

NCDOT SENC PASSENGER STUDY

ALT 1 - NORTHBOUND	Cumulative	Time		Incr. MRT	6%	Cumulative	Additional Time
Stations	Miles	Hrs	Min	(min)	Train Handling/TSOs	Minutes	(min)
Wilmington	0.00						3.0
New Jct. At Wilmington Sub..	1.25		0.0	0.0	0.00	3.0	4.0
Burgaw	22.72		20.4	20.4	1.22	28.6	1.0
Wallace	35.82		31.9	11.5	0.69	41.8	1.0
Warsaw	54.92		48.1	16.2	0.97	60.0	1.0
Mount Olive	70.32	1	1.8	13.7	0.82	75.5	1.0
Goldsboro	83.92	1	14.7	12.9	0.77	90.2	1.0
Turnout at MP 160.0 on CSX W&W Sub	84.12	1	15.6	0.9	0.05	92.1	1.0
MP 0.22 on new connecting track to realign turnout north of station	84.18	1	16.1	0.5	0.03	93.7	1.0
Turnout at MP 128.5 on NS H Line	84.40	1	17.5	1.4	0.08	96.2	1.0
MP 127.9 on NS H Line to realign turnout	84.46	1	18.0	0.5	0.03	97.7	1.0
Selma	103.50	1	39.5	21.5	1.29	121.5	1.0
Raleigh	131.80	2	5.8	26.3	1.58	150.3	
ALT 2 - NORTHBOUND	Cumulative	Time		Incr. MRT	6%	Cumulative	Additional Time
Stations	Miles	Hrs	Min	(min)	Train Handling/TSOs	Minutes	(min)
Wilmington	0.00						6.5
US 117	1.48		0.0	0.0	0.00	6.5	
Navassa	4.88	0	5.5	5.5	0.33	12.3	1.0
Riegelwood/Acme	18.98	0	22.1	16.6	1.00	30.9	1.0
Bladenboro	54.18	0	50.4	28.3	1.70	61.9	1.0
Lumberton	67.78	1	2.7	12.3	0.74	76.0	1.0
Pembroke	79.36	1	14.7	12.0	0.72	89.7	1.0
Fayetteville (then back into Selma)	110.16	1	42.4	27.7	1.66	120.0	3.0
Selma	159.30	2	29.1	46.7	2.80	172.5	2.0
Raleigh	187.25	2	55.0	25.9	1.55	202.0	
ALT 3 - NORTHBOUND	Cumulative	Time		Incr. MRT	6%	Cumulative	Additional Time
Stations	Miles	Hrs	Min	(min)	Train Handling/TSOs	Minutes	(min)
Wilmington	0.00						3.0
New Jct. At Wilmington Sub..	1.25		0.0	0.0	0.00	3.0	4.0
Burgaw	22.72		20.4	20.4	1.22	28.6	1.0
Wallace	35.82		31.9	11.5	0.69	41.8	1.0
Warsaw	54.92		48.1	16.2	0.97	60.0	1.0
Mount Olive	70.32	1	1.8	13.7	0.82	75.5	1.0
Goldsboro	83.92	1	14.7	12.9	0.77	90.2	1.0
NS Diamond at MP 159.8 on the CSX W&W Sub	84.32	1	15.8	1.1	0.07	92.3	
Contentnea	105.12	1	32.8	17.0	1.02	110.4	
Wilson	108.22	1	36.3	3.5	0.21	114.1	1.0
Rocky Mount	124.32	1	51.2	14.9	0.89	130.9	

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ALT 1 - SOUTHBOUND	Cumulative	Time		Incr. MRT	6%	Cumulative	Additional Time
Stations	Miles	Hrs	Min	(min)	Train Handling/TSOs	Minutes	(min)
Raleigh	0.00						
Selma	28.30		26.4	26.4	1.58	28.0	1.0
Turnout at MP 128.5 on NS H Line	47.40		47.9	21.5	1.29	51.8	1.0
MP 0.06 on new connecting track to realign turnout	47.46		48.4	0.5	0.03	53.3	1.0
Turnout at MP 0.27 on new connecting track	47.67		49.8	1.4	0.08	55.8	1.0
MP 160.06 on CSX W&W Sub to realign turnout north of station	47.74		50.4	0.6	0.04	57.4	1.0
Goldsboro	47.88		51.1	0.7	0.04	59.2	1.0
Mount Olive	61.48	1	4.1	13.0	0.78	73.9	1.0
Warsaw	76.88	1	17.8	13.7	0.82	89.5	1.0
Wallace	95.98	1	34.0	16.2	0.97	107.6	1.0
Burgaw	109.08	1	45.5	11.5	0.69	120.8	1.0
New Jct. At Wilmington Sub..	130.55	2	5.6	20.1	1.21	143.1	7.0
Wilmington	131.80					150.1	
ALT 2 - SOUTHBOUND	Cumulative	Time		Incr. MRT	6%	Cumulative	Additional Time
Stations	Miles	Hrs	Min	(min)	Train Handling/TSOs	Minutes	(min)
Raleigh	0.00						
Selma (then back out to MP 109.5 on NS H Line)	28.44		28.7	28.7	1.72	30.4	4.0
Fayetteville	77.09	1	12.6	43.9	2.63	81.0	1.0
Pembroke	108.17	1	41.8	29.2	1.75	112.9	1.0
Lumberton	119.47	1	52.3	10.5	0.63	125.0	1.0
Bladenboro	133.07	2	4.6	12.3	0.74	139.1	1.0
Riegelwood/Acme	168.27	2	32.9	28.3	1.70	170.1	1.0
Navassa	182.37	2	49.5	16.6	1.00	188.7	1.0
US 117	185.77	2	54.8	5.3	0.32	195.3	6.5
Wilmington	187.25					201.8	
ALT 3 - SOUTHBOUND	Cumulative	Time		Incr. MRT	6%	Cumulative	Additional Time
Stations	Miles	Hrs	Min	(min)	Train Handling/TSOs	Minutes	(min)
Rocky Mount	0.00						
Wilson	16.10		15.0	15.0	0.90	15.9	1.0
Contentnea	19.20		18.4	3.4	0.20	20.5	
NS Diamond at MP 159.8 on the CSX W&W Sub	40.00		35.3	16.9	1.01	38.4	
Goldsboro	40.40		36.5	1.2	0.07	39.7	1.0
Mount Olive	54.00		49.5	13.0	0.78	54.5	1.0
Warsaw	69.40	1	3.2	13.7	0.82	70.0	1.0
Wallace	88.50	1	19.4	16.2	0.97	88.2	1.0
Burgaw	101.60	1	30.9	11.5	0.69	101.4	1.0
New Jct. At Wilmington Sub..	123.07	1	51.0	20.1	1.21	123.7	7.0
Wilmington	124.32					130.7	

NS H Line: Speed Increase Scenario 3

From	To	mph
80.9	81.3	20
81.3	83.4	70 curves
83.4	84.2	60 curve
84.2	85.4	50 curves
85.4	85.9	70 curve
85.9	88.1	79
88.1	88.9	50 curves
88.9	90	79
90	90.4	60 curve
90.4	92.2	70 curves
92.2	94.5	79
94.5	95.2	70 curve
95.2	95.2	49 bridge
95.2	96.5	79
96.5	97.3	70 curves
97.3	105.9	79
105.9	106.9	70 curves
106.9	108.7	79
108.7	109.3	49 crossings

**No speed changes Raleigh to Selma
for Alternative 3 with CTC.
Use same speeds as Scenario 2.**

**No Speed Changes for Alternative 3 with CTC
Selma to Goldsboro
Use same speeds as Scenario 2.**

109.3	109.4	20	Over CSXT Diamonds
109.4	109.6	40	curves
109.6	110	40	curves
110	110.3	60	Curves
110.3	117.4	79	
117.4	117.7	79	Raised speed for crossing
117.7	119.7	79	
119.7	120	79	Raised speed for "Crossings"
120	124.6	79	
124.6	124.8	70	Raised speed for "Crossings"
124.8	126.7	79	
126.7	127.5	70	
127.5	128.5	10	To New connection at Mulberry St. Alternative 1

CSXT South End Sub.: Speed Increase Scenario 3

From	To	mph	
119.7	119.9	Use 40	No speed changes on South End Sub.
119.9	120.1	40	Station at MP 119.8
120.1	121.7	79	
121.7	125.4	70	
125.4	129.9	79	
129.9	135.1	70	
135.1	136.9	50	
136.9	138.9	79	
138.9	139.3	60	Contentnea MP 138.9
139.3	146.8	79	
146.8	151	70	
151	152.6	79	
152.6	153	70	
153	157.9	79	
157.9	161	70	
161	161	50	
161	164.5	70	New Selma connection MP 161.1
164.5	165.1	60	
165.1	169.4	70	
169.4	172	79	
172	176.3	70	
176.3	179.4	79	
179.4	180.3	55	
180.3	185.2	79	
185.2	187.3	45	
187.3	190.4	70	
190.4	207.4	79	
207.4	207.6	60	
207.6	209	45	
209	209.7	35	
209.7	209.7	25	
209.7	210.1	35	
210.1	210.8	40	
210.8	216.1	70	
216.1	218.4	60	
218.4	218.6	45	
218.6	219.1	60	
219.1	227.7	79	
227.7	233.8	70	
233.8	240.7	79	
240.7	241.4	50	New Pembroke connection at 241.2
241.4	243.3	79	

CSXT Wilmington Sub.: Speed Increase Scenario 3

From	To	mph	
285.7	295	79 raised speed	New Pembroke connection MP 285.7
295	296.7	79 raised speed	
296.7	297.7	40	
297.7	298.8	59	Raised Speed in town
298.8	354	79 raised speed	
354	356.8	40	
356.8	364.1	40 raised speed	Davis Yard to Castle Hayne Jct. switch at MP 364.1
364.1	367.2	40 Raised speed	
367.2	371.8	79 raised speed	Castle Hayne Jct switch at MP 364.1 to conection to restored W&W Sub.

CSXT W&W Sub.: Speed Increase Scenario 3

From	To	mph	
139	148.2	79 raised speed	
148.2	149.2	59	town
149.2	158.5	79 raised speed	Raised speed in town
158.5	159.8	59	
159.8	159.8	25 DIAMOND no stop	
159.8	160.9	25	Old Station is at 160.2
160.9	160.9	25 DIAMOND	
160.9	162.2	65 raised speed	Raised speed in town
162.2	164.6	79 raised speed	
164.6	187	79 raised speed	
187	190.5	59	Warsaw
190.5	208.1	79 raised speed	
208.1	234.8	79 raised speed	Restored segment
208.1	234.8	40 raised speed	Swing bridge
234.8	235.17	79 raised speed	Restored segment

NCDOT SENC Passenger Rail Feasibility Study

Scenario 3 Alternative 1

Order-of-Magnitude Capital Cost Summary

	Track Section				
Item	CSXT Wilmington- Castle Hayne	CSXT Castle Hayne- Wallace	CSXT Wallace- Goldsboro	NS Goldsboro- Raleigh	Totals
Track	\$1,172,000	\$4,800,000	\$10,050,000	\$0	\$16,022,000
Grade Crossings	\$32,000	\$176,000	\$240,000	\$0	\$448,000
Train Control Systems	\$1,800,000	\$6,775,000	\$12,875,000	\$0	\$21,450,000
Structures	\$0	\$0	\$0	\$0	\$0
Drainage	\$0	\$0	\$0	\$0	\$0
Utility Allowance	\$0	\$0	\$0	\$0	\$0
Allowance for Right-of-Way	\$0	\$0	\$0	\$0	\$0
Contractor Mobilization	\$150,200	\$587,550	\$1,158,250	\$0	\$1,896,000
Design and Permitting	\$150,200	\$587,550	\$1,158,250	\$0	\$1,896,000
Environmental Documentation	\$0	\$0	\$0	\$0	\$0
Construction Management	\$240,320	\$940,080	\$1,853,200	\$0	\$3,033,600
Contingencies	\$600,800	\$2,350,200	\$4,633,000	\$0	\$7,584,000
Inflation Factor	\$167,479	\$655,142	\$1,291,495	\$0	\$2,114,116
Total	\$4,312,999	\$16,871,522	\$33,259,195	\$0	\$54,443,716

NCDOT SENC Passenger Rail Feasibility Study

Scenario 3 Alternative 2

Order-of-Magnitude Capital Cost Summary

	Track Section			
Item	CSXT Wilmington- Pembroke	CSXT Pembroke- Selma	NS Selma- Raleigh	Totals
Track	\$17,197,000	\$0	\$0	\$17,197,000
Grade Crossings	\$160,000	\$0	\$0	\$160,000
Train Control Systems	\$19,600,000	\$0	\$0	\$19,600,000
Structures	\$0	\$0	\$0	\$0
Drainage	\$0	\$0	\$0	\$0
Utility Allowance	\$0	\$0	\$0	\$0
Allowance for Right-of-Way	\$0	\$0	\$0	\$0
Contractor Mobilization	\$1,847,850	\$0	\$0	\$1,847,850
Design and Permitting	\$1,847,850	\$0	\$0	\$1,847,850
Environmental Documentation	\$0	\$0	\$0	\$0
Construction Management	\$2,956,560	\$0	\$0	\$2,956,560
Contingencies	\$7,391,400	\$0	\$0	\$7,391,400
Inflation Factor	\$2,060,427	\$0	\$0	\$2,060,427
Total	\$53,061,087	\$0	\$0	\$53,061,087

NCDOT SENC Passenger Rail Feasibility Study

Scenario 3 Alternative 3

Order-of-Magnitude Capital Cost Summary

Track Section

Item	CSXT Wilmington-Castle Hayne	CSXT Castle Hayne-Wallace	CSXT Wallace-Goldsboro	CSXT Goldsboro-Contentnea	CSXT Contentnea-Rocky Mount	Totals
Track	\$1,172,000	\$4,800,000	\$9,850,000	\$5,480,000	\$0	\$21,302,000
Grade Crossings	\$32,000	\$176,000	\$240,000	\$160,000	\$0	\$608,000
Train Control Systems	\$1,800,000	\$6,775,000	\$12,375,000	\$5,625,000	\$0	\$26,575,000
Structures	\$0	\$0	\$0	\$0	\$0	\$0
Drainage	\$0	\$0	\$0	\$0	\$0	\$0
Utility Allowance	\$0	\$0	\$0	\$0	\$0	\$0
Allowance for Right-of-Way	\$0	\$0	\$0	\$0	\$0	\$0
Contractor Mobilization	\$150,200	\$587,550	\$1,123,250	\$563,250	\$0	\$2,424,250
Design and Permitting	\$150,200	\$587,550	\$1,123,250	\$563,250	\$0	\$2,424,250
Environmental Documentation	\$0	\$0	\$0	\$0	\$0	\$0
Construction Management	\$240,320	\$940,080	\$1,797,200	\$901,200	\$0	\$3,878,800
Contingencies	\$600,800	\$2,350,200	\$4,493,000	\$2,253,000	\$0	\$9,697,000
Inflation Factor	\$167,479	\$655,142	\$1,252,469	\$628,046	\$0	\$2,703,136
Total	\$4,312,999	\$16,871,522	\$32,254,169	\$16,173,746	\$0	\$69,612,436