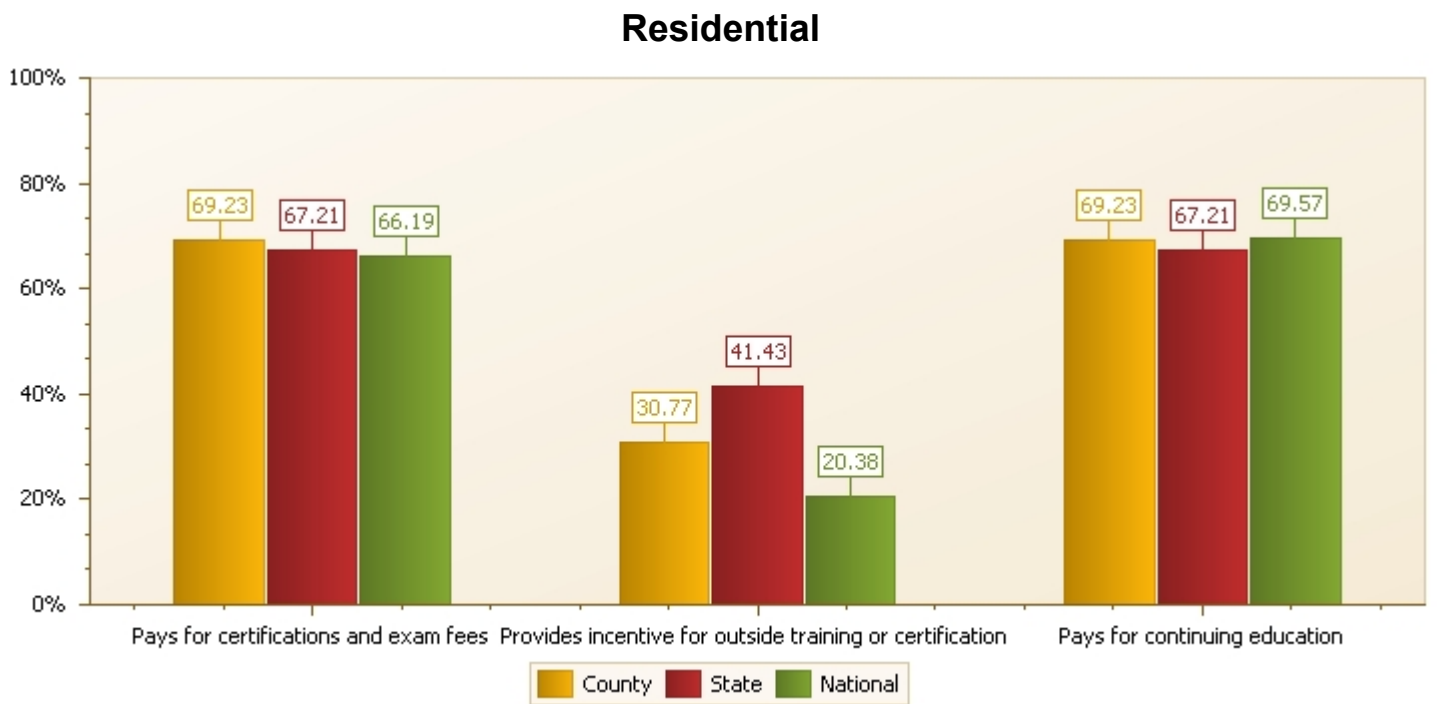
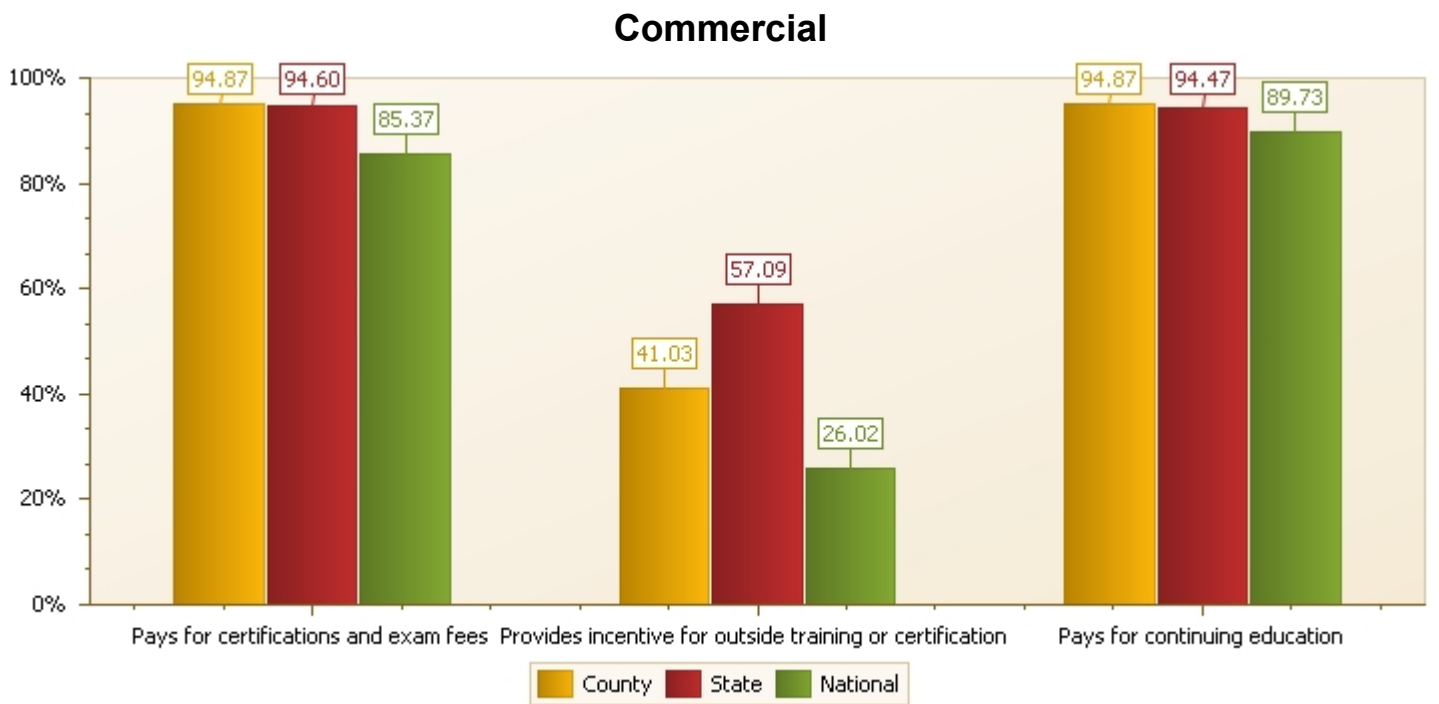
Building code enforcement departments may choose to emphasize their commitment to training and education through incentives, such as funding certification, exam fees, and continuing education or providing incentives for outside training. The following table is broken down for residential and commercial construction and indicates the incentives provided by Brunswick Co.

Table 4-3 BCEGS points earned by Brunswick Co for training incentives

	Commercial	Points Earned	Residential	Points Earned
Department pays for certifications and exam fee	Yes	0.50	Yes	0.50
Provides incentive for outside training or certification	Yes	0.50	Yes	0.50
Pays for continuing education	Yes	0.50	Yes	0.50

Benchmarking Information

Chart 4-4 Comparison of communities providing training incentive



Hiring only certified code enforcement employees or allowing a short probationary period for new hires to earn their certification are valued practices which elevate the quality and consistency of the code enforcement process. The following two charts compare your jurisdiction's policies regarding certification with those of other departments within your county, state and across the country. The charts represent the percent of plan reviewers and inspectors that held appropriate certification for the duties they performed at the time of the latest BCEGS survey. Chart 4-5 represents commercial work and Chart 4-6 represents residential work.

Chart 4-5 Comparison of Certified Personnel Performing Commercial Duties

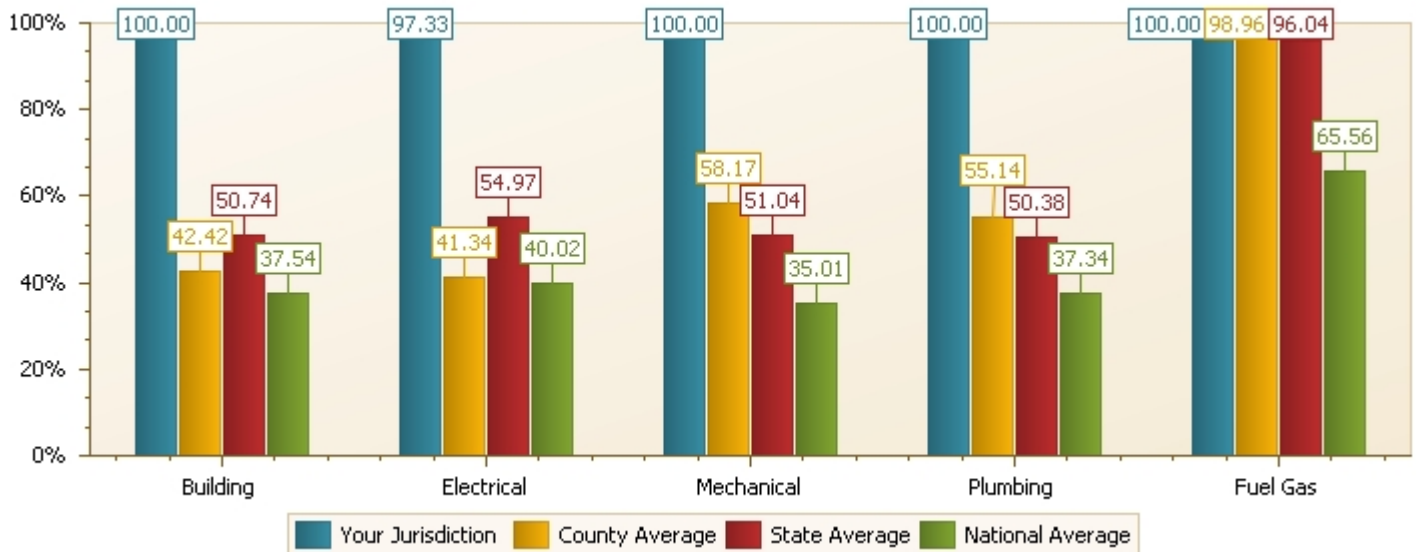
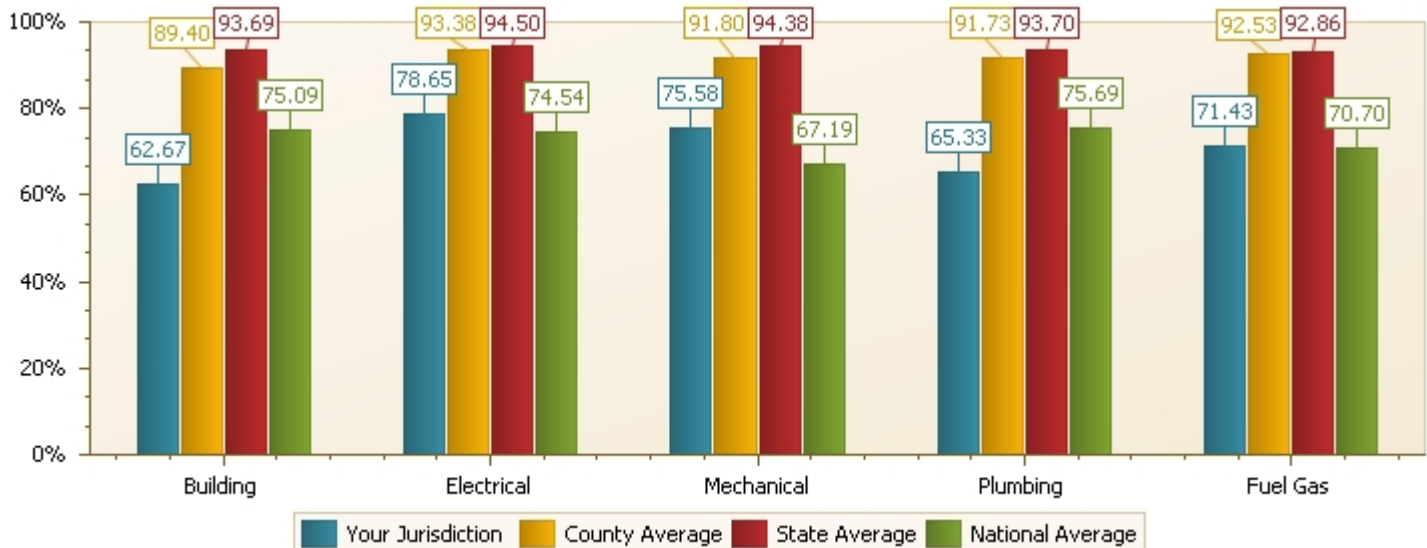
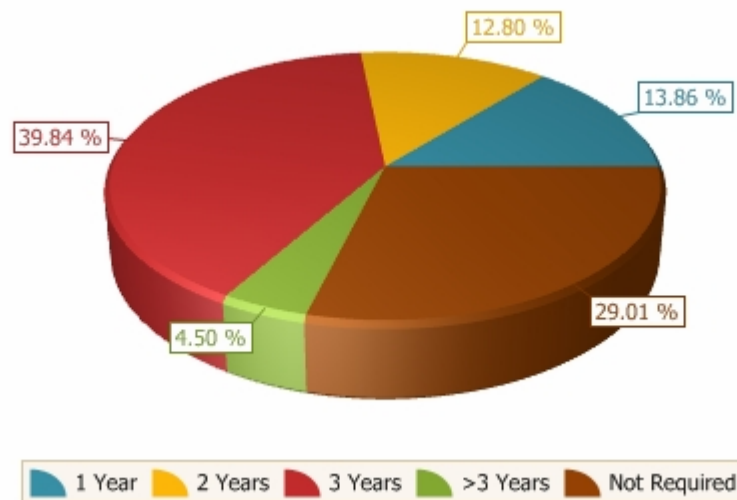


Chart 4-6 Comparison of Certified Personnel Performing Residential Duties

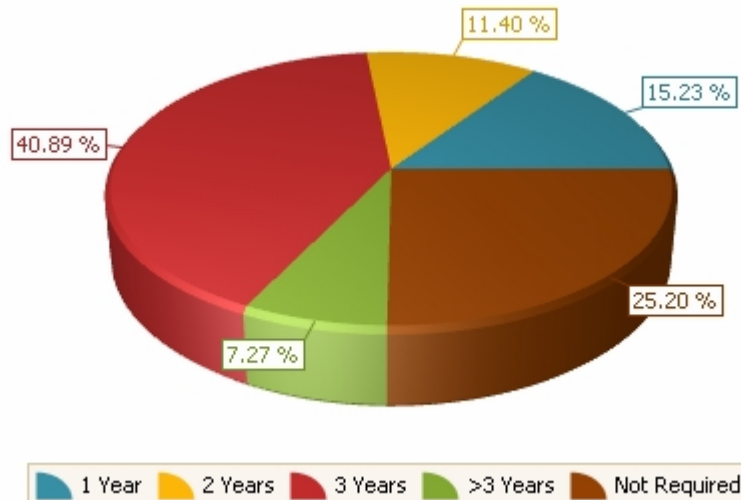


Requiring certification as a condition of employment is an important factor. However, the evolving nature of the building technology and the wide variety of situations encountered by plan reviewers and inspectors dictate the need for continuing education. The following two charts are based on the period of time allowed to complete the required amount of continuing education requirements for building inspectors in order for them to renew their license / certification. Information in these charts represents data gathered across the country.

**Chart 4-7 Building Certification Renewal Period
Commercial**



**Chart 4-8 Building Certification Renewal Period
Residential**



Section 5 Staffing Levels

One of the most frequently asked questions from community administrators and building officials is: How many inspectors and plan reviewers do we need to supply the desired level of service to our community? This section will provide valuable information to assist in this vital decision. The BCEGS schedule uses the following benchmarks to calculate the staffing levels:

- 10 inspections per day per full time inspector
- 1 commercial plan review per day per full time plan reviewer
- 2 residential plan review per day per full time plan reviewer

These are average numbers of the entire department over the course of a year. Some inspectors because of the type of work they are assigned will exceed these benchmarks while others will not be able to reach them, the same is true of plan reviewers. The fact is that these benchmarks have proved to be realistic over the course of surveying 14,000 code enforcement departments.

However, we realize that your community may have varying circumstances and may want to base staffing decision on other information. In the following set of charts we have scoured our database to find communities that are of similar size, and population to your community to provide data that may be helpful in your decision process. The next key element of staffing decision is the workload; again we queried our records to find communities with similar number of permits issued, inspections and plan reviews completed. This data can be useful in further defining your staffing levels. Realizing that some jurisdictions cover vast area while others are metropolitan we did some calculations and arrived at a unique category of permits per square mile. You may find that this category affords benchmarking opportunities that take into account workload and travel time for your inspecting staff.

Table 5-1

Your community falls into the following ranges

Population	>25,000
Square Miles	>38
Permits Issued	>2,000
Number of inspections conducted	>5,700
Building Plan reviews conducted	>1,400
Permits per Square Mile	10.01-15

Benchmarking Information

The information in Charts 5-3 through 5-14 depicts the staffing levels of your jurisdiction along with the average staffing levels of all the communities that fall within the range for each category as defined in Table 5 -1. To standardize these numbers this report converts all employees to full time equivalents. Therefore, in a department with two full time employees the number of personnel will be two. If a department has five full time code enforcers and seven part time code enforcers each working twenty hours per week the department is considered to have eight and one half full time employees. The data is further broken down by the responsibilities of each code enforcer. For example a department may allocate time as follows:

Table 5-2 Time Allocation Example

	Time allocation (hrs) employee #1 40 hrs per week	Time allocation (hrs) employee #2 30 hrs per week	Time allocation (hrs) employee #3 20 hrs per week	No. of equivalent full time employees
Commercial Plan Review	16	1.5	0	0.44
Residential Plan Review	8	1.5	0	0.24
Commercial Inspection	14	24	2	1.00
Residential Inspection	2	3	18	0.58
Total equivalent full time employees				2.25

The calculations used to make up the graphs for the example above would be the number of commercial plan reviews conducted in your jurisdiction divided by 0.44 (the number of commercial plan reviewers employed by your jurisdiction). Similarly assuming 732 residential inspections divided by the number of residential inspectors (0.58) returns a workload of 1,262 inspections per full time inspector per year. The calculation for the control group is the same except that the results are averaged.

Chart 5-3 Building Plan Review Staffing Comparisons of Communities Serving Similar Populations

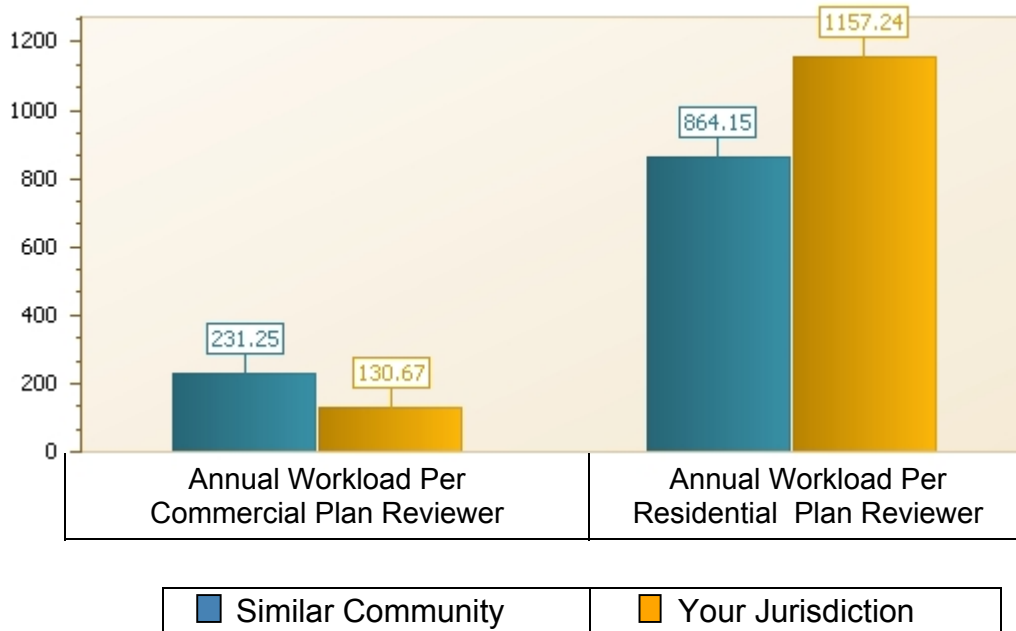
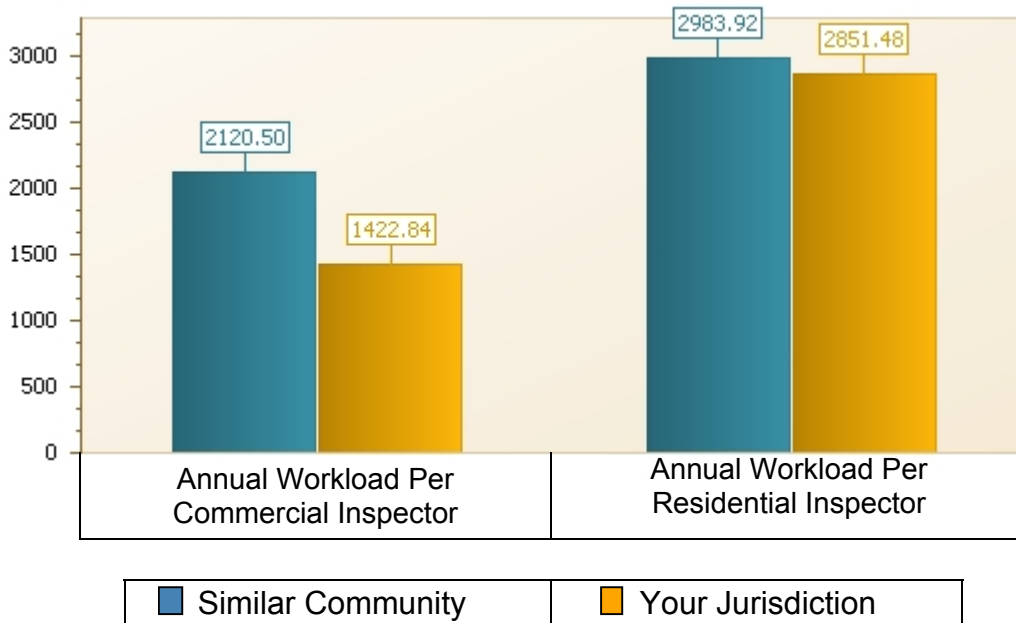
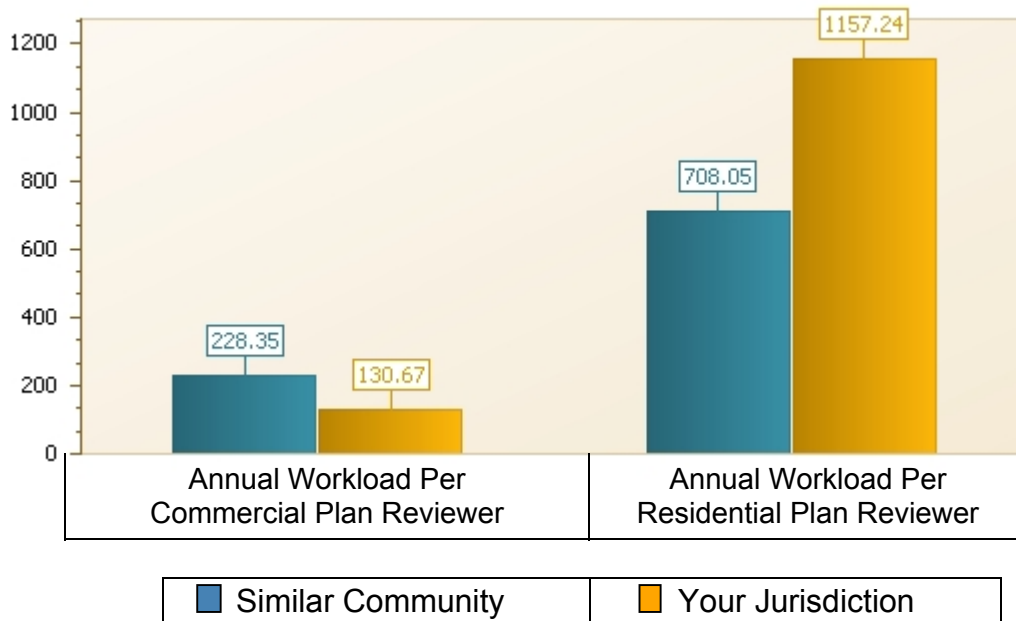


Chart 5-4 Inspection Staffing Comparisons of Communities Serving Similar Populations



**Chart 5-5 Building Plan Review Staffing
Comparison of Communities Serving Similar Square Miles**



**Chart 5-6 Inspection Staffing Comparison of
Communities Serving Similar Square Miles**

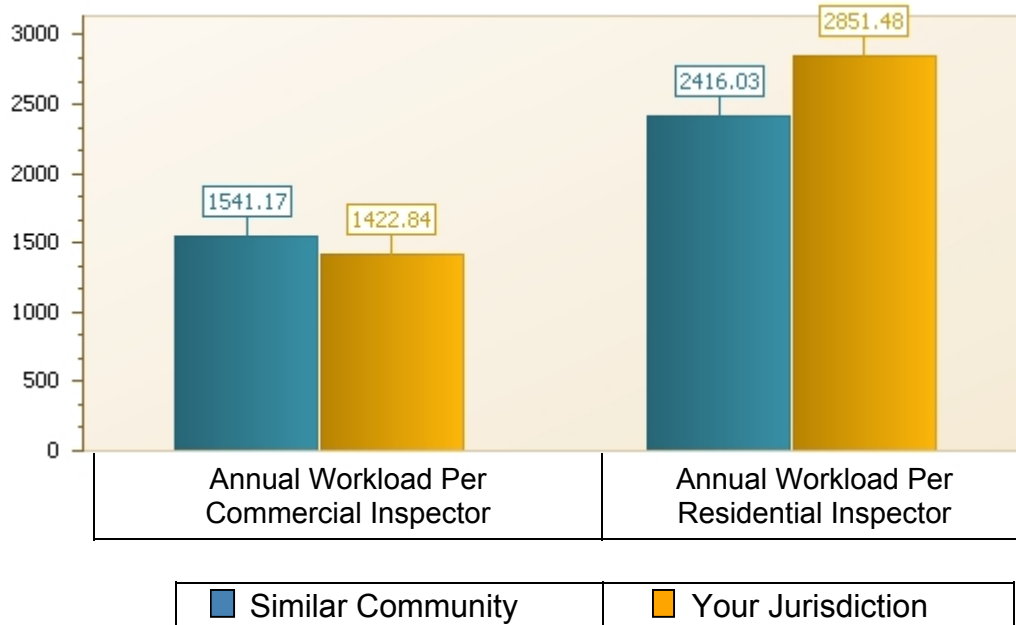


Chart 5-7 Building Plan Review Staffing Comparison of Communities Similar Number of Permits

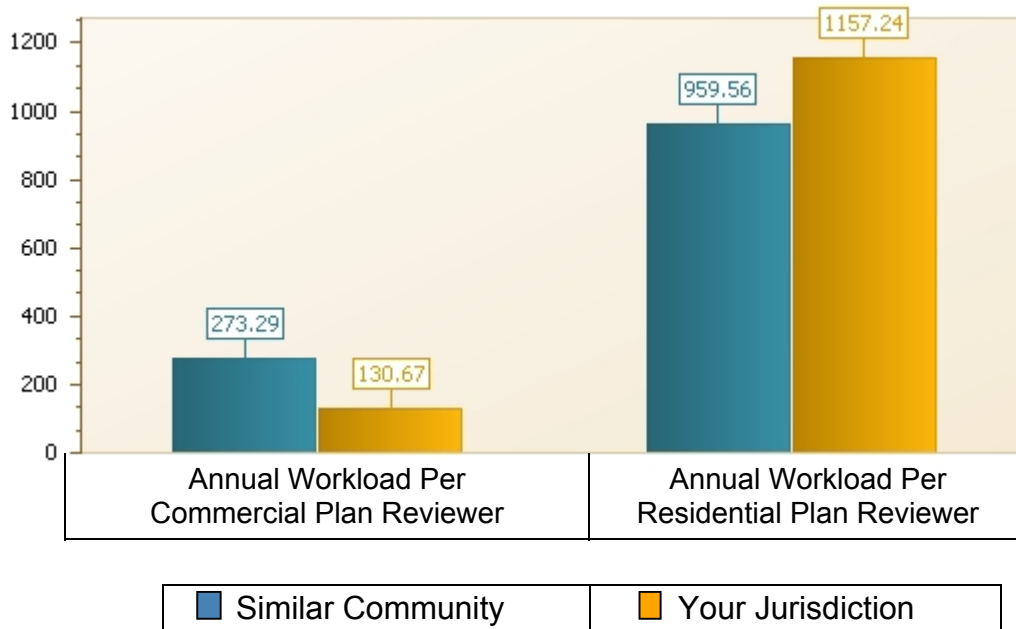


Chart 5-8 Inspection Staffing Comparison of Communities Issuing Similar Number of Permits

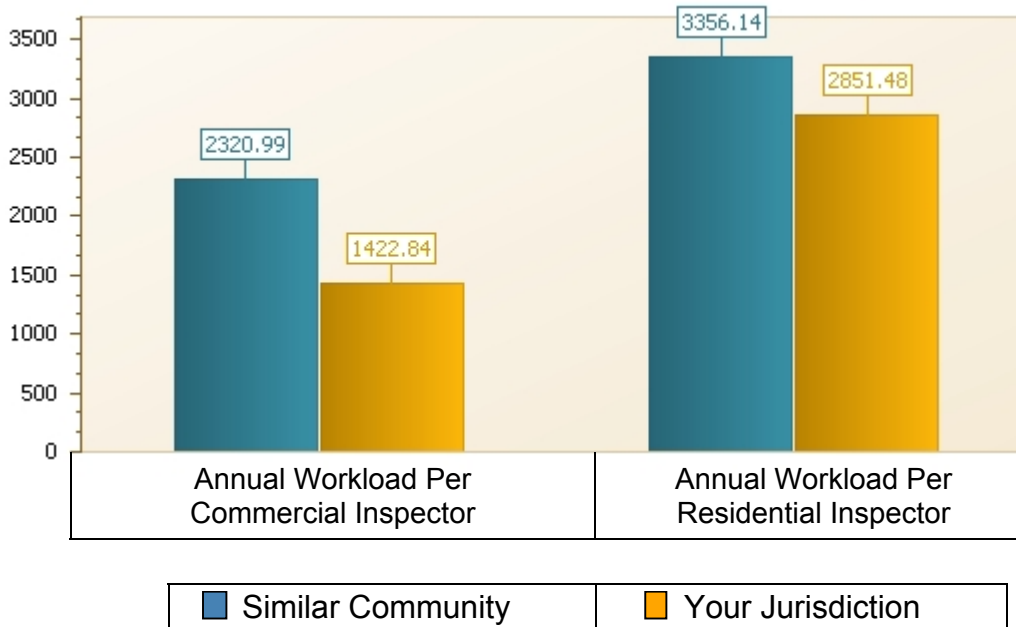


Chart 5-9 Building Plan Review Staffing Comparison of Communities Conducting Similar Number of Inspections

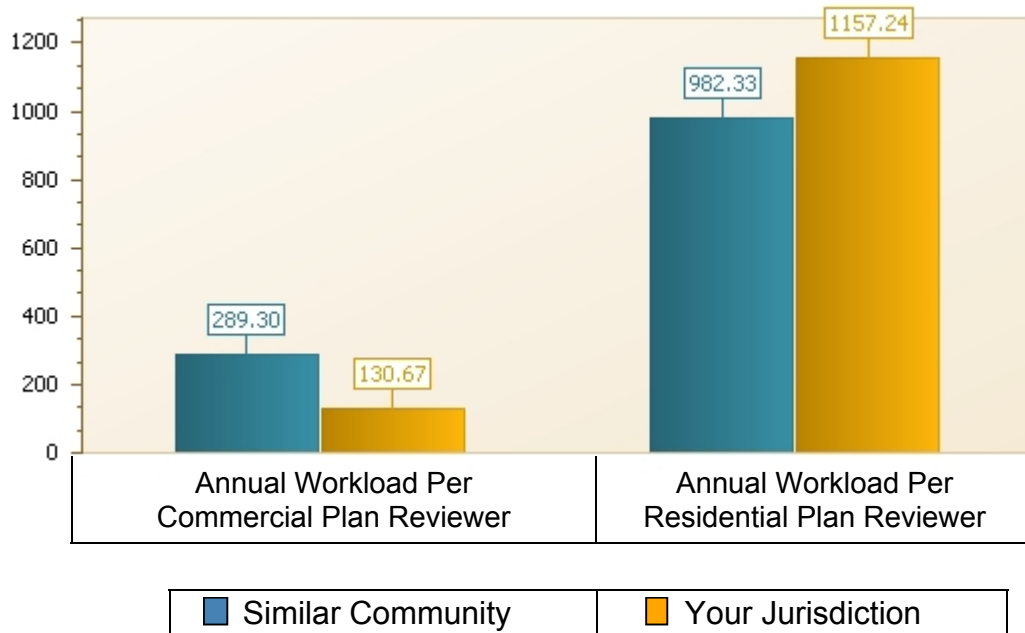


Chart 5-10 Inspection Staffing Comparison of Communities Conducting Similar Number of Inspections

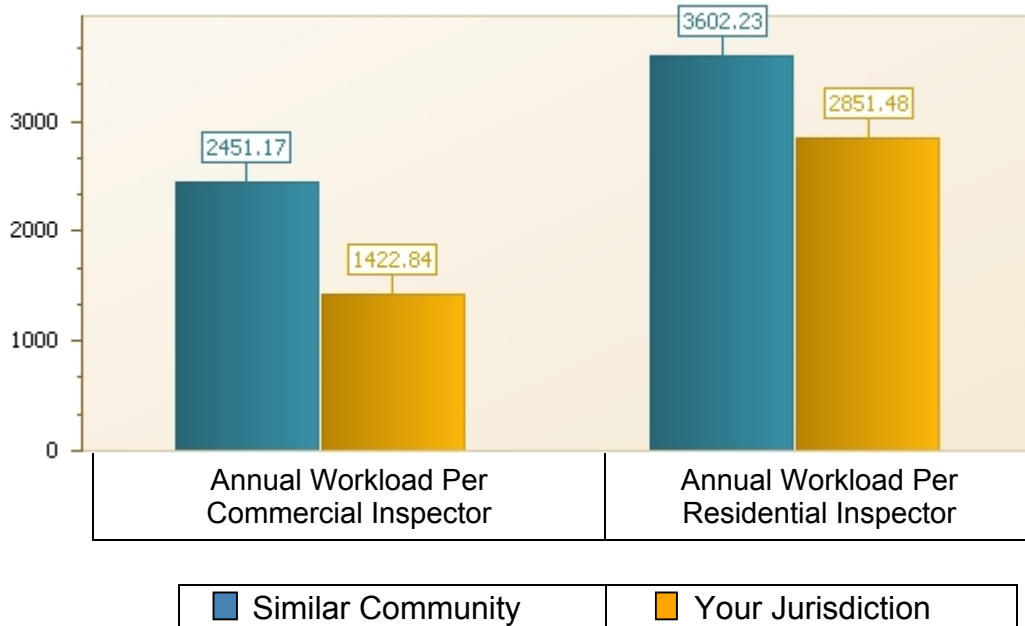


Chart 5-11 Building Plan Review Staffing Comparison of Communities Conducting Similar Number of Plan Reviews

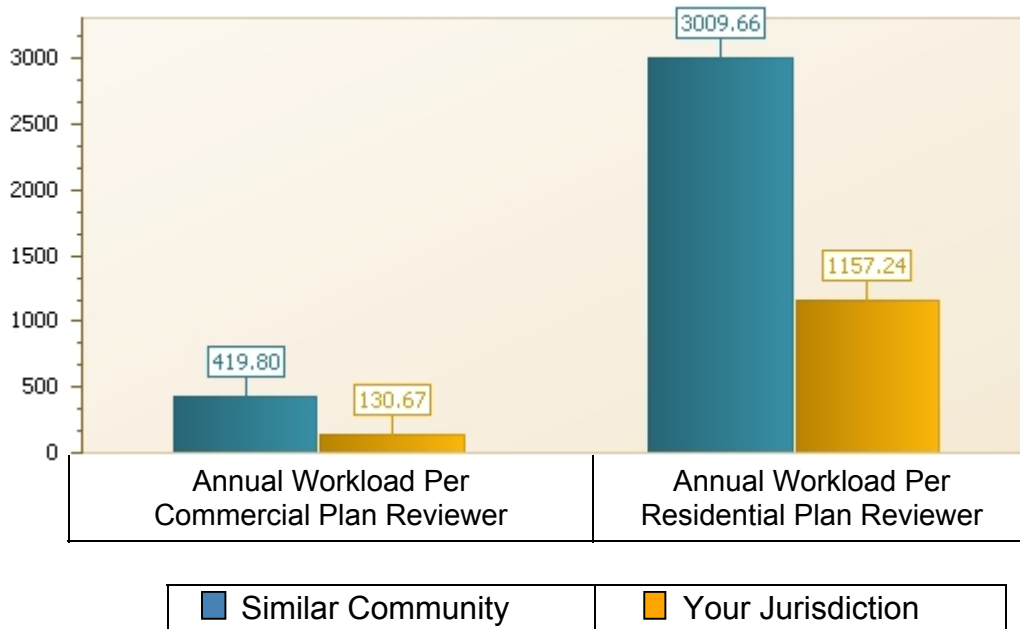


Chart 5-12 Inspector Staffing Comparison of Communities Conducting Similar Number of Plan Reviews

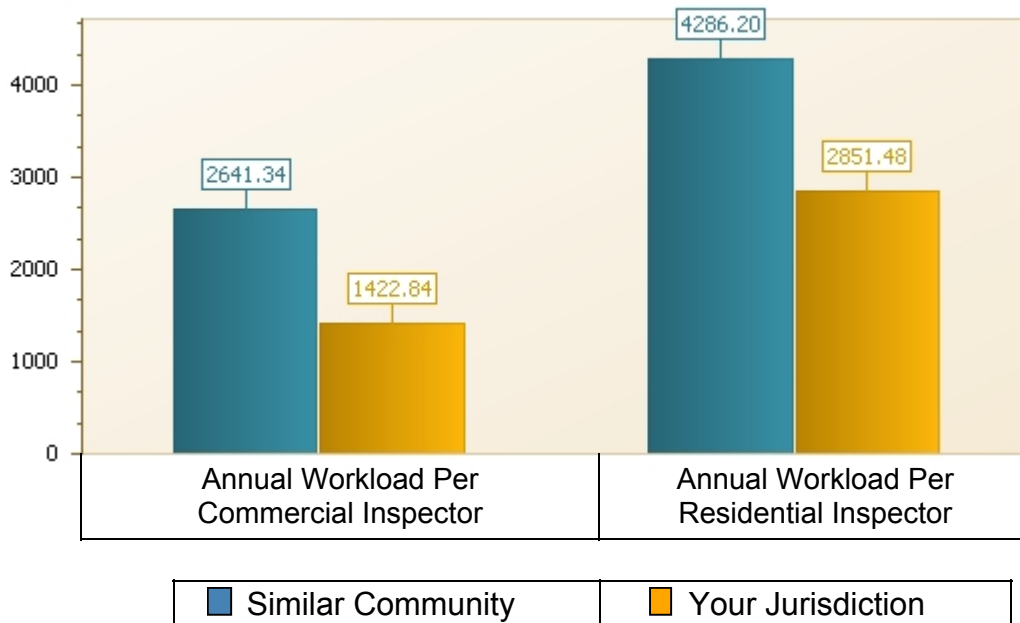


Chart 5-13 Building Plan Review Staffing Comparison of Communities Issuing Similar Number of Permits Per Square Mile

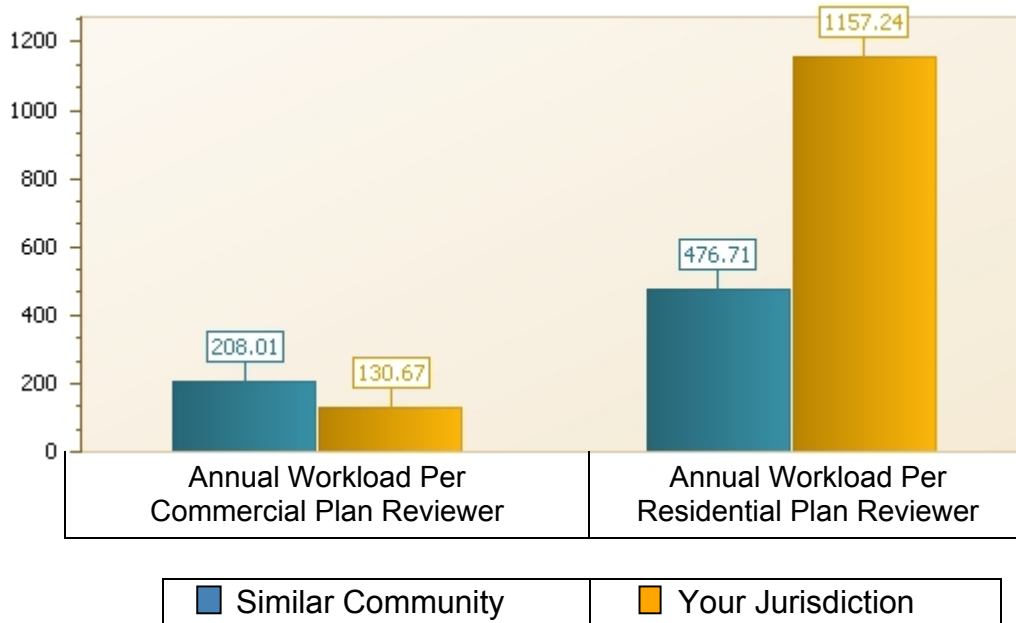
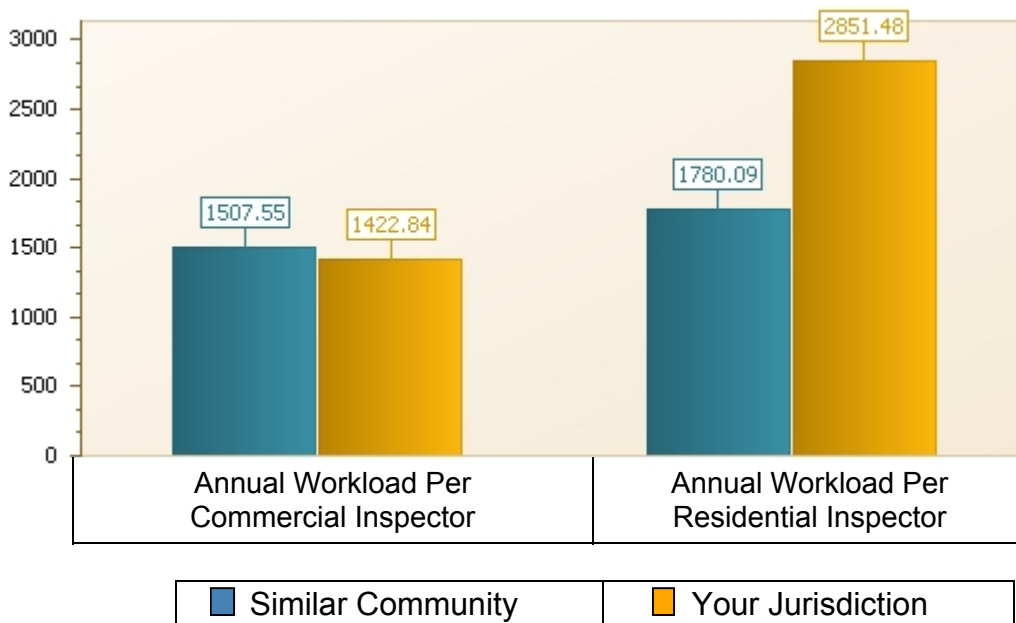


Chart 5-14 Inspector Staffing Comparison of Communities Issuing Similar Number of Permits Per Square Mile



Section 6 BCEGS Points Analysis

ISO has been surveying and evaluating building code adoption and enforcement in communities around the country since 1995. To maintain relevant information the BCEGS program is designed to conduct surveys on a 5 year cycle. The information in this section will give you some insight to trends in your jurisdiction, your state and across the country.

Benchmarking Information

Charts 6-1 through 6-2 compare the points earned by your department in each Section to the points earned by other departments in your state, county, and across the country. The charts are broken down by commercial and residential. You may use Table 1 as a guide for how points are earned in each section.

Chart 6-1 Comparison of Commercial Points Scored

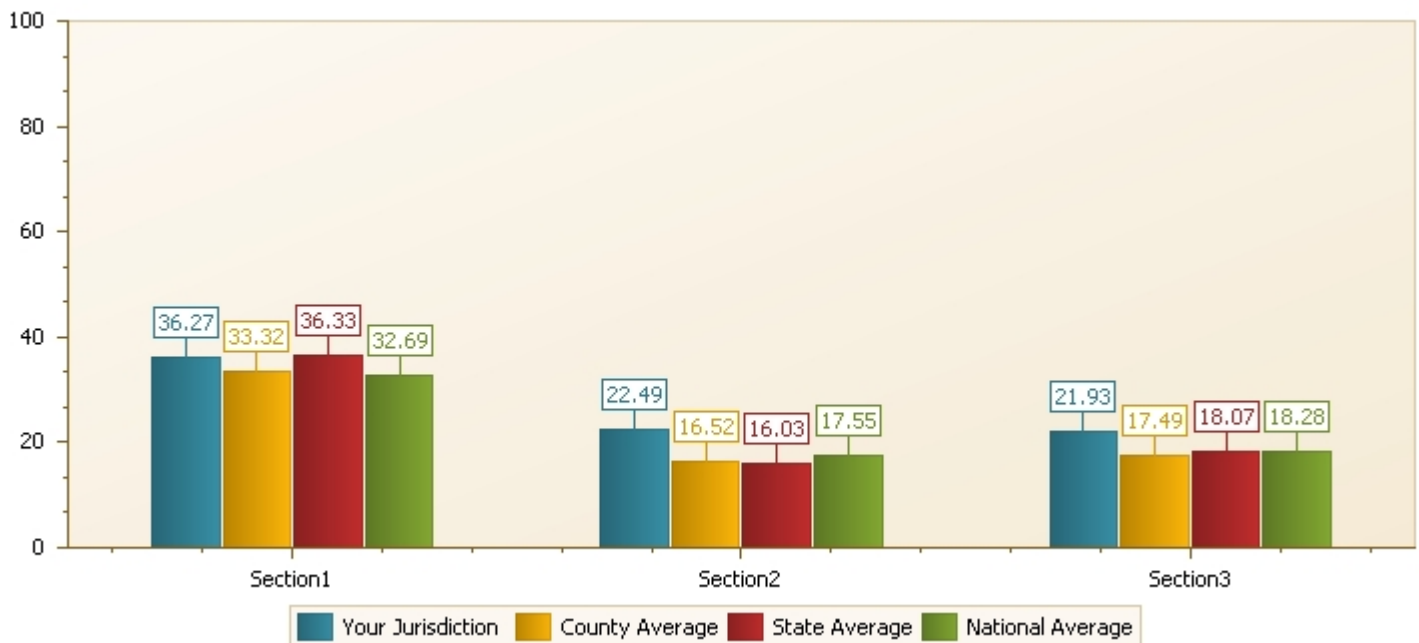
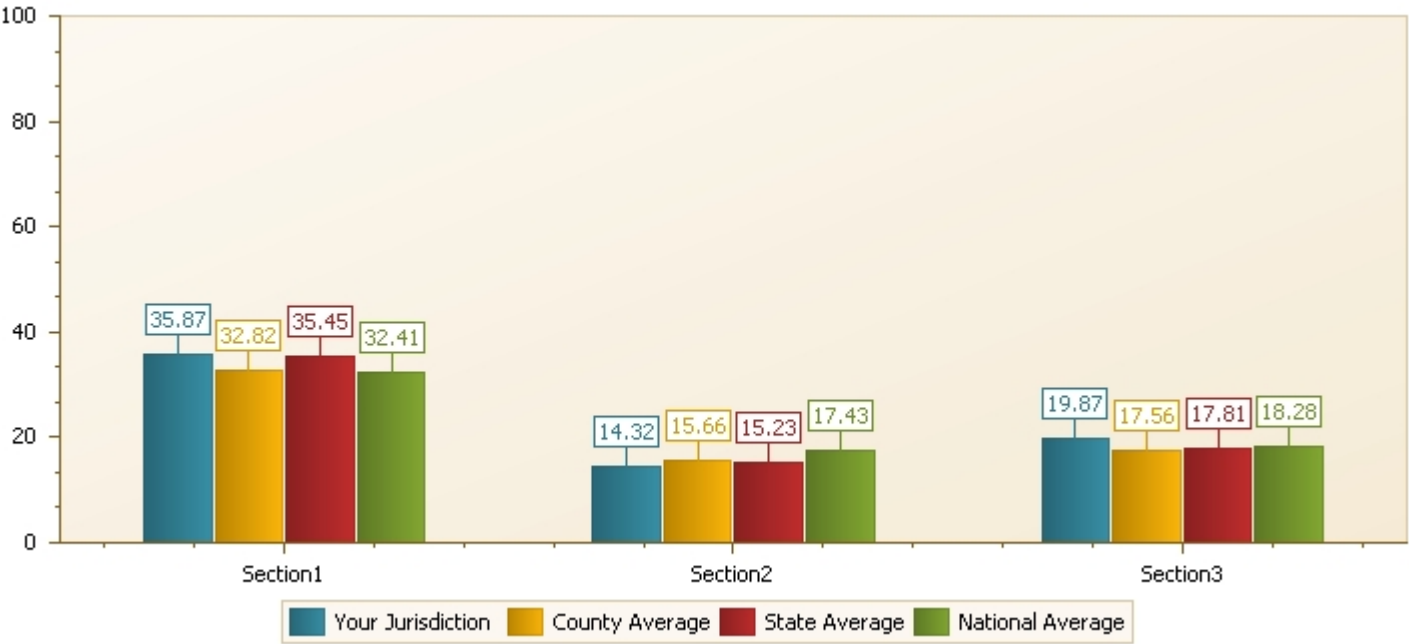


Chart 6-2 Comparison of Residential Points Scored



Section 7 Natural Hazards

Different parts of the country are subject to a variety of potential natural hazards. The map below is an overview of those potentials:



In cooperation with AIR (an ISO company) we have prepared the following hazard report using the municipal building address you supplied during the survey meeting. A full explanation of how to read and interpret the following profiles can be found in Appendix A.



CATASTROPHE HAZARD REPORT VERISK - MARKETING LOCATION PASSPORT

ORDER NAME: Brunswick Co, NC

ORDER DATE: 01/28/2019

**RESPONSE
DATE:
01/28/2019**

ORDER TIME: 11:34:37 AM

**RESPONSE
TIME:
11:34:38
AM**

Location Name

Entered Address: 75 COURTHOUSE DR NE, BOLIVIA, NC
28422

Catastrophe Hazard Information

Matched Address: 75 Courthouse Dr , Bolivia, NC 28422

Match Type: Street Level

Latitude: 34.057510

Longitude: -78.163347

☐ Hurricane Profile

Risk

(Percentage
Loss)

0%	5	10	15	20	25	30	35	40	45	100%
----	---	----	----	----	----	----	----	----	----	------

100-year
loss level:



250-year
loss level:



Average 0.2 %
Annual
Loss:

Relative Risk

(Percentile)

0% 10 20 30 40 50 60 70 80 90 100%

within
county:



within
state:



Hurricane Information

Storm Surge Potential:	No
Distance to effective coast:	5 - 10 miles
Distance to actual coast:	9.9511 miles
Coastal County:	Yes
Elevation:	40 - 45 feet above mean sea level
Terrain/ Land Use:	Developed Low Intensity

Florida Wind Loss Mitigation Profile

Exposure Area:

Exposure Area Enhanced: Terrain C

High Velocity Wind Region:

Windspeed Region:

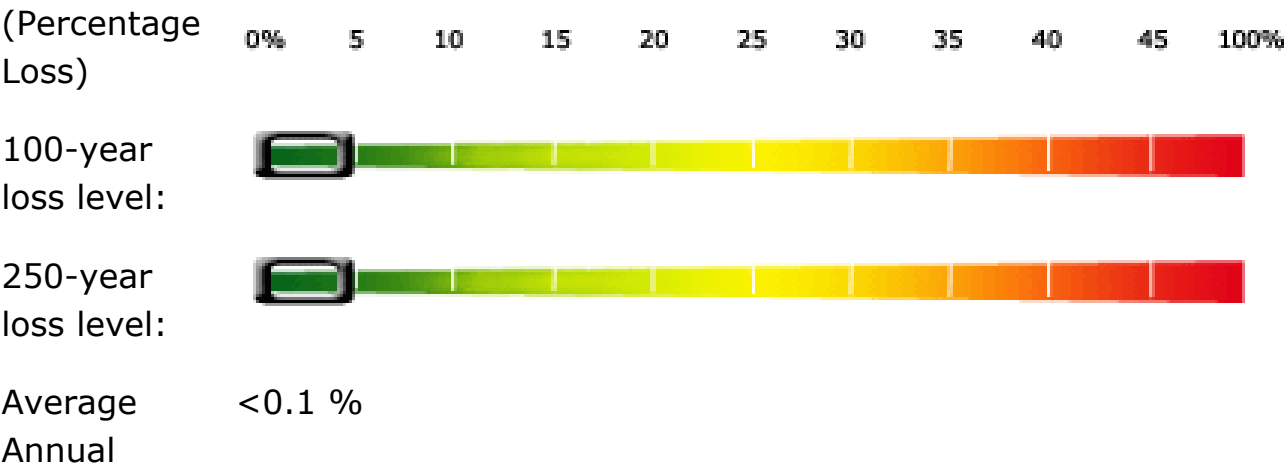
Windborne Debris Region:

Historical Hurricanes

Name	Date of Landfall	Intensity at Landfall (Saffir - Simpson)	Distance of Track to Property (mi)	Intensity Closest to Property (Saffir - Simpson)
Hazel	October 15, 1954	4	21	4
Helene	September 28, 1958	3	37	4
Fran	September 6, 1996	3	0	3
Floyd	September 16, 1999	3	19	3
Donna	September 10, 1960	4	37	3

Thunderstorm Profile

Risk



Loss:

Relative Risk

(Percentile)

0% 10 20 30 40 50 60 70 80 90 100%

within
county:within
state:**Hazard Information**Tornado: Very High/ High/ **Moderate**/ Low/ Very LowHail Storm: Very High/ High/ Moderate/ **Low**/ Very LowStraight-line Wind: Very High/ **High**/ Moderate/ Low/ Very Low**Nearest Historical Tornadoes**

Date	Distance (mi)	Intensity (Fujita Scale)
November 16, 2006	20.00	3
October 9, 1950	26.16	3
August 17, 1965	33.02	3
October 4, 1964	34.42	2
May 12, 1965	38.06	2

Nearest Historical Hail Storms

Date	Distance (mi)	Intensity by Average Hail Size (in)
------	------------------	---

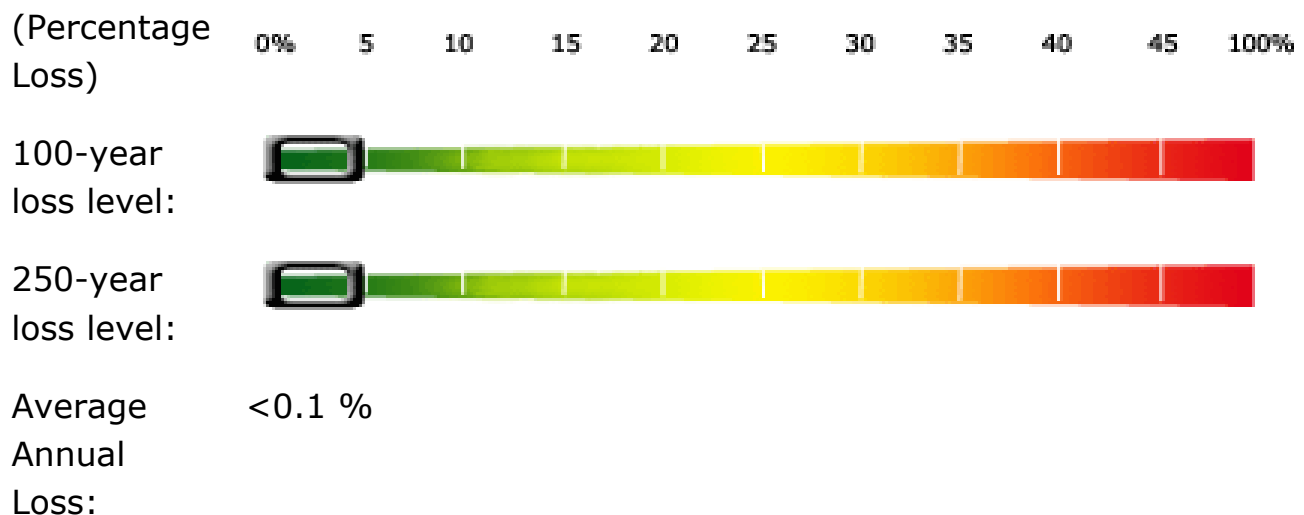
August 28, 2000	35.49	2.0-3.0
April 28, 2011	44.85	2.0-3.0
June 16, 1971	21.51	2.0-3.0
August 5, 1997	29.41	2.0-3.0
May 26, 2001	37.88	2.0-3.0

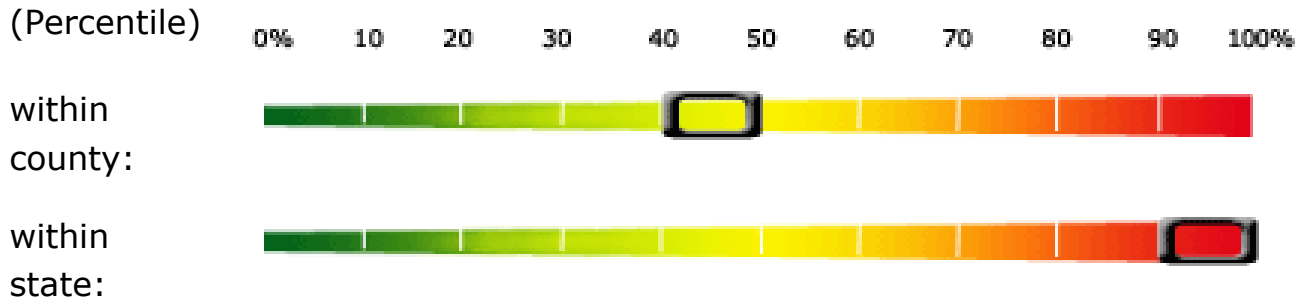
Nearest Historical Straight - Line Wind Storms

Date	Distance (mi)	Intensity by Average Wind Speed (mph)
July 30, 1967	9.48	80-90
May 31, 2003	24.52	80-90
June 12, 1995	11.29	80-90
March 15, 2008	32.09	80-90
July 9, 1966	21.51	70-80

☐ Winterstorm Profile

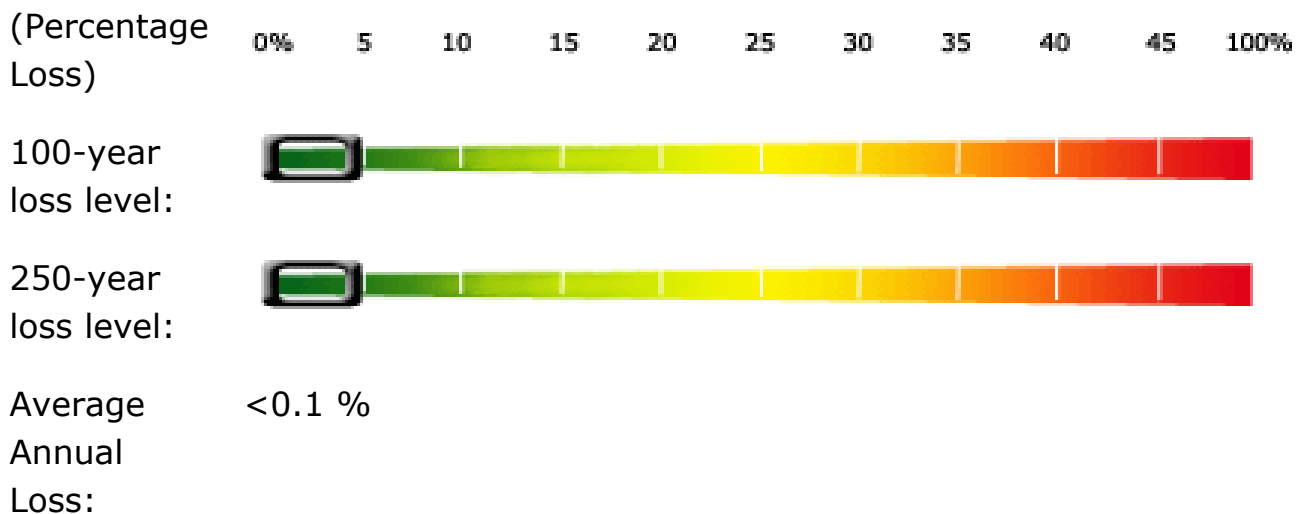
Risk



Relative Risk**Hazard Information**

Wind Frequency: **Very High**/ High/ Moderate/ Low/ Very Low

Snow Frequency: Very High/ High/ Moderate/ Low/ **Very Low**

☐ Earthquake Profile
Risk**Relative Risk**

county:

within

state:



Earthquake Information

CA DOI Zone:

Not Applicable

Liquefaction Potential:

Very High/ High/
Moderate/ Low/ **Very**
Low

Landslide Zone:

Alquist - Priolo Fault Zone:

Not Applicable

Soil Type:

Soft Rock

Intensity by Probability of Exceedance (PE):

Modified Mercalli Intensity:	VI	VII	VIII	IX	X	XI	XII
30 Year PE	0.85	0.55	0.26	0.09	0.01	0.00	0.00
	%	%	%	%	%	%	%

Intensity by Return Period:

Return Period	100	200	250	475
	Year	Year	Year	Year
Modified Mercalli Intensity:	3.0	3.0	3.0	3.0

Fault Information

No significant active fault has been mapped within a 200 mile radius of the address.

Historical Earthquakes

Name	Date	Magnitude	Epicentral Distance (mi)	Epicentral Depth (mi)
Charleston, SC	September	7.30	121.19	9

1, 1886

☐ Flood Profile

Flood Information

Source:	DFIRM
Flood Zone:	Outside Flood Zone
FEMA Flood Zone:	X Flood Zone
Elevation:	40 - 45 feet above mean sea level
Shortest Distance to:	
Water Body:	More than 5 miles
100 Year Flood Plain:	0.36 miles
500 Year Flood Plain:	0.83 miles

Appendix A - Natural Hazard General Information

AIRProfiler is designed to provide users with vital, peril-specific characteristics of the property location, such as storm surge potential and distance to nearest active fault, as well as risk scores, which are quick measures of the risk and relative risk associated with the property.

This release of *AIRProfiler* includes hurricane profiles for all states in the continental U.S. at risk from hurricanes, as well as earthquake, severe thunderstorm and flood profiles for the forty-eight contiguous states.

- The Address Profile displays important information regarding the accuracy of the look-up for the entered address, the geocode of that address and a street map. The Hurricane Profile provides hurricane risk information for the location as well as other related hazards including storm surge potential and distance to nearest historical hurricane track.
- The Earthquake Profile, in addition to showing risk level and ranking, shows susceptibility of the location to different hazards. Those hazards include liquefaction, landslide potential, and fault zone information.
- The Flood Profile provides the proximity of a location to one of five flood zone categories as well as the location's distance to various flood plain boundaries based on FEMA Digital Q3 flood data.
- The Severe Thunderstorm Profile provides information about risk from tornado, hail, and straight-line windstorms for a given location, including distance to nearest historical storms and annual frequency.

Based on the address information provided, *AIRProfiler*® displays the corrected and standardized address following USPS® rules and guidelines, as well as the geocode (latitude and longitude), county, and ZIP Code of the location. *AIRProfiler*® performs a look-up in the LOCATION™ database. The hazard is then assessed based on an exact address or ZIP Code match.

AIR's geocoding algorithm, based on the TIGER® geographical database, is used to convert the location address entered by the user into the corresponding latitude and longitude. Depending on the address match, either the exact geocode, or the geocode of the appropriate ZIP Code centroid, is used for assessing the risk.

- The Address Profile also provides a street map of the location.

Given a location, the loss potential from specific perils is represented by various risk scores. Risk scores are determined by performing a loss analysis on a typical residential building at that location. The analysis is performed using AIR's state-of-the-art modeling technologies. Note that content and time element (loss of use) calculations are excluded from the analysis. Based on this analysis of the location, *AIRProfiler*® provides two sets of scores:

Risk Scores. The user can obtain indications of risk based on three measures of potential loss: the 100-year loss level, the 250-year loss level, and the average annual loss. These levels represent, respectively, the loss likely to occur in one year out of every 100 years, one in every 250 years, and every year on average over a period of many years. The resulting risk scores are expressed in percentage terms, as below:

Low Risk		Moderate Risk				High Risk			Very High Risk
<5%	5-10%	10-15%	15-20%	20-25%	25-30%	30-35%	35-40%	40-45%	>45%

Relative Risk Scores. In addition to the risk score of a given location, *AIRProfiler*® also displays the location's relative risk by county and state. Relative risk ranks the loss potential of a location with respect to the loss potential of other locations in the county or state. The format of the ranking is based on percentile values from 10% to 100% percent.

The *AIRProfiler*® Hurricane Profile provides users with information about the hurricane risk potential for a specific location. Risk scores for 100-year, 250-year and annual average losses, as well as relative risk ranking within county and state, are displayed. The profile also displays the following hurricane risk information:

- Storm surge potential
- Distance to coast
- Elevation
- Terrain/Land use
- Intensity and nearest distance to historical storm track for nearest historical hurricanes

In addition to strong winds and tides, storm surge can pose significant danger to life and property during hurricanes. Storm surge is caused by winds pushing water toward the shore. When combined with high tide, storm surge can cause an increase in the mean water level and so result in severe flooding and substantial property loss. The densely populated Atlantic and Gulf coastlines that lie less than ten feet above mean sea level are particularly vulnerable to storm surge.

The *AIRProfiler*® Hurricane Report indicates whether or not the property is at risk from storm surge.

The AIR*Profiler*® Earthquake Profile provides users with information about the earthquake risk potential for specific location. Risk scores for 100-year, 250-year and average annual losses, as well as relative risk ranking within county and state, are displayed. The profile also displays the following risk information:

- The California Department of Insurance (DOI) zone
- Liquefaction potential
- Landslide zone
- Earthquake fault (Alquist-Priolo) zone
- Soil type
- Seismicity
- Fault information
- Historical earthquakes

When seismic waves pass through water-saturated, loosely packed sandy soils, contact pressure between the individual grains is lost. The grains become more densely configured, causing pore pressure to increase. If drainage is inadequate, what was once solid ground now behaves as a dense fluid, incapable of supporting buildings. Structures that may have survived the effects of shaking can deform, tilt or sink. They may remain structurally intact, but have become unusable and unsalvageable.

Liquefaction risk at a given site is represented by that site's potential to experience damage resulting from liquefaction. Liquefaction potential is a measure of a soil's susceptibility to liquefaction combined with a location's level of earthquake risk. AIR applies standard methodologies used by the Division of Mines and Geology (DMG), United States Geological Survey (USGS), to calculate liquefaction potential. The AIR*Profiler*® Earthquake Profile describes a location's liquefaction potential by one of five levels: very high, high, moderate, low, or very low.

The underlying soil type may have a determining effect on potential earthquake damage to structures. Certain types of soils, such as soft soils, are capable of amplifying seismic waves, hence causing more severe damage. Also, some types of soil, such as bay mud, sandy soil, and stiff to soft soil, are also more susceptible to liquefaction. Soil is classified according to its mechanical properties.

The AIR*Profiler*® Earthquake Profile for a particular location uses ten soil type classifications:

- Hard rock
- Rock
- Very dense soil
- Stiff soil
- Soft soil
- Rock to very dense soil
- Very dense to stiff soil
- Stiff to soft soil
- Bay mud Water

One measure of earthquake intensity is the level of ground shaking at any particular location. Over the years, several intensity scales have been proposed, but the Modified Mercalli Intensity (MMI) scale is the most commonly used, especially in the United States. The MMI scale describes the intensity of an earthquake based on human reaction and observed damage to natural and man-made structures. This is useful because it allows for an attribution of intensity to events that occurred prior to the advent of modern measuring devices, as well as in instances in modern times where those devices were not available. The drawback to this standard of measure is that the MMI scale is highly subjective. The following table lists the MMI scales and definitions.

MMI	Definition
I.	People do not feel any movement.
II.	A few people might notice movement if they are at rest and/or on the upper floors of tall buildings.
III.	Many people indoors feel movement. Hanging objects swing back and forth. People outdoors might not realize that an earthquake is occurring.
IV.	Most people indoors feel movement. Hanging objects swing. Dishes, windows and doors rattle. The earthquake feels like a heavy truck hitting the walls. A few people outdoors may feel movement. Parked cars rock.
V.	Almost everyone feels movement. Sleeping people are awakened. Doors swing open or close. Dishes are broken. Pictures on the wall move. Small objects move or are turned over. Trees might shake. Liquids might spill out of open containers.
VI.	Everyone feels movement. People have trouble walking. Objects fall from shelves. Pictures fall off walls. Furniture moves. Plaster in walls might crack. Trees and bushes shake. Damage is slight in poorly built buildings. No structural damage.
VII.	People have difficulty standing. Drivers feel their cars shaking. Some furniture breaks. Loose bricks fall from buildings. Damage is slight to moderate in well-built buildings; considerable in poorly built buildings.
VIII.	Drivers have trouble steering. Houses that are not bolted down might shift on their foundations. Tall structures such as towers and chimneys might twist and fall. Well-built buildings suffer slight damage. Poorly built structures suffer severe damage. Tree branches break. Hillsides might crack if the ground is wet. Water levels in wells might change.
IX.	Well-built buildings suffer considerable damage. Houses that are not bolted down move off their foundations. Some underground pipes are broken. The ground cracks. Reservoirs suffer serious damage.
X.	Most buildings and their foundations are destroyed. Some bridges are destroyed. Dams are seriously damaged. Large landslides occur. Water is thrown on the banks of canals, rivers, lakes. The ground cracks in large areas. Railroad tracks are bent slightly.
XI.	Most buildings collapse. Some bridges are destroyed. Large cracks appear in the ground. Underground pipelines are destroyed. Railroad tracks are badly bent.
XII.	Almost everything is destroyed. Objects are thrown into the air. The ground moves in waves or ripples. Large amounts of rock may move.

The data presented in *AIRProfiler*® is developed by calculating MMI values for each location. It incorporates all potential seismic sources, the distance of those sources from the location of interest, and local site conditions. Because MMI is considered as a measure of what the ground is doing during an earthquake, rather than an index of damage to structures, damageability of building at the site is not included in the calculation. Those who are more interested in damage estimation should refer to 100- and 250-year loss levels.

The MMI values are represented in two ways in the Earthquake Profile:

- Intensity by PE (probability exceedance)
- Intensity by Return Period

The first representation, defined by probability of exceedance, is the probability that at least one event of that MMI will occur within 30 years. The second representation, based on return period, depicts the maximum intensity of an event that is likely to occur within the designated return period; that is, the intensity corresponds to the maximum event that is likely to occur within the return period displayed.

Proximity to an active fault is an important indication of seismicity for a specific location. The *AIRProfiler*® Earthquake Profile displays the property's distance to the nearest known active faults. Important characteristics of these faults are displayed, including fault length, and the magnitude and frequency of the "characteristic" event associated with that fault. (Scientists believe that many faults tend to produce earthquakes of a particular size, or magnitude, that is "characteristic" of that particular fault, and that occur with a particular frequency, or recurrence rate).

The AIRProfiler® Flood Profile provides users with information about the flood risk potential for a specific location. Each location is characterized by its proximity to one of five flood zone categories as follows:

- Water body: Includes large lakes and rivers
- 100-year flood plain: Areas where there is 1% chance of being flooded
- 500-year flood plain: Areas where there is 0.2% chance of being flooded
- Outside flood plain: Areas outside of water body, 100- and 500-year flood plains
- No data: Areas where there is no data available

The proximity of the location to FEMA defined flood zones is also provided:

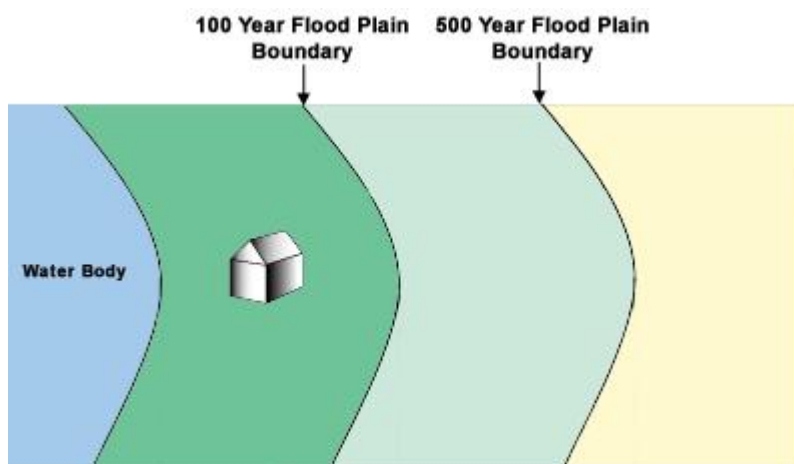
FEMA Zone	Description
V	An area inundated by 100-year flooding with velocity hazard (wave action); no BFE*s have been determined.
VE	An area inundated by 100-year flooding with velocity hazard (wave action); BFEs have been determined.
A	An area inundated by 100-year flooding, for which no BFEs have been determined.
AE	An area inundated by 100-year flooding, for which BFEs have been determined.
AO	An area inundated by 100-year flooding (usually sheet flow on sloping terrain), for which average depths have been determined; flood depths range from 1 to 3 feet.
AOVEL	An alluvial fan inundated by 100-year flooding (usually sheet flow on sloping terrain), for which average flood depths and velocities have been determined; flood depths range from 1 to 3 feet.
AH	An area inundated by 100-year flooding (usually an area of ponding), for which BFEs have been determined; flood depths range from 1 to 3 feet.
A99	An area inundated by 100-year flooding, for which no BFEs have been determined. This is an area to be protected from the 100-year flood by a Federal flood protection system under construction.
D	An area of undetermined but possible flood hazards.
AR	An area inundated by flooding, for which BFEs or average depths have been determined. This is an area that was previously, and will again, be protected from the 100-year flood by a Federal flood protection system whose restoration is federally funded and underway.
X500	An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding.
X	An area that is determined to be outside the 100- and 500-year floodplains.
100IC	An area where the 100-year flooding is contained within the channel banks and the channel is too narrow to show to scale. An arbitrary channel width of 3 meters is shown. BFEs are not shown in this area, although they may be reflected on the corresponding profile.

500IC	An area where the 500-year flooding is contained within the channel banks and the channel is too narrow to show to scale. An arbitrary channel width of 3 meters is shown.
FWIC	An area where the floodway is contained within the channel banks and the channel is too narrow to show to scale. An arbitrary channel width of 3 meters is shown. BFEs are not shown in this area, although they may be reflected on the corresponding profile.
FPQ	An area designated as a "Flood Prone Area" on a map prepared by USGS and the Federal Insurance Administration. This area has been delineated based on available information on past floods. This is an area inundated by 100-year flooding for which no BFEs have been determined.
IN	An area designated as within a "Special Flood Hazard Area" (or SFHA) on a FIRM. This is an area inundated by 100-year flooding for which BFEs or velocity may have been determined. No distinctions are made between the different flood hazard zones that may be included within the SFHA. These may include Zones A, AE, AO, AH, A99, AR, V, or VE.
OUT	An area designated as outside a "Special Flood Hazard Area"(or SFHA) on a FIRM. This is an area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; an area protected by levees from 100-year flooding; or an area that is determined to be outside the 100- and 500-year floodplains. No distinctions are made between these different conditions. These may include both shaded and unshaded areas of Zone X.
ANI	An area that is located within a community or county that is not mapped on any published FIRM.
UNDES	A body of open water, such as a pond, lake, ocean, etc., located within a community's jurisdictional limits, that has no defined flood hazard.
*BFE = Base Flood Elevation	

The Flood Profile provides the shortest distance of the location to the various flood plain boundaries. Three types of distance measurement is provided:

- Shortest distance to the boundary of water body
- Shortest distance to the boundary of 100-year flood plain
- Shortest distance to the boundary of 500-year flood plain

The following map illustrates the way distance from flood plain boundaries are calculated:



The *AIRProfiler*® Severe Thunderstorm Profile provides users with information about the severe thunderstorm risk potential for a specific location. The Severe Thunderstorm Profile includes risks due to tornado, hail, and straight-line wind. Risk scores for 100-year, 250-year and annual average losses, as well as relative risk ranking within county and state, are displayed. The profile also displays the following risk information:

Annual Frequency

This field represents the annual frequency of occurrence for tornado, hail, and straight-line windstorms. A qualitative description of the frequency (very high, high, moderate, low, or very low) is displayed.

Historical Severe Thunderstorms

In this section of the Severe Thunderstorm Profile, *AIRProfiler*® identifies information on the five most severe tornado, hail, and straight-line wind events within 50 miles of the given location. The following characteristics are displayed: year, date, distance from location, and intensity. The description of intensity varies by peril. For tornadoes, the Fujita scale is used. The intensity of hailstorms is measured by average hailstone size and the intensity of straight-line windstorms is derived from a measurement of maximum wind speed.

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A description of the listed hazards follows:

- A. **Brush and Forest Fires:** Areas with heavy vegetation and a dry season can be subject to forest and brush fires. Local building and zoning regulations address this hazard in some areas of the country. Buffer zones which are free from brush and other fuel sources, as well as the use of fire resistive exterior siding and roofing can be utilized to mitigate this hazard.
- B. **Earthquake:** Earthquakes are caused by a tension release from the earth's tectonic plates that causes the ground to shake or vibrate. Most casualties associated with earthquakes are caused by structural failures in buildings and fires caused from electrical shorts and gas leaks. All of the model codes have seismic zones where buildings should be constructed to withstand at least a moderate earthquake. The codes are currently geared towards avoiding a structural collapse. This is a life safety issue and a building can still sustain enough physical damage to render it unusable after the earthquake occurs. Since 1900 earthquakes have occurred in 39 states and caused damage in all 50.
- C. **Floods:** Floods are one of the most common disasters in the United States, and cause damage to thousands of structures annually. Floodplain construction is addressed in most building codes and many zoning regulations. Flood mitigation is addressed through the National Flood Insurance Program which provides insurance credit incentives for complying with FEMA regulations. Flood as a hazard falls outside the scope of the BCEGS program.
- D. **Hail:** Consists of icy pellets of various sizes that are usually associated with thunderstorms or tornadic activity. Large hail can cause substantial damage to roof surfaces. In a typical year the insurance industry pays out \$1.5 billion in hail damage claims. In rare cases hail has caused structural damage and building collapses. Building codes usually do not address potential damage from hail.
- E. **High Winds:** High strait line winds can occur anywhere in the United States and are caused by pressure and temperature variances in the Earth's atmosphere. High strait line winds are common in thunder storms, in the open plains where there are no obstructions to slow down the wind, in mountainous areas from upslope and downslope wind effects, on the East Coast from "Northeasters", and on the Pacific Coast from Santa Anna winds. Model Code groups have formulated maps based on 50 year mean recurrence intervals. The model codes currently apply the concept of "fastest wind speed" which is determined by an anemometer 33 ft. above the ground in open terrain. The anemometer measures the time it takes for one mile of air to pass its location. Wind maps are not based on potential maximum wind gust, but on "fastest wind speed," which has created confusion in media coverage of storms.
- F. **Hurricane:** This is a tropical low pressure system with a circular wind rotation of 74 mph or greater usually accompanied by rain, lightning, and sometimes tornadoes. These storms have the ability to travel inland for hundreds of miles, maintaining hurricane force winds.

- G. The Saffir-Simpson scale is used to rate the strength of a hurricane from 1 to 5 with 5 being the most severe. The Saffir-Simpson scale uses wind speed and storm surge to rate the hurricane's strength and potential for devastation. Model codes have addressed the probability of hurricanes by creating wind zones that range from 110 mph on barrier islands to 70mph inland. Structures must be designed and built to compensate for the potential additional stress placed on structures by the wind in these zones. The structural designs must take into account both Positive and Negative Wind Loads. Roof systems must be anchored to the wall systems to resist the wind loads. The wall systems must also be strapped or bolted to the foundation and footing system to create a continuous resistive system. Building codes also address the potential storm surge for coastal construction, by requiring structures to be elevated on pilings.
- H. **Landslide/mudflow/debris flow:** This hazard is more common in, but not limited to mountainous areas. Earthquakes and heavy rains cause landslides. Mudflows and debris flows can be caused by heavy rains as well as volcanic eruptions in areas with snow and ice present. This is usually a localized occurrence, and is more of a zoning than a building code issue.
- I. **Lightning:** All states are subject to lightning in varying degrees. Lightning rods can be installed on structures in high probability areas, but most building codes do not address when lightning rods are required. In a typical year the insurance industry pays out over \$1 billion in residential lightning damage claims.
- J. **Snow Loads:** This is a concern in snow belt areas in northern states and in mountainous areas. There are snow load maps created by the model code groups that address this situation. Some areas require a minimum roof pitch and higher design factors to compensate for the additional weight imposed on roofs by snow.
- K. **Soil Liquefaction:** This is a seismic concern. There are some soil types which, in the presence of a high enough water table, will take on the physical properties of a liquid when shaken by an earthquake. Buildings constructed in areas subject to liquefaction need to be designed to reduce or eliminate the possibility of uneven settling or tilting during an earthquake.
- L. **Soil Subsidence:** This is the shrinking or settling of soil due to its composition. Some soils compact or shrink excessively and this could cause foundation failure if not compensated for by foundation reinforcement. Some areas are subject to sink holes. These are typically caused by lime deposits being dissolved by underground water.
- M. **Swelling Soils:** This is common in clay based soils that do not drain well and needs to be compensated for by foundation reinforcement. Footings or foundations placed on or within expansive soils need to be designed to resist differential volume changes to prevent structural damage to the supported structure. As an alternative to special design the soil can be removed and replaced or stabilized.

- N. **Tornado:** Tornadoes are formed from mesocyclones or supercell thunderstorms. Tornadoes can strike in many places in the United States, but the greatest probability of tornadic activity is in a corridor from Texas to Wisconsin known as tornado alley. They occur usually in the spring or fall of the year during the late afternoon when the atmosphere is least stable. Tornadoes are measured by the Fujita Scale (F-SCALE), which measures the wind speed and damage potential. The scale ranges from F0 to F5 with F5 being the most severe storm. Damages from a direct hit by the strongest tornadoes cannot be mitigated, but the collateral damages that occur in surrounding areas can be reduced. The wind provisions of the model codes can help to limit damages from the most common, weaker tornadoes.
- O. **Tsunamis:** (tidal wave) These are large sea waves usually caused by earthquakes or volcanic eruptions, and are most common in the Pacific Ocean. The potential devastation of a Tsunami is enormous, but little is being done to mitigate this hazard. Several Pacific Coast States have enacted zoning regulations to prevent schools and hospitals from being built in low areas subject to tsunamis.
- P. **Volcanoes:** There are numerous dormant and active volcanoes in the Western United States, and the potential danger is catastrophic near these volcanoes. Collateral damage could occur for hundreds of miles. Building codes can do little to address this danger, but some areas require additional roof structure design to compensate for volcanic ash load. Zoning restrictions are a more viable means of mitigation.



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Michael Slate, Director of Code
Administration

11:35 a.m. - Remote Video Inspections Presentation (Michael
Slate, Code Administrator)

Issue/Action Requested:

To provide the Board of Commissioners information regarding new technology to enhance the delivery of service from the Code Administration Department.

Background/Purpose of Request:

With the ever increasing demand for inspections, the Code Administration Department is looking to utilize new technology to deliver superior service to the customers it serves. This presentation is a look into the process the Code Administration Department is utilizing to keep up with the demand the County is experiencing with being the fastest growing county in NC.

Fiscal Impact:

Approved By County Attorney:

ATTACHMENTS:

Description

- ☐ Remote Video Inspection Presentation



Remote Video Inspections: Wave or Ripple?

Digital Inspection Market

According to a MarketWatch report published in December 2018 the global market for digital inspection accounted for \$17B in 2017 with a projected annual growth rate of 7.2% through 2025.



Some prominent companies that are operating in this market are:

- General Electric
- Nikon
- National Instruments
- Applied Technical Services

INDUSTRIES THAT UTILIZE RVI TECHNOLOGY

Manufacturing

Aviation

Medical

Government

HIGHLY REGULATED INDUSTRY EXAMPLES

- Aviation
 - Gulfstream Aerospace currently uses FAA approved RVI for conformity and maintenance inspections. Remote engineering test witnessing is currently in the process of being developed for FAA approval.
- Medical
 - Arthroscopic surgery is a common and growing method for performing non-invasive surgery that reduces risk factors associated with more invasive surgical methods.

RVI INNOVATIVE COUNTIES

A decorative graphic on the left side of the slide, consisting of several parallel diagonal stripes in dark grey, light grey, and blue, extending from the top left towards the bottom right.

Clark,
Washington

Tucson,
Arizona

Pima, Arizona

San
Bernardino,
California

Whatcom,
Washington

Pierce,
Washington

Brunswick,
North Carolina

National Fire Protection Association: Conducting Remote Video Inspections

The NFPA concluded in their August 2018 whitepaper that:

“RVI offers both jurisdictions and permit holders the opportunity to use technology to increase the efficiency of the inspection process...With proper attention and communication, both parties may complete the inspection successfully. It is important for jurisdictions that allow the use of RVIs to develop rules, policies, and procedures to provide expectations to the permit holders. The transparency in procedures for the AHJ [Authority Having Jurisdiction] will go a long way in the success of these inspection programs.”

<https://www.nfpa.org/-/media/Files/White-papers/WhitePaperRVI.pdf> (*Conducting Remote Video Inspections - August 2018*)

BRUNSWICK COUNTY, NC

Remote Video Inspection (RVI) Policy and Procedure

Inspections Eligible for RVI

- Utility Trench (not to exceed 100')
- Shower pan
- HVAC (No Gas)
- Electric Water Heater

Client Responsibility

1. Download [Skype](#).
2. 4G must available at the inspection site.
3. Have all necessary tools and documents available. (Some examples may include: tape measurer, level, GFCI tester, step ladder, manufacturer's installation instructions, site plans, etc.)
4. Allow up to 30 minutes for the inspection.
5. If using your phone for the inspection, make sure you do the following to avoid interruptions:
 - iPhone "Settings":
 - Tap on "Do Not Disturb"
 - Set the "Manual" slide button to be green
 - Scroll down to "Silence"
 - Tap next to "Always" to add a check mark
 - Android
 - Tap "Sounds and Notifications" in Settings
 - Tap "Do Not Disturb" under the "Notifications" section
6. Call (TBD) from Skype to connect with the Inspector.
7. The inspection:
 - The inspector has to be able to see the front of the house and the address.
 - Starting from the front of the house, walk toward the site for the inspection and follow the inspector's directions.

***Disclaimer: We reserve the right to determine during the RVI that a site visit will be required for the inspection to be completed. We will attempt to schedule a site visit for the same day if possible.**





Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Michael Slate, Director of Code
Administration

Action Item # 2. -
11:45 a.m. - ICC Building Valuation Data Permit Fee Schedule
(Michael Slate, Code Administrator)

Issue/Action Requested:

Request that the Board of Commissioners receive information on the proposed use of the ICC (International Code Council) Building Valuation Data (BVD) chart for calculation of project construction cost and permit fees.

Background/Purpose of Request:

The International Code Council (ICC) publishes the Building Valuation Data (BVD) bi-annually in August and February. It provides the average construction cost per square foot that can then be used to help determine permit fees and construction values. Some counties in North Carolina currently use the ICC BVD for this purpose. With the proposed use of the ICC BVD chart the construction value will be determined based on the ICC BVD values, the square footage and type of construction. Brunswick County Management Software would automatically calculate this value. It would enhance our reports for a more reliable construction value based on current construction valuation. The BVD is updated bi-annually by the International Code Council.

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information on the proposed use of the ICC (International Code Council) Building Valuation Data (BVD) chart for calculation of project construction cost and permit fees.

ATTACHMENTS:

Description

- ☐ ICC BVD Presentation

2019

International Code Council Building Valuation Data Comparison

Michael Slate, Code Administration

Building Valuation Data

The International Code Council (ICC) publishes the Building Valuation Data (BVD) bi-annually in August and February. It provides the average construction cost per square foot that can then be used to help determine permit fees.

Some counties and cities in N.C that currently use the ICC BVD:

- Mecklenburg County
- New Hanover County
- City of Chapel Hill
- City of Raleigh
- Iredell County
- City of Burlington

ICC BVD Chart

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	244.21	236.18	230.55	221.01	207.82	201.82	214.02	189.83	182.71
A-1 Assembly, theaters, without stage	223.45	215.42	209.80	200.25	187.31	181.32	193.26	169.33	162.21
A-2 Assembly, nightclubs	190.08	184.73	180.34	172.99	163.33	158.82	166.99	147.83	142.92
A-2 Assembly, restaurants, bars, banquet halls	189.08	183.73	178.34	171.99	161.33	157.82	165.99	145.83	141.92
A-3 Assembly, churches	224.47	216.44	210.82	201.27	189.73	183.73	194.28	171.74	164.62
A-3 Assembly, general, community halls, libraries, museums	188.77	180.74	174.11	165.57	151.59	146.63	158.58	133.64	127.52
A-4 Assembly, arenas	222.45	214.42	207.80	199.25	185.31	180.32	192.26	167.33	161.21
B Business	195.88	188.76	182.90	173.98	159.08	153.13	167.31	139.76	133.67
E Educational	207.44	200.32	195.11	186.22	173.62	164.85	179.83	151.63	147.30
F-1 Factory and industrial, moderate hazard	115.30	109.99	103.87	99.84	89.72	85.56	95.69	73.79	69.57
F-2 Factory and industrial, low hazard	114.30	108.99	103.87	98.84	89.72	84.56	94.69	73.79	68.57
H-1 High Hazard, explosives	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	0.00
H234 High Hazard	107.85	102.54	97.43	92.40	83.50	78.33	88.25	67.57	62.34
H-5 HPM	195.88	188.76	182.90	173.98	159.08	153.13	167.31	139.76	133.67
I-1 Institutional, supervised environment	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
I-2 Institutional, hospitals	327.69	320.57	314.72	305.80	289.87	0.00	299.12	270.56	0.00
I-2 Institutional, nursing homes	227.45	220.33	214.47	205.56	191.65	0.00	198.88	172.34	0.00
I-3 Institutional, restrained	222.66	215.54	209.69	200.77	187.11	180.16	194.09	167.80	159.71
I-4 Institutional, day care facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
M Mercantile	141.54	136.19	130.80	124.45	114.24	110.73	118.45	98.74	94.83
R-1 Residential, hotels	196.81	190.20	184.74	177.03	162.97	158.58	177.13	146.15	141.65
R-2 Residential, multiple family	165.05	158.44	152.98	145.27	132.00	127.61	145.37	115.18	110.68
R-3 Residential, one- and two-family	154.04	149.85	145.98	142.32	137.11	133.50	139.93	128.29	120.75
R-4 Residential, care/assisted living facilities	194.98	188.36	182.90	175.20	161.40	157.01	175.29	144.58	140.08
S-1 Storage, moderate hazard	106.85	101.54	95.43	91.40	81.50	77.33	87.25	65.57	61.34
S-2 Storage, low hazard	105.85	100.54	95.43	90.40	81.50	76.33	86.25	65.57	60.34
U Utility, miscellaneous	83.66	79.00	74.06	70.37	63.47	59.32	67.24	50.19	47.80

Current Residential Calculation

Current Calculation:

\$110 per square foot X total square feet under roof X .0045 = Permit Fee

Example: 2000 sq. ft. New Single-Family Residence

The Calculation to determine the Permit Fee: $\$110 \times 2000 \times .0045 = \990

Proposed Residential Calculation

Proposed Calculation with ICC BVD:

BVD X total square feet under roof X .004 = Permit Fee

Example: 2000 sq. ft. New Single-Family Residence

The Calculation to determine the Permit Fee: \$120.75 X 2,000 X .004 = **\$966**

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
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S-2 Storage, low hazard	105.85	100.54	95.43	90.40	81.50	76.33	86.25	65.57	60.34
U Utility, miscellaneous	83.66	79.00	74.06	70.37	63.47	59.32	67.24	50.19	47.80

Residential Permit Fee Comparison

Current	Proposed	Difference
\$990	\$966	\$24

The August 2018 ICC BVD data result is a \$24 (-2.4%) decrease based on their bi-annual calculated average construction cost per sq. ft. compared to the current Brunswick County formula.

Current Commercial Calculation

For Structures < 20000 sq. ft.:

Square feet under roof X \$115 X .0045 = Permit Fee

Example: 15000 sq. ft. commercial structure:

15000 X 115 X .0045 = **\$7762.50**

For Structures > 20000 sq. ft.:

Square feet under roof X \$115 X .0045 X .8 = Permit Fee

Example: 25000 sq. ft. commercial structure:

25000 X 115 X .0045 X .8 = **\$10350**

Proposed Commercial Calculation

Proposed Calculation with ICC BVD:

BVD x total square feet under roof x .0035 + any additional > 15K sq. ft. x BVD x .0012

Example: 25000 sq. ft. Steel Business Building

The Calculation to determine the Permit Fee: \$173.98 X 15,000 X .0035 = \$9133.95 + \$173.98 X 10,000 X .0012 = 2087.76. **Permit Fee Total = \$11221.71**

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
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S-2 Storage, low hazard	105.85	100.54	95.43	90.40	81.50	76.33	86.25	65.57	60.34
U Utility, miscellaneous	83.66	79.00	74.06	70.37	63.47	59.32	67.24	50.19	47.80

Commercial Permit Fee Comparison

Current	Proposed	Difference
\$10350	\$11221.71	\$871.71

The August 2018 ICC BVD data result is a \$11221.71 (8.4%) increase based on their bi-annual calculated average construction cost per sq. ft. compared to the current Brunswick County formula.

Construction Value Control

Construction value is currently determined by the applicant by the value entered on the application form. This poses a serious problem with regard to maintaining accuracy. Some examples of obvious inaccurate construction values entered by applicants are:

1. A commercial application for a 51389 sq. ft. nursing home with a construction value of \$763,279,400.
2. A residential application for a 9963 sq. ft. addition to a barn with a construction value of \$150,000,000.
3. A residential application for a 3205 sq. ft. 3 bedroom 3 bathroom house with a construction value of \$54,926,200.

Reliable and Consistent Construction Values

With the proposed use of the ICC BVD chart the applicant would still enter the construction value but on our side the construction value will be determined based on the ICC BVD values, the square footage and type of construction. BCMS would automatically calculate this value and would be available on our reports for a more reliable construction value based on current construction valuation updated bi-annually by the International Code Council.



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -
12:00 p.m. - Recess for Lunch

From:

Issue/Action Requested:

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Amanda Hutcheson

12:45 p.m. - Administration - County Seal and Logo Options
(Amanda Hutcheson, Public Information Officer)

Issue/Action Requested:

Request that the Board of Commissioners receive information on options for a new county seal and logo.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information on options for a new county seal and logo.

ATTACHMENTS:

Description

- ▣ County Logo Presentation

2019

Brunswick County Logo/Seal Options

Amanda Hutcheson, Public Information Officer

S&A Communications Proposal

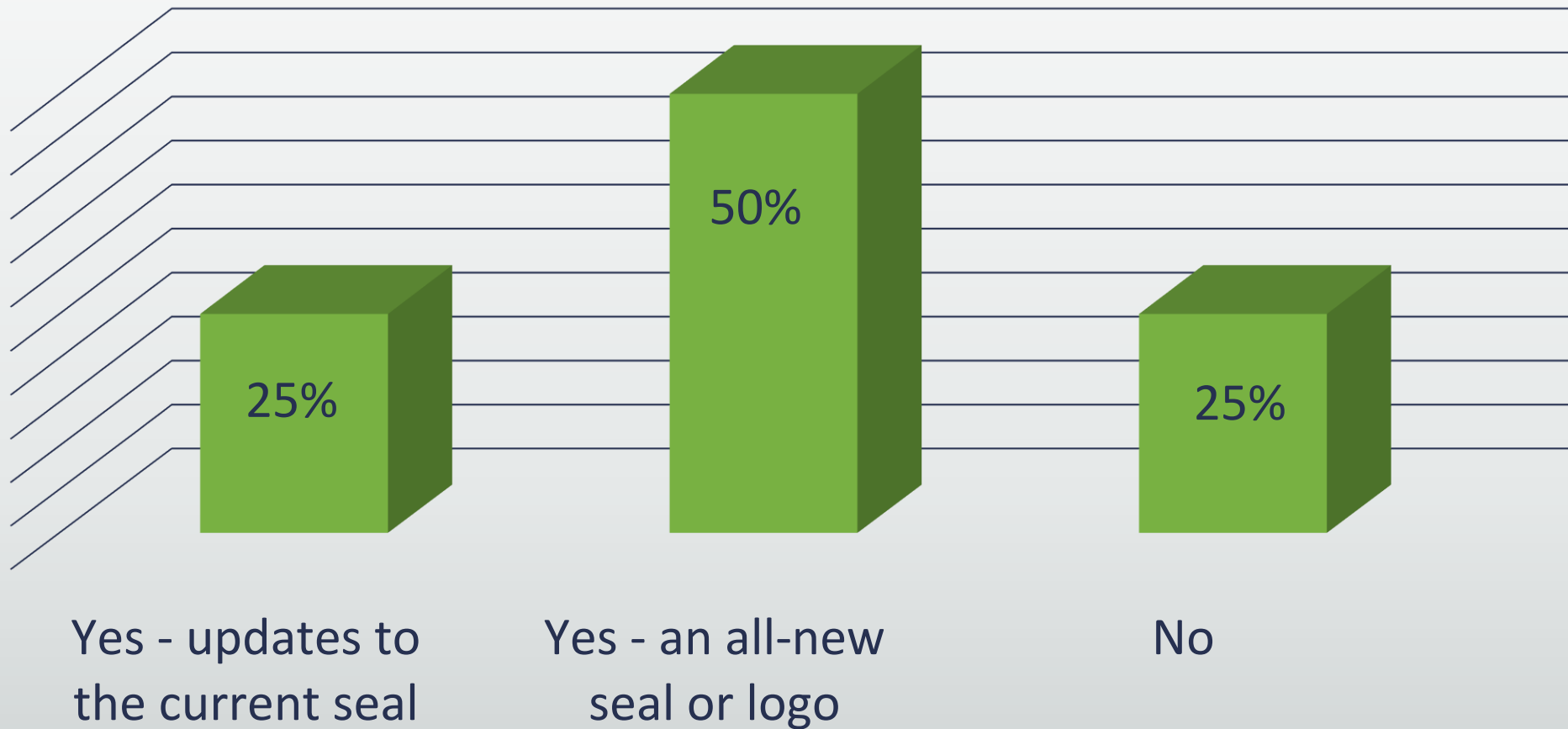
- Create new logo to supplement County seal
- Estimated cost: \$4,500-\$5,000
- Other option: Update current seal

Current Seal:



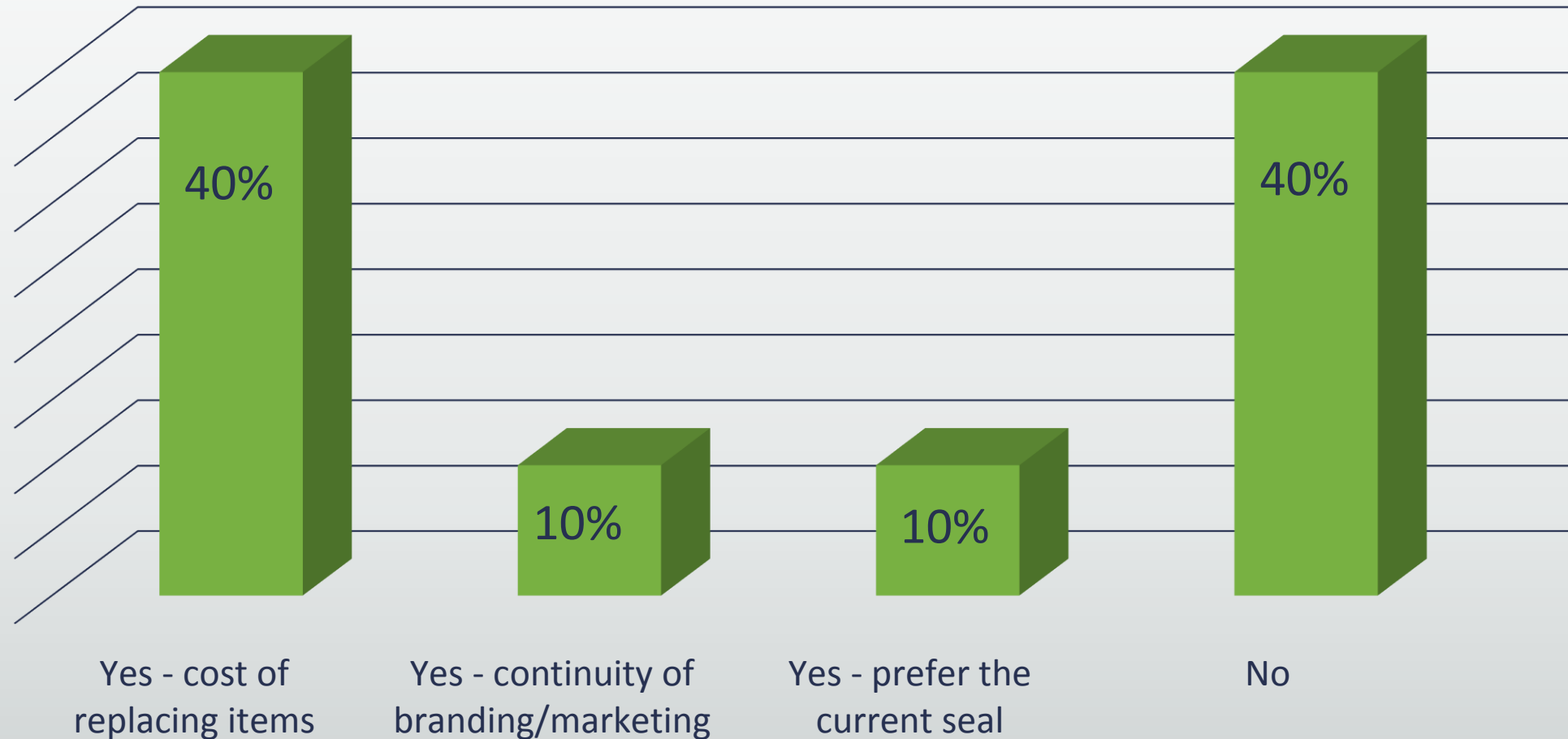
Department Leaders Feedback

Would you like to see changes to the seal?



Department Leaders Feedback

Do you have concerns with updating or replacing the seal?



Department Leaders Feedback

25% of departments have a departmental logo or seal

- 10% use it in addition to the County seal
- 15% use it instead of the County seal

100% of departments with a department logo or seal would be interested in using a new or updated County seal or logo with their departmental logo

Details of Implementation

Several departments are using the seal solely or mostly in digital form (website, PDF documents, etc.)

Other uses:

- Vehicle decals
- Business cards, letterhead, forms, brochures
- Signs
- Shirts and uniforms
- Equipment identification
- Water meter lids*
- ID badges – 1,100

Some items are replaced regularly, and logo changes could be phased in with these already-planned and –budgeted replacements.

Department Leaders Feedback

- Several liked having a symbol of farming and fishing/shrimping, representing parts of the County's history and economy
- Several thought the symbol on the right (for industry) was hard to recognize and identify
- Several suggested something more modern



Options

- Keep the current seal
- Design a new logo for use in addition to the seal
- Update the current seal



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
John Nichols, P.E.

Action Item # 2. -
1:00 p.m.- Enterprise Capital Improvement Plan (John Nichols,
Public Utilities Director)

Issue/Action Requested:

Request that the Board of Commissioners receive information on the Enterprise Capital Improvement Plan.

Background/Purpose of Request:

The FY 20 Water and Sewer CIP has been updated to reflect current construction and design costs, add additional projects, and remove projects as conditions warrant.

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information on the Enterprise Capital Improvement Plan.

ATTACHMENTS:

Description

- ☐ Enterprise CIP PPT

2019 Water Capital Improvement Plan

John Nichols, Utilities Director

Water – Current Projects

1. Highway 74/76 Water Main – Malmo Loop Road to Mintz Road – Construction Complete
2. Bailey Road Water Main (Shallotte) – Construction Complete
3. Sunset Harbor Road Water Main – Construction Complete
4. Highway 74/76 Water Main – Mintz Drive to Old Maco – In Design
5. Highway 74/76 Water Main – Sandy Creek to Industrial Park – Design Complete Nov. 2019

Water – FY20 Projects

Funding Sources: Capital Reserve and Pay Go:

1. Shallotte Water Transmission Main – Bid December 2019 (\$4.5 million)
2. Utilities Operations Center – In Design, Start Construction in FY20 (\$590k)

Funding Source: Planned Debt Issue January 2020:

1. Northwest Water Treatment Plant – Expansion – Bid December 2019 (\$47.5 million)
2. Northwest Water Treatment Plant – Reverse Osmosis – Bid December 2019 (\$89.5 million)
3. 54” LCFWSA Raw Water Main – Bid in October 2019 (\$42.4 million)

Water – Horizon Projects – Beyond FY 24

1. Southeast Area Improvements – (\$2.035 million)
2. FY16 Top 7 & Apollo Water Mains – (\$2.435 million)
3. System Improvement Mains – Neighborhood – (\$650k)
4. Asbestos Cement Pipe Repair Program – (\$950k)
5. NC 211 - Gilbert/Old Lennon Road Improvements – (\$1.5 million)
6. Transmission Improvements – Leland to Bell Swamp – (\$5.7 million)
7. Highway 87 Transmission System Improvements – (\$5.1 million)

2019

Wastewater Capital Improvement Plan

John Nichols, Utilities Director

Wastewater – Current Projects

1. Northeast Brunswick WWTP 2.5 mgd Expansion – Bid December 2019 (\$39.1 million)
 - Planned Debt Issue January 2020 - Funded by Participants Reimbursement
2. West Brunswick WRF 0.75 mgd Expansion (Southport) – Bid December 2019
 - \$18,450,382 Construction Cost
 - \$1,848,818 Force Main Betterment Cost in NCDOT R/W – 16” to 24” upsize
 - \$5,460,800 Transmission System Reimbursement Cost
 - \$25,760,000 Total Cost
3. Transmission – Midway Road to West Brunswick WRF – FY 23-24 @ \$13 million
 - \$5,681,226 County Pay-Go Funding
 - \$1,848,818 Southport Force Main Betterment Reimbursement
 - \$5,460,800 Southport Transmission System Reimbursement
 - \$12,990,884 Total Funding

Wastewater – Horizon Projects – Beyond FY 24

1. Enterprise Funded Low Pressure Main Extensions – (\$700k)
2. Ocean Isle Beach WWTP Effluent Disposal Improvements – (\$2.7 million)
3. Transmission Pump Station Upgrades – (\$1.2 million)



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Cris Harrelson, Health Director

1:20 p.m. - Medicaid Managed Care Update (Cris Harrelson,
Health Director)

Issue/Action Requested:

Request that the Board of Commissioners receive information on Medicaid Managed Care and the impact on Brunswick County.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information on Medicaid Managed Care and the impact on Brunswick County.

ATTACHMENTS:

Description

- ☐ Medicaid Managed Care Update PPT

MEDICAID MANAGED CARE UPDATE

2/18/19



Prepaid Health Plans

- NCDHHS recently awarded contracts to 5 Prepaid Health Plans that will participate in Medicaid managed care beginning in November 2019:
 - AmeriHealth Caritas North Carolina, Inc.
 - Blue Cross and Blue Shield of North Carolina
 - UnitedHealthcare of North Carolina, Inc.
 - WellCare of North Carolina, Inc.
 - Carolina Complete Health, Inc. (in Regions 3 and 5)

Brunswick County

- Brunswick County is located within Region 5 and is scheduled to transition to managed care in February 2020



In the Meantime...

- ▣ The recently selected managed care vendors will soon ask to contract directly with the health department for services.
- ▣ Case management programs at the health department such as CC4C and PCM will remain for a couple of years

In the Future...

- ▣ Fiscal impacts to Brunswick County Health Services are unknown at this time.
- ▣ Fiscal Year 2020-2021 will be the first year of impacts as the cost settlement (as we know it) will end.
- ▣ Unknown: “Additional Utilization-Based Payments”
 - Methodology for calculating this potential payment is unknown at this time



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Cris Harrelson, Health Director

1:25 p.m. - Substance Use & Addiction Commission Update
(Steve Lanier, BCSUAC Chair / Cris Harrelson, Health Director)

Issue/Action Requested:

Request that the Board of Commissioners receive an update on the Substance Use & Addiction Commission.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive an update on the Substance Use & Addiction Commission.

ATTACHMENTS:

Description

- ▣ Brunswick County Substance Use & Addiction Commission Update PPT

Brunswick County Substance Use and Addiction Commission

Steve Lanier, Chair
Cris Harrelson, Health Director

Membership Roster

Melody Bass
At-Large -exp. 06/30/19

Catherine Cooke
Board of Education - exp. 06/30/19

William Eberle
District 3 - exp. 06/30/21

Kathleen Gomes
District 1 – exp. 06/30/20

Eric Gushue
Chief Judge Office – exp. 06/30/21

William Hickman
District 5 – exp. 06/30/22

Stephen Lanier
BC Sheriff's Office – exp. 06/30/22

Joshua Torbich
District 2 – exp. 6/30/20

Resea Willis
District 4 – exp. 06/30/21

Meeting Schedule

Commission meets monthly on the first Thursday at 6:00 pm in the Board Room, Health Services (Building A)

Initial Meeting: November 8, 2018

Meetings have been well attended by Commission members and the public.

Update

Goals

- Reduce Opioid-Related Deaths
- Reduce Opioid-Related Emergency Room Visits
- Reduce the Oversupply of Prescription Opioids
- Reduce the Diversion of Prescription Opioids
- Increase Access to Naloxone
- Promote Treatment and Recovery
- Reduce Negative Stigma Associated with Substance Use and Mental Health
- Help Families Impacted by Substance Use to Heal

Update

At each meeting, members review the latest local and state substance use data

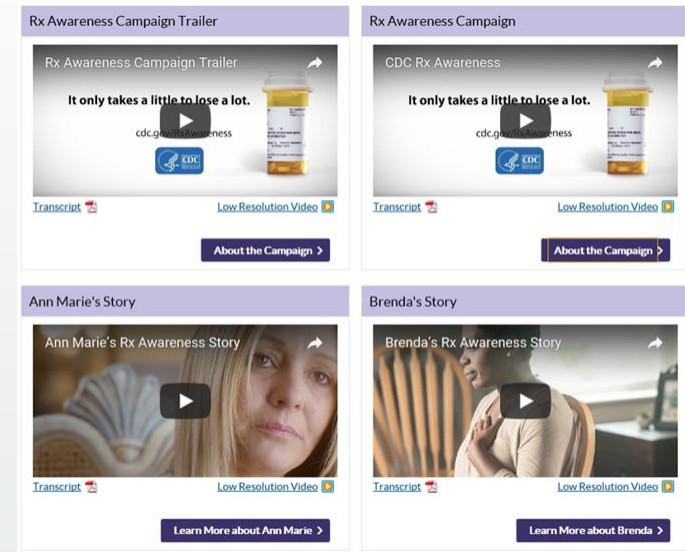
Members want to make a difference in the community and are determined to pursue practical projects that are attainable but impactful.

Proposed projects include:

- A Recovery Celebration Event
- Media Awareness Campaign

Media Awareness Campaign

- Proposed media campaign will use CDC materials from their “Rx Awareness” campaign to tell stories of real people whose lives were torn apart by prescription opioids using TV, radio, social media, and billboards.



Latest Opioid Data for Brunswick County

41

Brunswick County resident unintentional
opioid overdose deaths in 2017

44

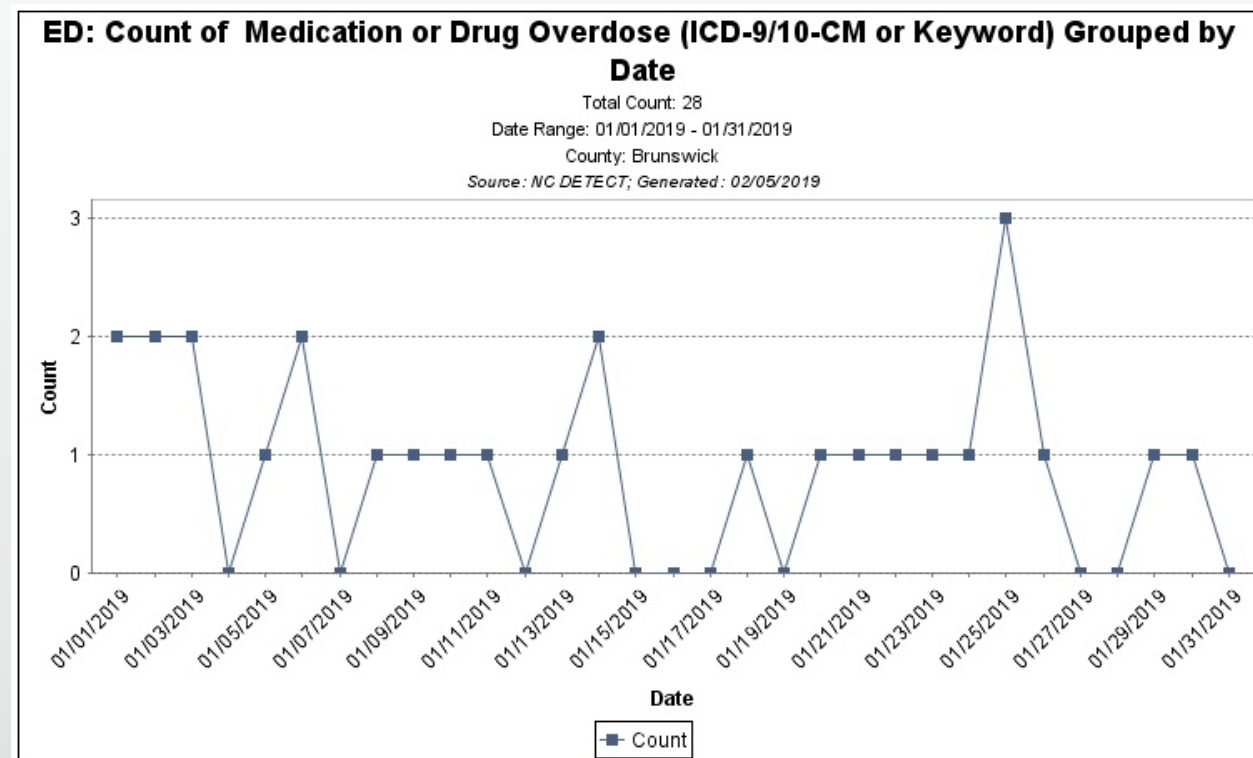
Brunswick County resident opioid overdose ED
visits in 2017

8,513,000

Opioid pills dispensed to Brunswick
County residents in 2017

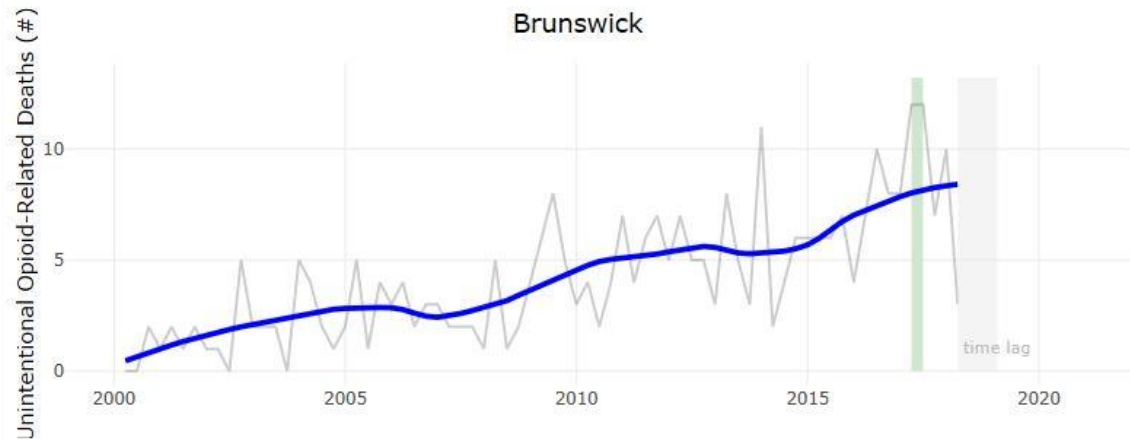
280

Reported community naloxone reversals in
Brunswick County in 2017



Unintentional Opioid-Related Deaths (through Quarter 1, 2018)

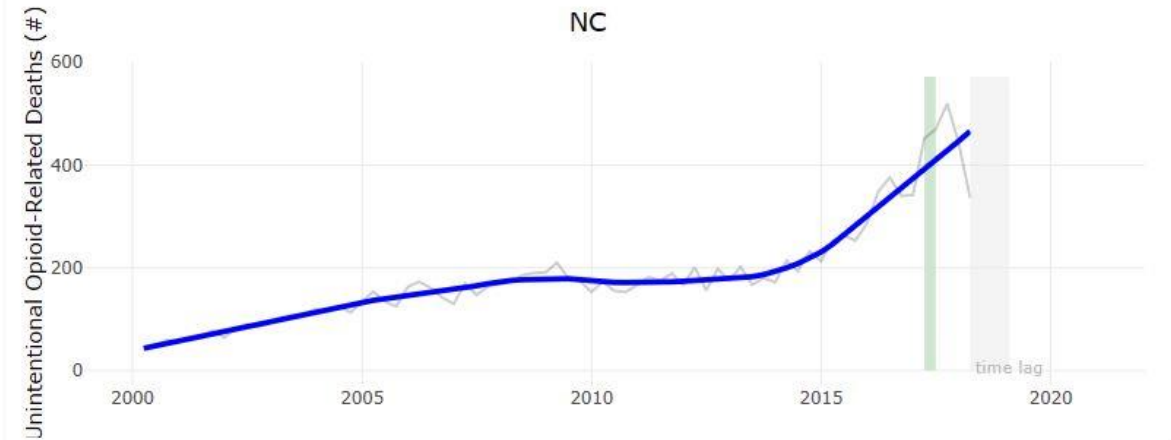
Unintentional Opioid-Related Deaths



Data Source: North Carolina State Center for Health Statistics, Vital Statistics, Death Certificate Data, 1999-present. See Technical Notes.

Brunswick County

Unintentional Opioid-Related Deaths



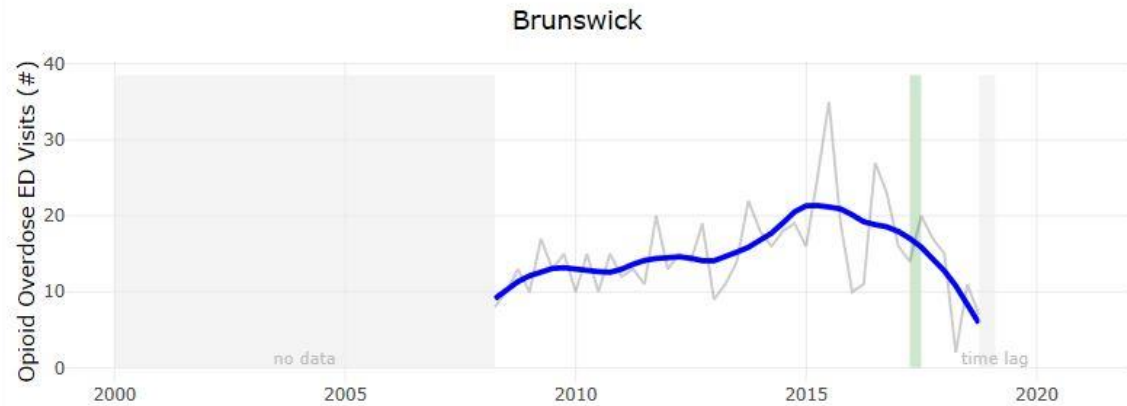
Data Source: North Carolina State Center for Health Statistics, Vital Statistics, Death Certificate Data, 1999-present. See Technical Notes.

North Carolina

Data Source: North Carolina State Center for Health Statistics, Vital Statistics, Death Certificate Data, 1999-present. See Technical Notes.

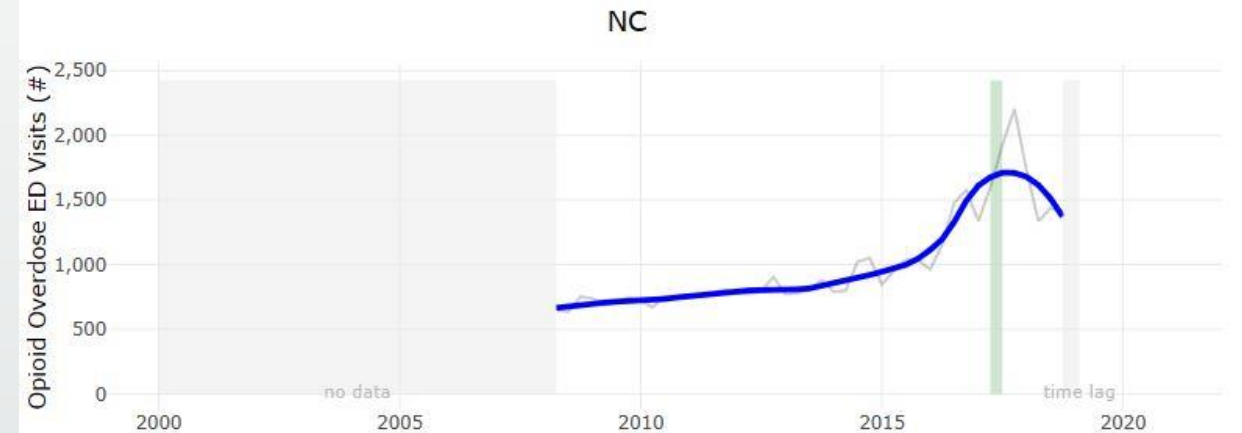
Emergency Department Visits Related to Opioid Overdoses (through Quarter 3, 2018)

Opioid Overdose ED Visits



Brunswick County

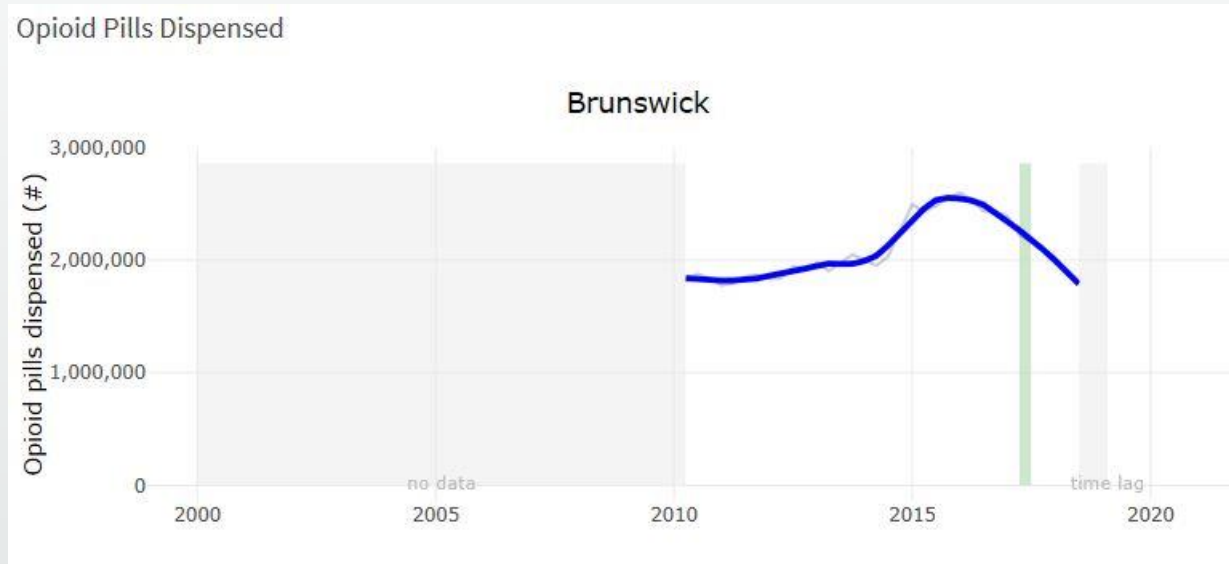
Opioid Overdose ED Visits



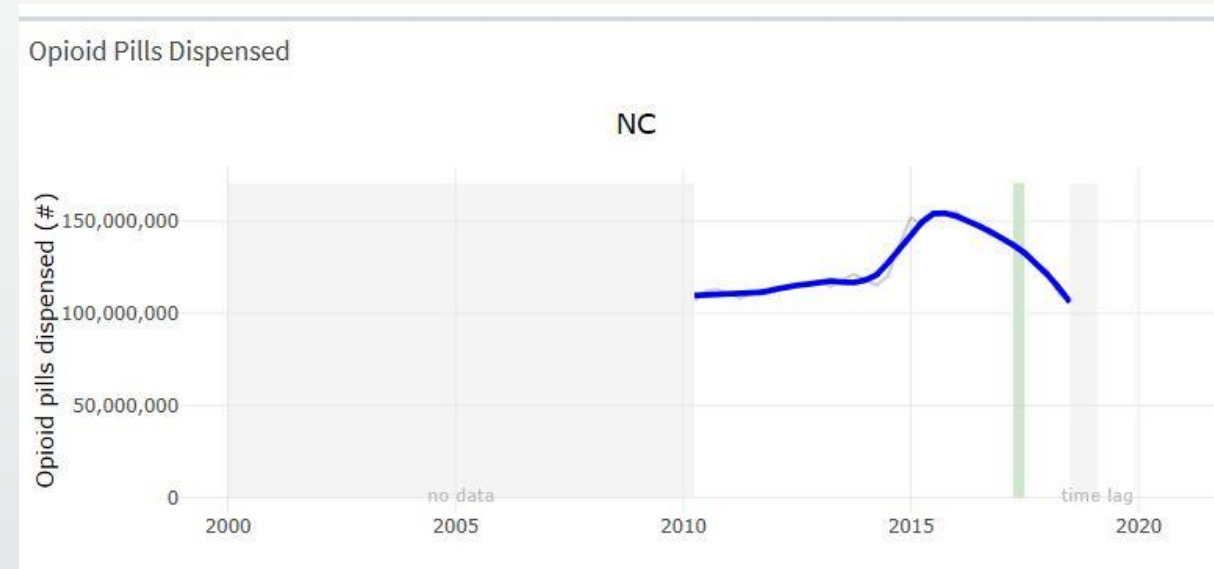
North Carolina

Data Source: North Carolina Division of Public Health, Epidemiology Section, North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), 2008-present See Technical Notes.

Number of Opioid Pills Dispensed (through Quarter 2, 2018)



Brunswick County



North Carolina

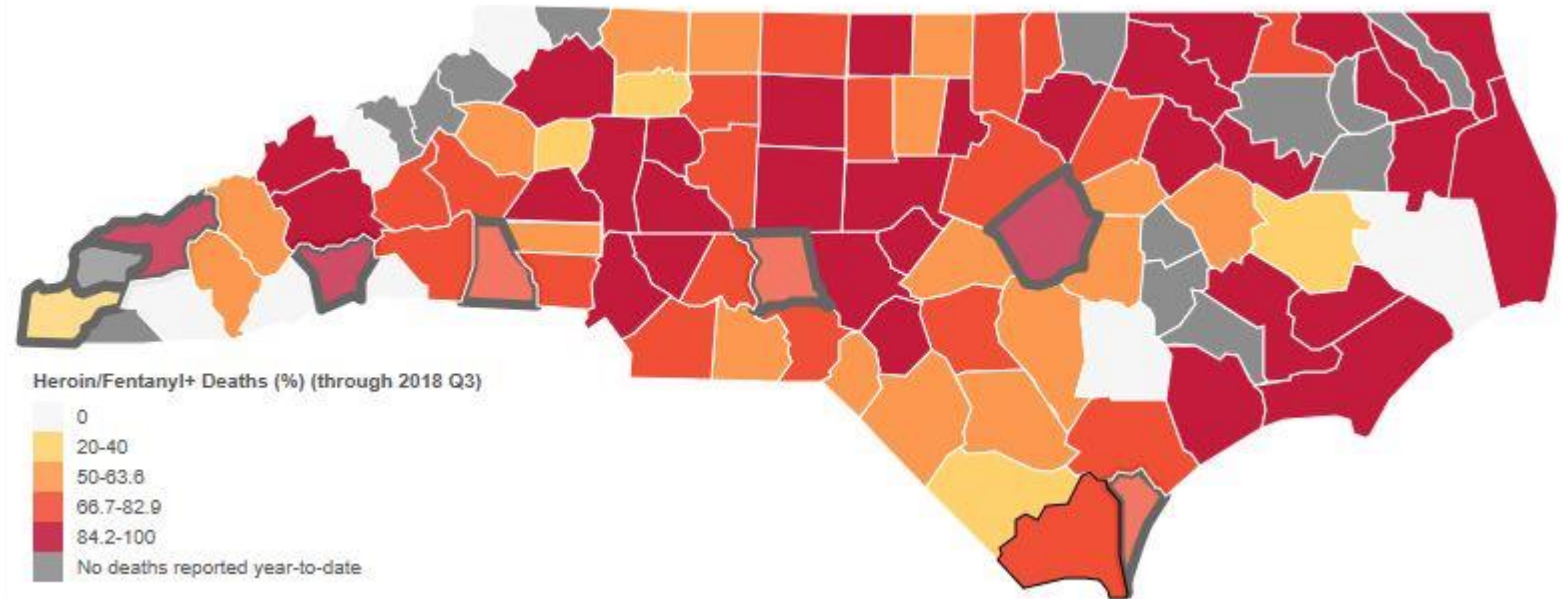
Data Source: North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Controlled Substance Reporting System (CSRS), 2011-present. See Technical Notes.

Involvement of Illicit Substances in Opioid Deaths

i.e. heroin, fentanyl, and fentanyl analogues (drugs that are similar to fentanyl but have been chemically modified in order to bypass current drug laws)

Brunswick County
66.7%

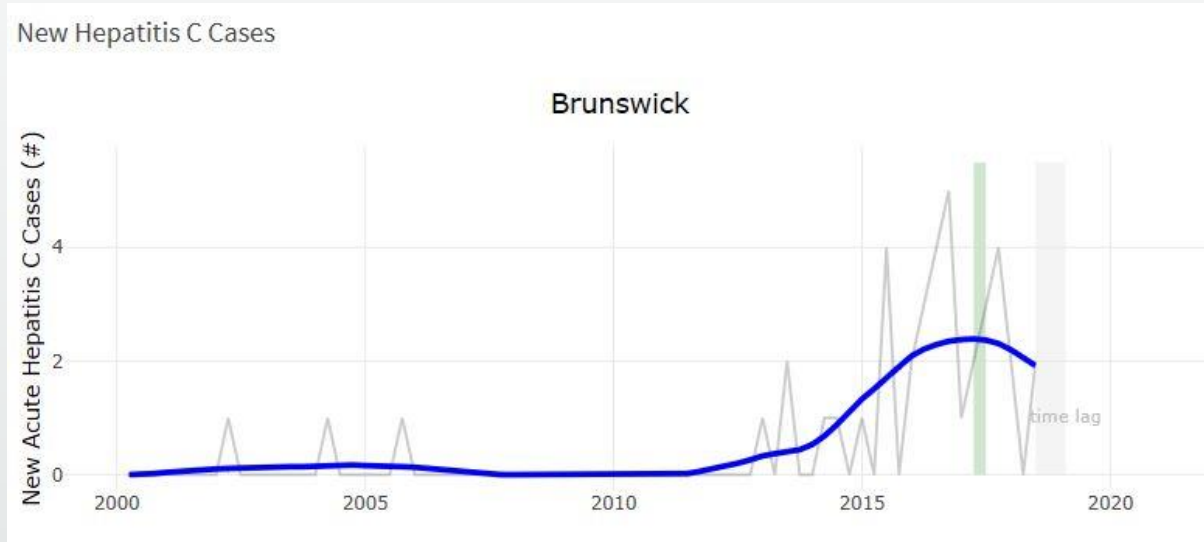
Most Recent Year-to-Date Percent of Illicit Involvement in Opioid Overdose Deaths by County



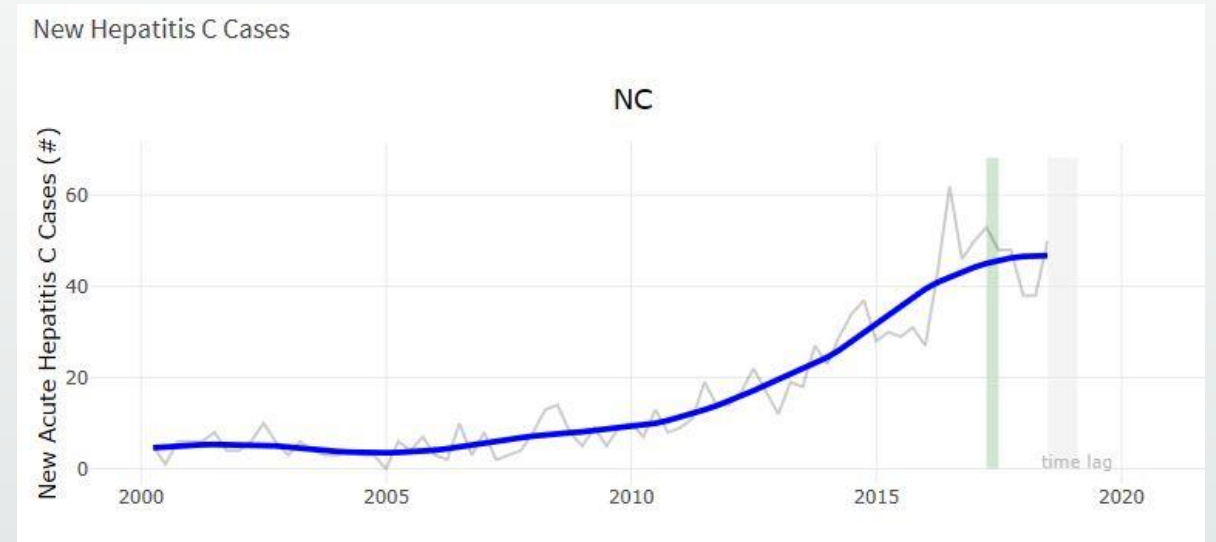
Data Source: North Carolina Office of the Chief Medical Examiner and the OCME Toxicology Laboratory, 2010-present. See Technical Notes.

Number of Acute Hepatitis C Virus Cases (through Quarter 2, 2018)

i.e. The shift to IV drug use by many users may lead to the exchange of blood via needle-sharing



Brunswick County

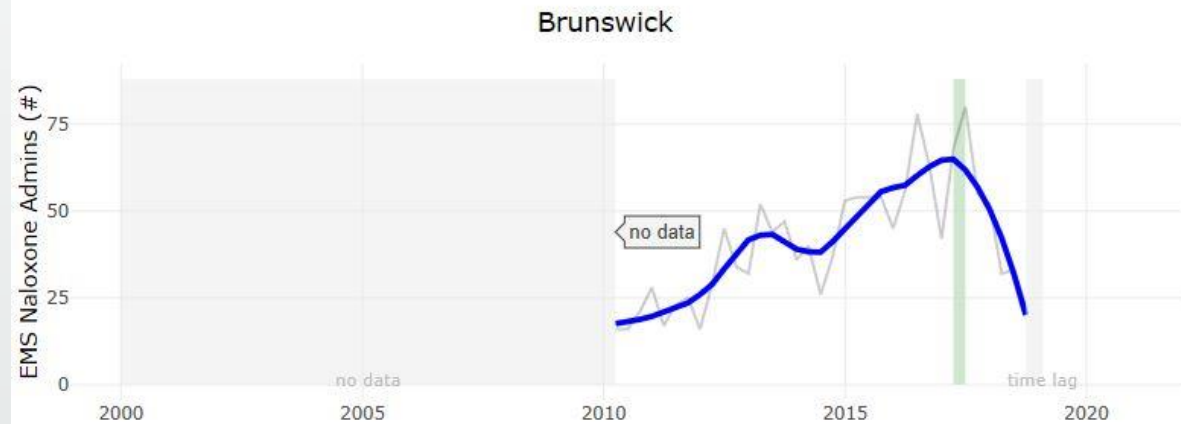


North Carolina

Data Source: North Carolina Division of Public Health, Epidemiology Section, North Carolina Electronic Disease Surveillance System (NC EDSS), 2000-present. See Technical Notes.

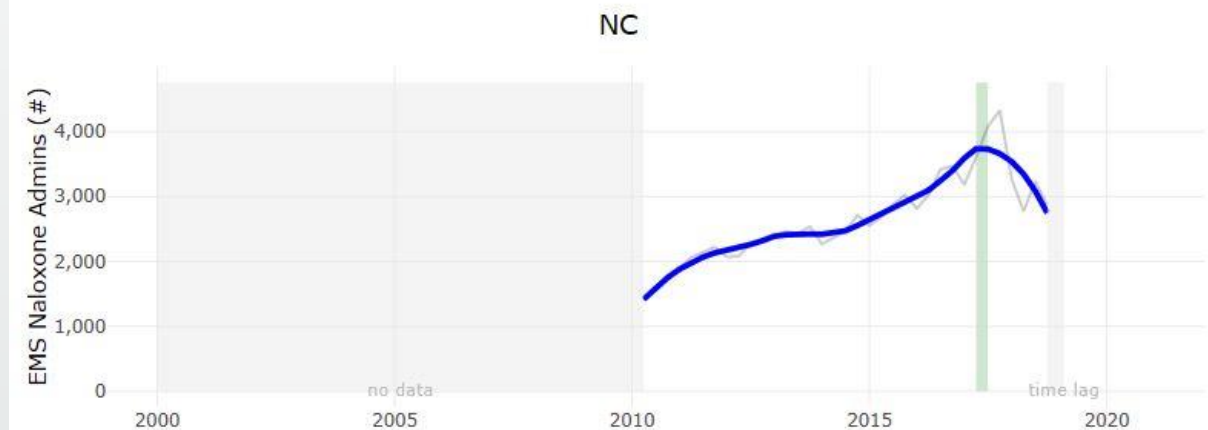
Naloxone Administration by EMS Staff (through Quarter 3, 2018)

EMS Naloxone Administrations



Brunswick County

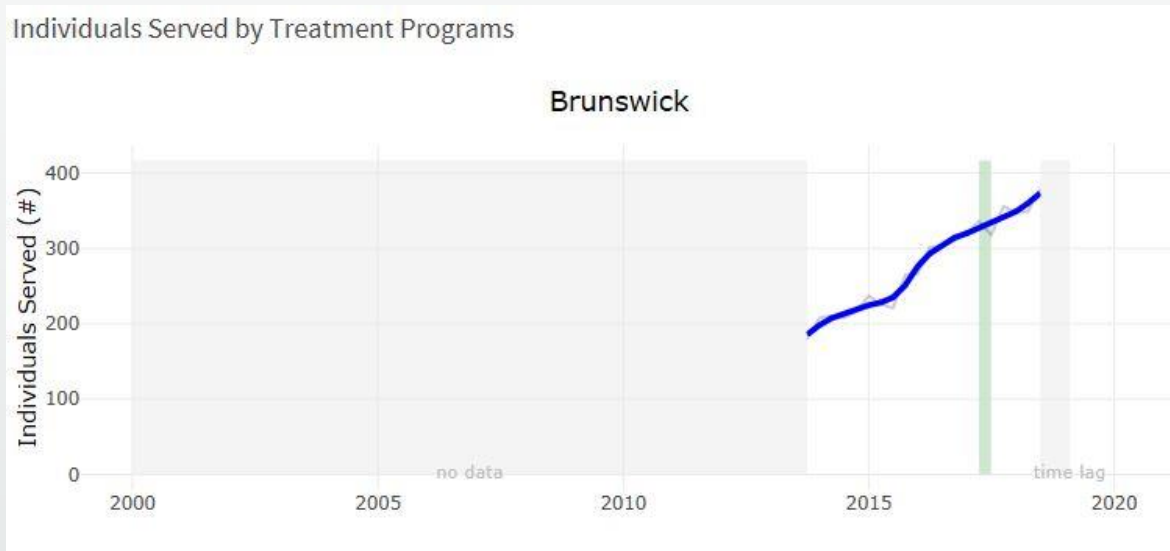
EMS Naloxone Administrations



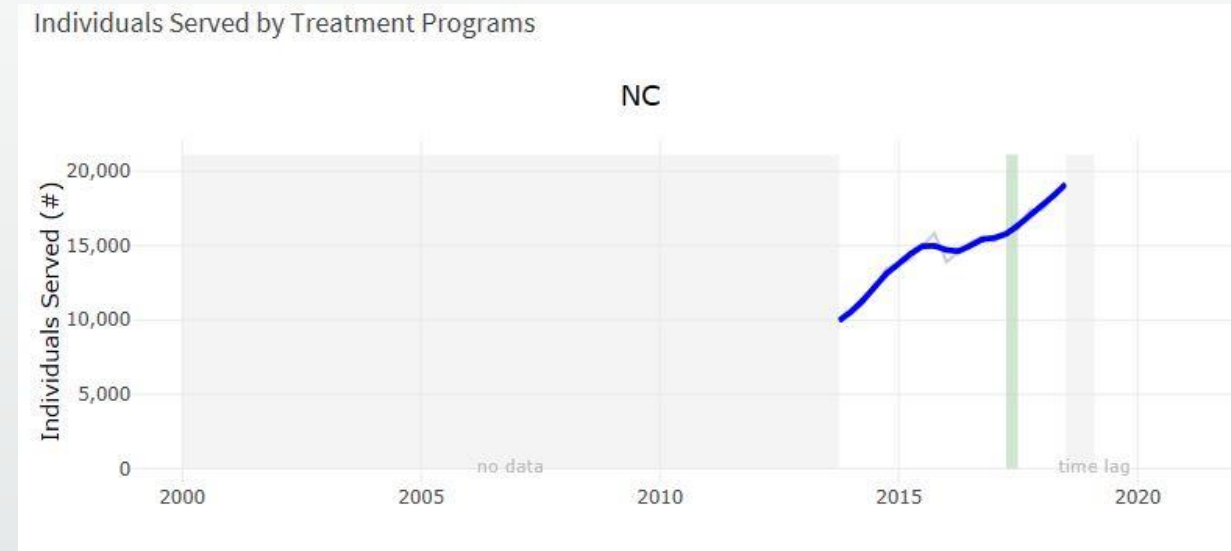
North Carolina

Data Source: North Carolina Office of Emergency Medical Services (OEMS), EMSpic-UNC Emergency Medicine Department, 2012-present. See Technical Notes.

Number of Individuals Served by Treatment Programs (through Quarter 2, 2018)



Brunswick County



North Carolina

Data Source: North Carolina Division of Mental Health, Developmental Disabilities and Substance Abuse Services, Claims Data, 2013-present. See Technical Notes.



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From: 1:35 p.m. - Sheriff's Office Goals (Sheriff John Ingram)

Issue/Action Requested:

Request that the Board of Commissioners receive information from the Sheriff's Office.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

Yes

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information from the Sheriff's Office.

ATTACHMENTS:

Description

- ▣ Slides -- Sheriff's Office goals

2019-2020 Goals

Sheriff's Office, Detention Center, 911 Center, and Animal
Protective Services

Sheriff John Ingram V

Sheriff's Office Goals (104310)

- Relieve salary compression issues among mid-level command staff positions
 - Note: yellow indicates higher starting salary for position

Agency Name	Population	# Sworn	Sergeant	Lieutenant	Captain	Major
<i>Brunswick Co. Sheriff's Office</i>	122,765	200	\$ 45,886	\$ 52,125	\$ 58,363	\$ 62,521
<i>Chatham Co. Sheriff's Office</i>	70,928	111	UNK	UNK	UNK	\$ 75,000
<i>Cumberland Co. Sheriff's Office</i>	323,838	313	\$ 46,607	\$ 55,884	\$ 61,177	\$ 70,104
<i>Durham Co. Sheriff's Office</i>	300,952	183	\$ 43,560	\$ 47,916	\$ 52,707	\$ 54,000
<i>Fayetteville Police Dept.</i>	204,759	351	\$ 44,784	\$ 55,060	\$ 66,635	\$ 73,611
<i>Forsyth Co. Sheriff's Office</i>	369,019	220	\$ 56,687	\$ 62,919	\$ 68,494	\$ 79,539
<i>Garner Police Dept.</i>	28,776	66	\$ 52,152	\$ 56,514	\$ 60,395	UNK
<i>Greenville Police Dept.</i>	91,495	191	\$ 54,538	\$ 62,566	\$ 76,794	UNK
<i>Guilford Co. Sheriff's Office</i>	517,600	266	\$ 58,088	\$ 67,244	\$ 77,843	\$ 85,822
<i>Johnston Co. Sheriff's Office</i>	185,660	126	\$ 44,518	\$ 50,802	\$ 57,974	\$ 69,136
<i>New Hanover Co. Sheriff's Office</i>	220,358	356	\$ 46,883	\$ 51,688	\$ 59,846	\$ 69,280
<i>Onslow Co. Sheriff's Office</i>	186,311	180	UNK	\$ 48,702	\$ 50,651	\$ 66,652
<i>Orange Co. Sheriff's Office</i>	141,354	124	\$ 44,126	\$ 48,709	\$ 53,764	\$ 65,506
<i>Pender Co. Sheriff's Office</i>	57,611	101	\$ 41,718	\$ 45,994	\$ 53,244	UNK
<i>Raleigh Police Dept.</i>	458,880	802	\$ 55,742	\$ 51,822	\$ 56,732	\$ 67,529
<i>Wake Co. Sheriff's Office</i>	1,024,000	386	\$ 55,660	\$ 61,226	\$ 67,349	\$ 80,818
<i>Wilmington Police Dept.</i>	117,525	280	\$ 43,347	\$ 49,858	\$ 59,826	\$ 68,796

Sheriff's Office Goals (104310)

- Here are examples of current officers, their years of service, and how far off their current salary is from the mid-point of their pay grade:

BCSO Case Study		
POSITION	YEARS	TO GET TO MID
Deputy 1	13	\$4,458
Deputy 2	13	\$10,185
Deputy 3	17	\$2,752
Detective 1	11	\$10,513
Detective 2	16	\$8,141
Sergeant 1	10	\$13,226
Sergeant 2	12	\$11,926
Sergeant 3	12	\$10,194
Sergeant 4	15	\$12,896
First Sergeant 1	14	\$12,789
First Sergeant 2	26	\$4,858
Lieutenant 1	16	\$11,761
Lieutenant 2	22	\$10,133

Sheriff's Office Goals (104310)

- Create IT Technician position to assist in growing agency and subsequent growing IT service demands
 - Annual and recurring cost (based on FY18/19 pay range):
 - Pay grade 66 (\$43,807) + fringe (\$17,382.92) = **\$61,189.02**

Detention Center Goals (104320)

- Increase each jail shift by four detention officers to provide better service, safety, and support to detention center staff and detainees
 - 16 jailers in total
 - Initial cost (salary, benefits, equipment/uniforms) = **\$835,673.88***
 - Recurring cost = **\$779,019.64***
 - *(based on FY 18-19 pay scale)

911 Center Goals (104375)

- Reclassify three telecommunicator positions to improve retention, morale, and compete with other job opportunities in area

CURRENT 911 CENTER PAY GRADE				
Grade	Title	Starting Salary	# of Positions	Total Cost
60	Call Taker	\$ 31,331.00	3	\$ 93,993.00
61	Telecommunicator I	\$ 33,411.00	17	\$ 567,987.00
62	Telecommunicator II	\$ 35,489.00	4	\$ 141,956.00
63	Telecommunicator III	\$ 37,569.00	4	\$ 150,276.00
			TOTAL (estimate)	\$ 954,212.00
SUGGESTED 911 CENTER PAY GRADE -- SHERIFF				
Grade	Title	Starting Salary	# of Positions	Total Cost
60	Call Taker	\$ 31,331.00	3	\$ 93,993.00
63	Telecommunicator I	\$ 37,569.00	17	\$ 638,673.00
65	Telecommunicator II	\$ 41,728.00	4	\$ 166,912.00
67	Telecommunicator III	\$ 45,886.00	4	\$ 183,544.00
			TOTAL (estimate)	\$ 1,083,122.00
			Salary Difference	\$ 128,910.00

APS Goals (104380)

- Begin the process of expanding current facility to include adoption center building
 - Request approx. **\$10,000** in funding to initiate process with a market analysis/consultation and other introductory procedures to begin adoption center building project.
- Live release rate has increased dramatically since becoming part of Sheriff's Office, increasing need for additional building
 - 2011 intake total = 5,569 – live release rate = 19% (1,113)
 - 2018 intake total = 4,425 – live release rate = **74% (3,201)**



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Steve Randone, MIS Director

1:45 p.m. - MIS - Cyber Security Focus (Steve Randone, MIS Director)

Issue/Action Requested:

Request that the Board of Commissioners receive information on Cyber Security.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive information on Cyber Security.

ATTACHMENTS:

Description

- ▣ MIS - Cyber Security Focus PPT

2019 Cyber Security Focus

Steve Randone, MIS Director

Cyber Security

- Experts say local governments have been disproportionately targeted because they typically lack the resources to respond to cyber incidents—making it all the more likely that they will pay the ransom.
- 95% of all attacks on enterprise networks are the results of successful spear phishing.
- A University of Maryland study found that hackers are attacking computers and networks at a “near-constant rate”, with an average of one attack every 39 seconds.
- Brunswick County blocks approximately 8,000 malicious emails and 1,249 brute force attempts per day.

Brunswick County MIS will continue to deploy tools and policies to combat cyber-crime of all various forms including brute force, phishing attempts, social engineering, virus', etc. Along with necessary security measures deployed in the 2018-19 Budget Year, Brunswick County is testing additional resources for recommendations to the 2019-20 Budget Year. Beginning with the current budget year, Brunswick County MIS recommends Penetration Security Testing to be conducted annually.



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:
Andrea White

Action Item # 2. -
1:50 p.m. - Brunswick County Schools Bond Update (Dr. Jerry Oates, Superintendent)

Issue/Action Requested:
Request that the Board of Commissioners receive an update on the Brunswick County Schools Bond.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:
Recommend that the Board of Commissioners receive an update on the Brunswick County Schools Bond.

ATTACHMENTS:

Description

- ▣ Brunswick County Schools PPT



Brunswick County Schools

Bond Update



\$152 MILLION IN PROJECTS
SERVING ALL SCHOOLS

February 18, 2019

Why did we need a bond?

- Key Drivers:
 - Overcrowding & Safety
 - Building and Site Improvements
 - Athletics
 - Early College High School
 - Career Technical Education
 - Technology Improvements

BOND ISSUANCE #1

FY 2018

- Construction of 6 classroom addition at Town Creek Elementary School
- Construction of Town Creek Middle School
- Lincoln Elementary School improvements
- Athletics-Technology-Interior & Exterior Improvements

Where Are We?

CURRENT STATUS

Town Creek Elementary School

Construction of the addition is ongoing, with structural steel, exterior wall studs and sheathing, roof decking, and the mechanical mezzanine installed. Work continues on interior electrical and mechanical rough-ins

Budget

Starting Contract Amount \$2,410,000

Current Contract Amount \$2,410,000

Schedule

Contractual Substantial Completion Date May 28, 2019

The project remains on schedule for occupancy by students in August 2019



Town Creek Elementary Addition

Where Are We?

Current Status

Town Creek Middle School

The storm-water pond is installed, with site, fire hydrants, and sanitary sewer nearing completion. Building footings are approaching 50%, and wall construction in the gym area is ongoing. Paving sub-base is being installed on selected parking and traffic areas to support emergency vehicle access around the building.

Budget

Starting Contract Amount \$23,782,995

Current Contract Amount \$23,782,995

The project remains within budget.

Schedule

Contractual Substantial Completion Date: May 22, 2020



Town Creek Middle School

Where Are We?

Current Status

Lincoln Elementary School

The storm-water pond is complete, with site storm-water piping 50% complete. Phased work continues with footings, underground plumbing and the concrete slab completed in the section of the addition that ties into the c-wing. Work continues on completing the footings and remainder of the concrete slab. Required changes associated with the new water and sanitary tie-ins to infra-structure are under engineering review.

Budget

Starting Contract Amount..... \$3,507,300

Current Contract Amount..... \$3,575,807

The project remains within budget.

Schedule

Contractual Substantial Completion Date May 13, 2019



Lincoln Elementary School Addition

Where Are We?

Athletic Improvements

Construction of the new athletic buildings at NBHS and SBHS are progressing. At NBHS Floor slabs, load bearing walls, roof steel and decking are complete at the wrestling and weight room additions; and brick veneer has started. Steel erection is 50% complete at the field house. Rework of the NBHS football field will start this month. At South, progress at the wrestling room is similar to that of North. Masonry walls at the field house are 50%.

Budget

Starting Contract Amount	\$6,550,750
--------------------------	-------------

Current Contract Amount	\$6,550,750
-------------------------	-------------

The project cost remains within budget.

Schedule

Contractual Substantial Completion Date	April 19, 2019
---	----------------

Delays associated with Hurricane Florence and excessive rain are currently under review, and will be presented at the February Operations Committee/March Board meeting. The project remains on schedule for occupancy by students in May 2019.



North Brunswick High School Field House



South Brunswick High School Field House



North Brunswick High School Soccer Field

Where Are We?

Other Projects

New playground equipment has been installed or is in progress at 4 of the elementary schools, equipment has been ordered for several others, and equipment selection is in process those remaining.

The landscape architect has generated site plans delineating landscaping activities, to include the removal of damaged or deficient plantings and the planting of native vegetation that does not cause security issues and is low maintenance

Technology Upgrades-Wireless and Security upgrades--1.8M

In support of the district 1:1 initiative to equip every student with mobile technology in the classroom, the Technology Department began a wireless upgrade project in the Spring of 2018. This project upgraded all wireless infrastructure in the classrooms and Media Centers for faster throughput and better performance. This phase of the project was completed in Summer 2018. To provide a more secure network for our students and staff, a state of the art security system powered by Cisco was purchased and will be deployed in Spring 2019.



Tech infrastructure and playground equipment





Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

From:

Andrea White

Action Item # 2. -

2:05 p.m. - Afternoon Break

Issue/Action Requested:

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Andrea White

2:15 p.m. - Brunswick Community College Update (Dr. Gene Smith, President)

Issue/Action Requested:

Request that the Board of Commissioner receive an update from Brunswick Community College.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioner receive an update from Brunswick Community College.

ATTACHMENTS:

Description

▣ BCC Update PPT

STATE OF THE COLLEGE



BRUNSWICK

COMMUNITY COLLEGE

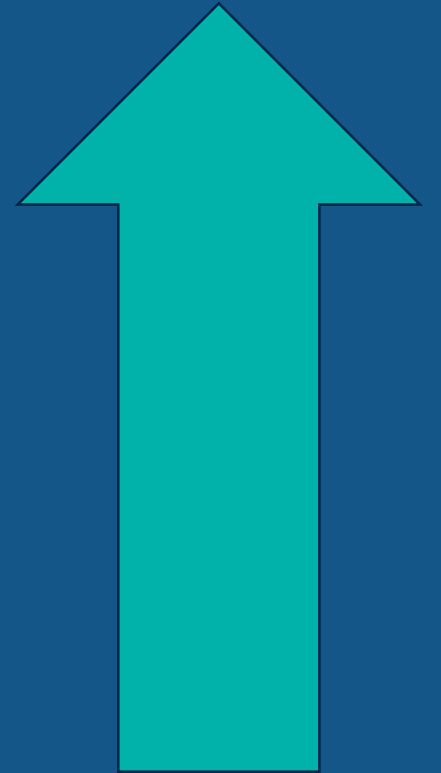


BRUNSWICK GUARANTEE

SCHOLARSHIP PROGRAM

2018 Brunswick Guarantee Highlights

- 2017 Applications 62 / 2018 Applications 83 ↑ 46.15%
- 2017 vs. 2018 Scholarships Awarded ↑ 35.76% (\$135,496 to \$256,000)
- 2017 Local High School Enrollment 12.4% / 2018 Local High School Enrollment 21.6%



WHERE

Our students are from

			2016	2017	2018
	West Brunswick	Number of students in graduating class	299	306	312
		Number of students who attended BCC	45	57	70
		Percent of graduating class who attended BCC	15.1%	18.6%	22.4%
		Brunswick Guarantee Funded (new to BCC)	8 (2.7%)	8 (2.6%)	16 (5.1%)
	North Brunswick	Number of students in graduating class	211	233	227
		Number of students who attended BCC	11	15	48
		Percent of graduating class who attended BCC	5.2%	6.4%	21.1%
		Brunswick Guarantee Funded (new to BCC)	4 (1.9%)	10 (4.3%)	14 (6.2%)
	South Brunswick	Number of students in graduating class	228	268	275
		Number of students who attended BCC	12	28	58
		Percent of graduating class who attended BCC	5.3%	10.4%	21.1%
		Brunswick Guarantee Funded (new to BCC)	9 (3.9%)	8 (3.0%)	16 (5.8%)

2017-2018	
Students	62
Budget	\$200,000
Tuition	\$100,403
Books	35,093
Marketing/ Admin	50,000
Subtotal	\$185,496
Balance	\$14,504

Fall 2018	Spring 2019
89	76*
\$216,000	\$169,490
70,718	60,507*
40,792	44,000*
25,000	25,000
\$136,510	\$129,507
\$79,490	\$39,983

12/18 Addt'l
\$90k Allocation

Est. Funds
for Summer
2019
Enrollment

Addt'l Allocation of
\$16k Co-Req

Projected Budget

*Estimated

Brunswick Community College / Brunswick County Schools Career and College Promise

- The purpose of Career and College Promise (CCP) is to offer structured opportunities for qualified high school students to be concurrently enrolled in community college courses.
- Provides tuition waived pathways that lead to a certificate, diploma, or degree as well as entry-level jobs skills.
- Open to all eligible Brunswick County Schools, private, and home school juniors and seniors.

CCP Pathway Options

College Transfer Pathways

Earning credits toward an Associate in Arts, Associate in Science, Associate in Engineering or Associate Degree Nursing

Career and Technical Education Pathways

Earning credits toward an entry level job credential, certificate or diploma.

Workforce Continuing Education Pathways

Earning entry level job credential, no high school credit given.

CCP Student Benefits (2018)

- Students **explored** more than 69 academic programs.
- High school students **earned** over 2,022 hours of college credit.
- More than 354 high school students **saved** approximately \$446,862 in college tuition.

CCP Data / Facts

- Jan. 2018 - 105 students compared to Jan. 2019 - 192 students
 - South Brunswick 20 students in Spring 2016 to 70 students in Spring 2019
 - North Brunswick increased from 16 students in Spring '16 to 47 students in Spring '19
 - West Brunswick increased from 23 students in Spring '16 to 33 students in Spring '19
- Career Coaches added at the high schools and grant was renewed for 3 additional years (thru June '22)
- 24 Homeschooled and Private School students enrolled.
- Enrolled 71 students in Summer Term Courses
- Buses run from traditional high schools to BCC twice a day.

CCP Student Success Fall 2018

**CCP ACADEMIC SUCCESS - 93.2% WITH STUDENTS
EARNING A, B, C IN THEIR COURSES.**

Number of Students	Grades	Percentage
160	A	49.70%
102	B	31.70%
38	C	11.80%
8	D	2.50%
14	F	4.3%

Facilities and Capital Projects

Allied Health Building

Funding Source	Amount
County	\$2,907,320
NC Connect Bond	\$2,857,328
State Equipment	\$285,830
Total Budget	\$6,050,478

Estimated Groundbreaking is March, 2019
Estimated Completion is May, 2020

Facilities and Capital Projects

- New Roof on Building A – Administration
 - \$90,000 county approved
 - Currently design documents at SCO for review/approval
 - Estimated start is April, 2019
 - Estimated completion is May, 2019
- Asphalt Re-surfacing
 - \$60,000 county approved
 - Most of Auditorium and all of Administration parking lot completed - \$13,503
 - Campus-wide pothole patching scheduled for February 8, 2019-estimate \$3,440
 - East section of College Rd and remainder of Auditorium scheduled for March 18, 2019 with an estimate of \$38,000

Odell Williamson Auditorium

- Danielle Graves - Director of the OWA and Campus Events at BCC after the passing of Mike Sapp
- OWA finalized the planning of the 2019-20 season to include a variety of 9 shows instead of 8 as in previous years
- The auditorium continues to be strong in national dance competition rentals and public school activities such as graduations, choral & band concerts
- FEMA was stationed here free of charge from September 28, 2018 through December 1, 2018. Hurricane Florence also allowed us to host the DSS DSNAP in our facility from September 28, 2018 through October 6, 2018
- OWA has 2 season shows left for this season including The 5th Dimension on February 15 and Rhythm of the Dance on March 22nd

Gore Fitness and Aquatics Center

Growth in Membership

- Feb 2017.....2652
- Feb 2018.....2754
- Feb 2019.....3008

Questions?



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

2:30 p.m. - BSRI Update (Jim Fish, President/CEO)

From:

Andrea White

Issue/Action Requested:

Request that the Board of Commissioners receive an update from Brunswick Senior Resources, Inc. on the proposed Brunswick Center at Ash.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive an update from Brunswick Senior Resources, Inc. on the proposed Brunswick Center at Ash.

ATTACHMENTS:

Description

- ▣ BSRI Ash Site PPT

2019
Brunswick Senior Resources Inc.

Jim Fish, CEO BSRI

Annie H. Phelps

- Wilma Baker Family land donation for a future Senior Center (2012)
- Donated 3 Acres, Brunswick County purchased remaining 5 for 30k (2013)
- Name the Senior Center the Annie H. Phelps Brunswick Center at Ash
- Annie H. Phelps family donated a significant portion of the land for the Waccamaw School



Community Needs

- Consolidated Services Location
- Improved & Dedicated Senior Space
- Law Enforcement Sub Station
- EMS Services
- Disaster Response Staging Area
- Food Pantry
- Human Services Rendezvous Location – New Hope Clinic / BFA, etc.
- ATM
- Retail Space
- Park Integration

Senior Community Needs

- Expanded Senior Resources & Permanent Space
- Improved & Modern Kitchen
- Consolidated Meals on Wheels Assistance
- Consolidated Senior Housing
- Integrated Health Services
- Consolidated Transportation
- Improved Parking

Current Senior Site



Current Senior Site

- Daily break down & set up
- Non-ADA compliant restrooms
- Limited growth potential
- Obsolete Building for Senior Related Activities
- Fire escape for only 50% of the Building
- Climate control units obstructing escape
- Exterior Fencing
- Soft Dirt Passage
- Entire interior constructed of wood
- Poor Lighting
- Failing Windows

Current Senior Site



Current Senior Site



Current Senior Site



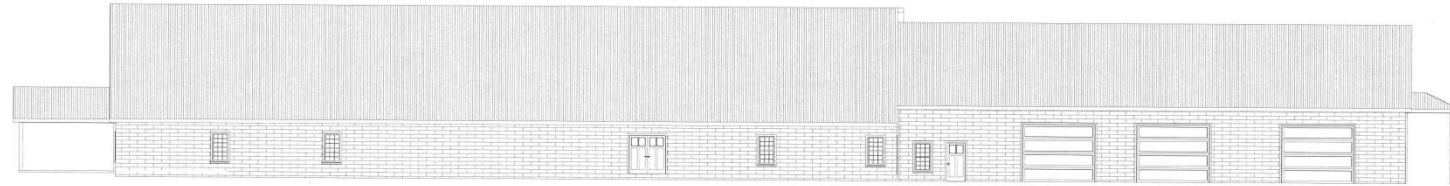
Current Senior Site



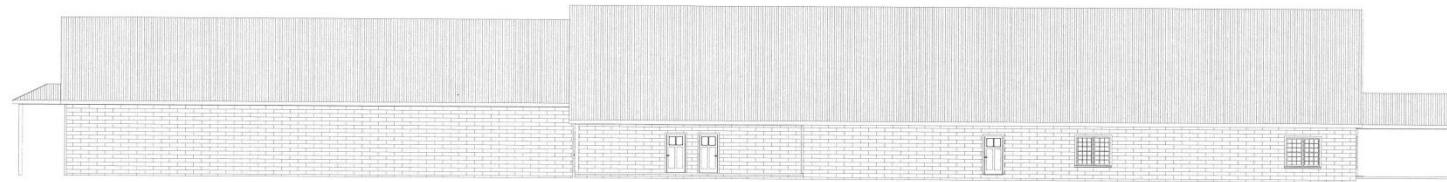
Proposed Community Center

Drawings

FRONT



REAR



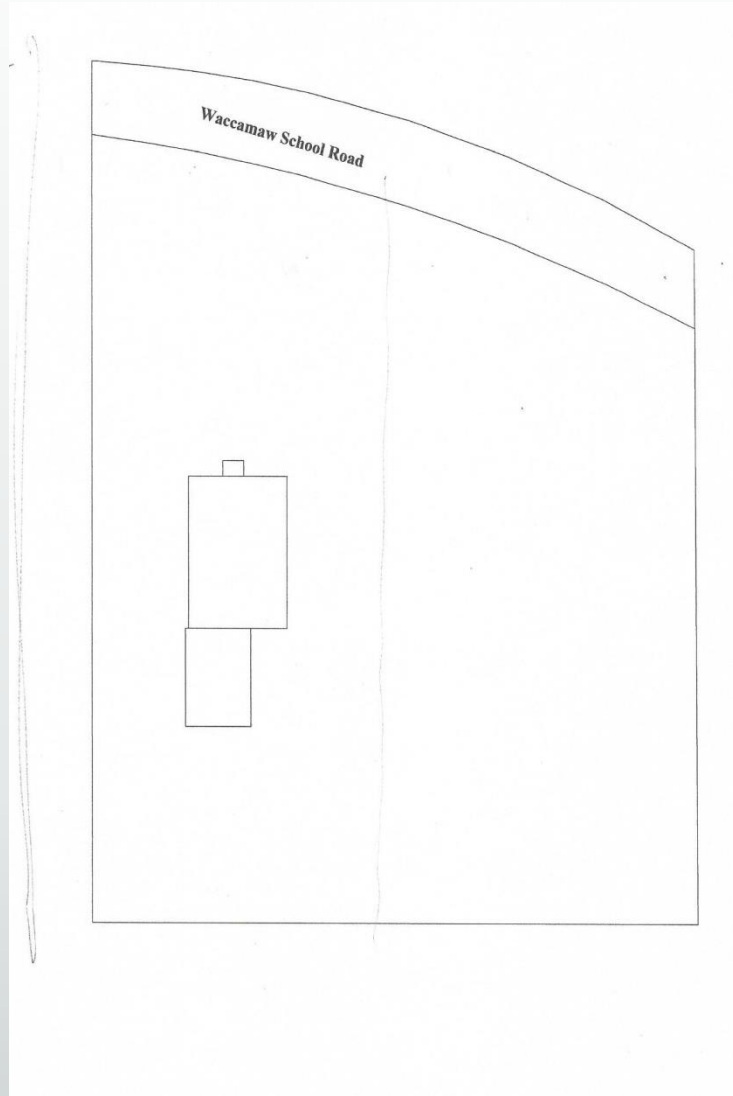
LEFT

**ANNIE A PHELPS
BRUNSWICK CENTER AT ASH**

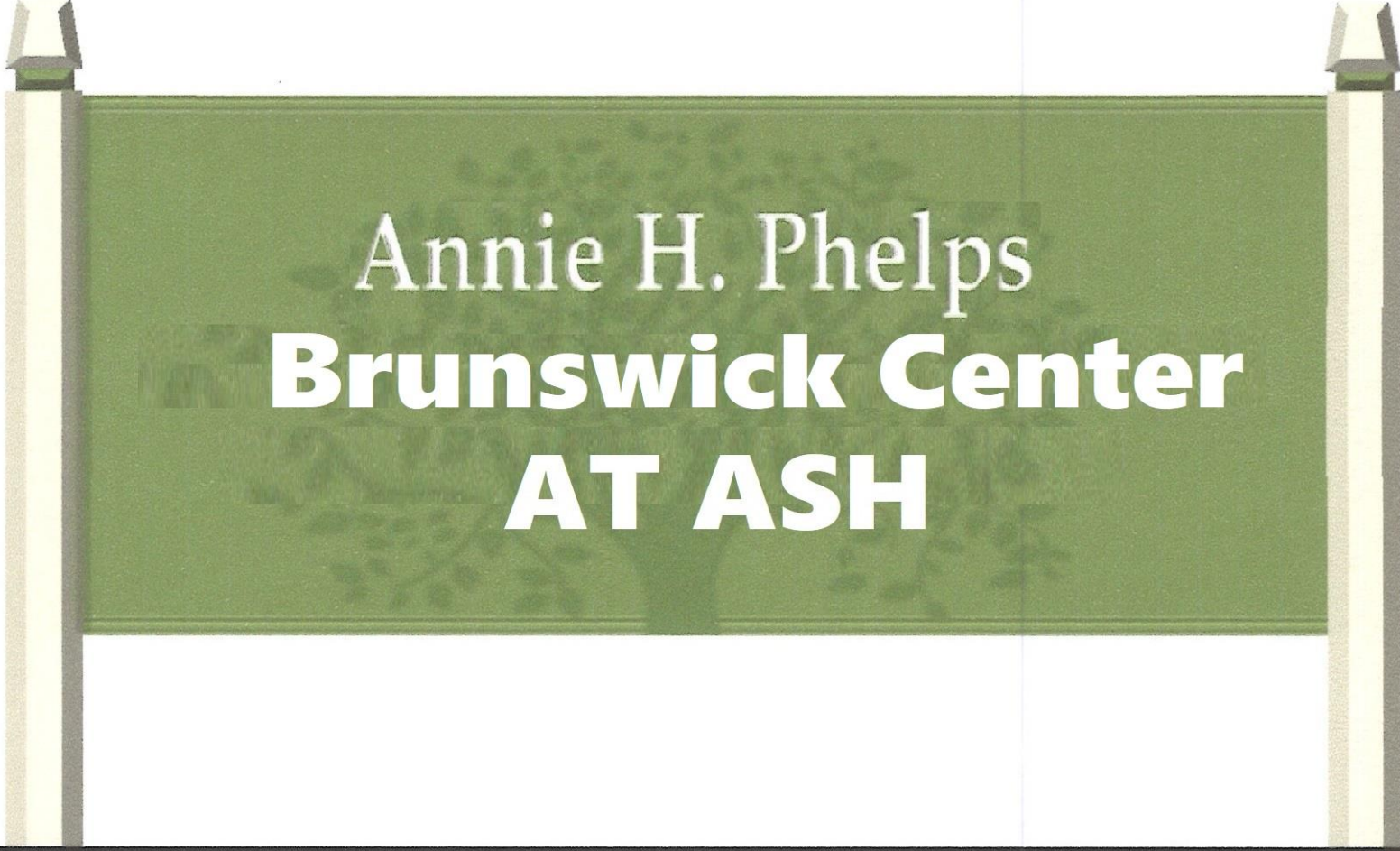
RIGHT



Proposed Community Center



Annie H. Phelps



Annie H. Phelps
Brunswick Center
AT ASH

Site Advantages

- Seamless integration with Waccamaw School & Park
- Site is acquired with simple MOU for signage
- Site was prepped during Waccamaw Park Renovation (2015)
- Water
- Fire Hydrants
- Electrical
- Phone/Internet
- King Farming Inc. Will allow spray field on their property

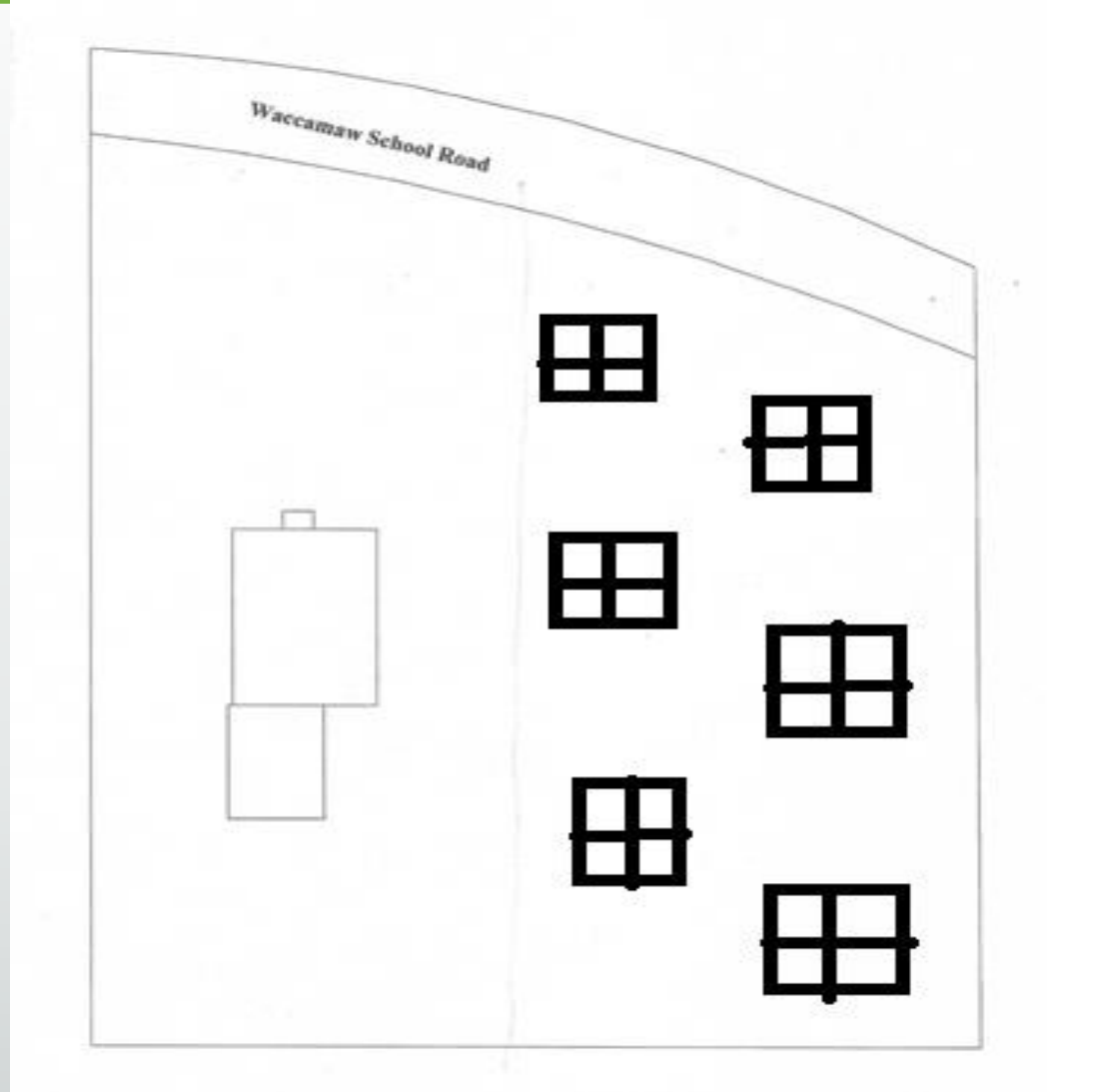
Site Advantages



Looking Ahead

- Senior Housing (Quads)
 - Hundreds of Substandard Mobile Homes & Temporary Housing
- Senior Participation with Park Activities
- Senior Participation with School Activities

Proposed Senior Housing



Questions?



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Andrea White

2:45 p.m. - Brunswick BID Update (Bill Early, Executive Director)

Issue/Action Requested:

Request that the Board of Commissioners receive an update from Brunswick Business & Industry Development (BBID).

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners receive an update from Brunswick Business & Industry Development (BBID).

ATTACHMENTS:

Description

▣ BBID PPT

2019



Bill Early, Executive Director

Review of 2018

Brunswick Business & Industry Development's Mission is, "To promote economic development and create an effective climate for business development that will benefit the citizens in Brunswick County, North Carolina by creating, retaining, and expanding jobs that facilitate economic growth, enhanced wealth, and provide coordinated and planned capital investment."

For 2018, our first year in partnership with Brunswick County government, Brunswick Business & Industry Development engaged Greenfield, an economic development research and consulting firm to conduct a thorough study of Brunswick County's assets, challenges and strategy to move Brunswick County forward in a positive direction.

This plan is near completion and will provide a framework for moving forward to achieve the goals and objectives of the MOU between Brunswick County and Brunswick Business & Industry Development.

Observations From 2018

Brunswick Business & Industry Development (BBID) received 66 Requests For Information (RFI) during 2018.

BBID responded to 42 of the RFI's

24 RFI's, 36%, were not responded to due to a lack of product

Of the 42 submitted, 2 were eliminated due to a lack of infrastructure being readily available.

Identified Needs

Brunswick County lacks existing buildings suitable for manufacturing and distribution facilities

Two areas of need:

- 100,000 + square feet along US 74/76 corridor

- 50,000 square feet in or near the Leland Industrial Park

(We are finding existing businesses operating around the Leland Industrial Park are outgrowing their existing space, and most are growing into needs of 50,000 sf)

Identified Needs

BBID staff has met with 6 potential developers of spec buildings and have received positive feedback on feasibility. Most are seeking a public-private partnership to develop new buildings. This is being evaluated to make a sound recommendation to County officials.

Identified Needs

Second area of Product Development Need is completing infrastructure to Brunswick County's Mega Sites.

BBID has worked with Economic Development Partnership of North Carolina to add the Mid-Atlantic Industrial Rail Park and International Logistics Park to the State's Mega Site webpage.

BBID has completed all required documentation to recertify both industrial parks

Wastewater upgrades are underway and funded by grants received by Columbus County in partnership with Brunswick County to cover the cost of these improvements

Engineering and Design is underway for the extension of water lines to serve the 2 industrial parks

Grant funding has been researched to assist with this extension; however, a company must be committed with new jobs to qualify.

Questions



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

From:
Andrea White

3:00 p.m. - Approval of Commissioners FY 19-20 Goals
(Commissioners)

Issue/Action Requested:

Request that the Board of Commissioners consider approval of FY 19-20 Goals.

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney:

County Manager's Recommendation:

Recommend that the Board of Commissioners consider approval of FY 19-20 Goals.

ATTACHMENTS:

Description

- ▣ Commissioners Goals PPT

Commissioners' Goals and Major Focus Areas To Guide Budget Development for FY 20

Ann Hardy, County Manager

Goal: Economic Development

1. Collaborate with the Brunswick Community College Workforce Development Initiatives, Brunswick Business & Industry Development, the four Chambers of Commerce and the Tourism Development Authority to develop a friendly and positive business environment, employ an effective business expansion and retention effort, develop a targeted business/industry recruitment strategy and grow the tourism and hospitality industry while protecting our residential neighborhoods.

Goal: Education

1. Continue the multi-year local funding agreement with the Brunswick County Board of Education to provide for a quality education that prepares our children for college or the workforce.
2. Support and enhance the Brunswick Guarantee Program with BCC Foundation that provides scholarships for county high school graduates to attend BCC.
3. Support the expansion of Allied Health Career Programs at BCC.
4. Facilitate the facility improvements associated with the voter approved 2016 \$152 million school bond referendum.

Goal: Financial Stewardship

1. Adopt a County Budget to maintain one of the lowest tax rates among counties in North Carolina with a population over 100,000.
2. Employ a conservative budgetary philosophy and make strategic decisions on all fiscal matters in order to maintain the positive financial position and credit strength of the county; continue a zero-based budgeting strategy wherever appropriate and feasible.
3. Staff seek out ways to reduce overhead and administrative costs.

Goal: Environmental Stewardship

1. Encourage and incentivize green development and construction to minimize the impact on natural resources while respecting and protecting private property rights.

Goal: Transportation

1. Continue the supplemental financial support for the Brunswick Connector transit service provided by the Cape Fear Public Transportation Authority.
2. Support BTS in continued development of rural transportation services, providing access to services and employment for rural residents.
3. Support the efforts of the NCACC to oppose any transfer of responsibility for transportation funding from the state to counties.
4. Request that NCDOT initiate a comprehensive transportation plan specifically for Brunswick County that includes municipal and other county partners.

Goal: Organizational Improvement/Development

1. Embed a focus on exceptional customer service where it becomes part of the organizational culture.
2. Provide all services in a way that recognizes and values diversity.
3. Recognize that businesses are customers of the county and review the Unified Development Ordinance to develop small business assistance by providing local rules that are clear, simple, easy to understand, that are predictable, reasonable and appropriate for Brunswick County.
4. Revise and implement policies, processes, procedures, and programs focused on ensuring a high performing workforce.
5. Encourage a healthy lifestyle to improve upon individual health of employees, improve productivity and reduce medical costs.
6. Provide supervisory skill building and leadership training opportunities for all supervisory personnel and those with supervisory potential. Expand Training and Skill Development to provide growth opportunities for non-supervisory staff.
7. Develop succession planning for key county positions.
8. Explore opportunities where the private sector or non-profit entities may more economically and efficiently serve the public than government.

Goal: Infrastructure/Development Expansion

1. Develop strategies for continued growth in the number of water and sewer customers by determining methods to increase the number of SAD projects, ~~prioritizing County funded water and sewer mains~~ and acquiring or merging existing private and/or public water and sewer systems.
2. Support the participants of the Lower Cape Fear Water and Sewer Authority in obtaining the raw water capacity to meet the county's long-term potable water needs.
3. Improve communication between the county and its wholesale water customers and utilities that contribute flow to the regional wastewater treatment plants.
4. Explore methods to work with surrounding utilities to reduce operational costs.
5. Support the plant expansion for Southport to become a participant in the West Brunswick Regional Wastewater System to meet the City's capacity needs.
6. Support the plant expansion at the Northeast Sewer System to meet the capacity needs of the participants.
7. Support the expansion and low pressure reverse osmosis advanced treatment at the Northwest Water system to meet the capacity and water quality needs of the county.

Goal: Public/Mental Health

1. Provide education to the public about preventable health issues and diseases and improve Brunswick County's health ranking in the state.
2. Support the Trillium LME/MCO to operate a program for mental health, developmental disabilities, and substance abuse services as they transition to one of the four state entities.
3. Continue to advocate for sufficient state/federal funding to adequately address MH/DD/SAS needs of our residents.

Goal: Community Development

1. Investigate additional policy amendments and enhancements to provide tangible incentives to encourage the development of affordable single and multi-family housing opportunities.
2. Enhance community appearance and protect property values through responsible zoning and code enforcement while recognizing the diversity of our county and respecting private property rights.
3. Support the Community Improvement Plan to remove unsafe and derelict structures.

Goal: Technology

1. Implement the results of the comprehensive in-house evaluation and assessment of the County's technological resources and operations and identify opportunities for departments to improve efficiency and service delivery through the implementation of proven technology applications.

Goal: Public Safety

1. Continue to ensure the safety and security of Brunswick County residents, property owners and visitors, while planning for Brunswick County's growth.
2. ~~Review the recommendations of the Brunswick County Fire Commission and~~
Continue to explore best practices of fire and rescue services while planning for growth in the county.
3. Support the Brunswick County Sheriff with resources to better enable law enforcement efforts while ensuring officer safety.



Brunswick County Board of Commissioners
ACTION AGENDA ITEM
February 18, 2019

Action Item # 2. -

3:05 p.m. - Closing Remarks (Commissioners)

From:

Andrea White

Issue/Action Requested:

Background/Purpose of Request:

Fiscal Impact:

Approved By County Attorney: