



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

January 31, 2018

TO: Joint Legislative Transportation Oversight Committee
Representative Kelly E. Hastings, Co-Chair
Representative Frank Iler, Co-Chair
Representative John A. Torbett, Co-Chair
Senator Jim Davis, Co-Chair

Joint Legislative Education Oversight Committee
Representative D. Craig Horn, Co-Chair
Representative Linda P. Johnson, Co-Chair
Senator Chad Barefoot, Co-Chair

FROM: J. Kevin Lacy, PE, CPM
State Traffic Engineer
Director, Transportation Mobility & Safety Division

A handwritten signature in black ink, appearing to read "J. Kevin Lacy", written over the printed name and title.

SUBJECT: Roadway Improvements Adjacent to Schools Report

Under the Appropriations Act of 2017 (Senate Bill 257 / Session Law 2017-57, Section 34.6A subsections (c), (d) and (e)), the North Carolina Department of Transportation and the North Carolina Department of Public Instruction are directed to collaborate on the development of the *Road Improvements Adjacent to Schools* report and submit the report to the North Carolina General Assembly's Joint Legislative Transportation and Education Oversight Committees by February 1, 2018. The included report details the specifics required by Session Law 2017-57.

The North Carolina Department of Transportation retained the consulting firm of VHB to research and prepare the report. It includes data for identified new, expanded and relocated schools (public, charter and private) that opened between July 1, 2015 and July 1, 2017. Road improvement types and data on the location, maintenance responsibility, funding source and cost of the identified road improvements are provided. Estimates based on the previous years of data are included for the number of schools, types of road improvements and projected costs for schools that are expected to be constructed and occupied from July 2, 2017 to July 1, 2020.

If you need any additional information on this report, please contact me by e-mail at jkylacy1@ncdot.gov or by phone at (919) 814-5000.

Attachment (Road Improvements Adjacent to NC Schools Report PDF)

cc: MG(R) James H. Trogon, III, PE, Secretary of Transportation, w/ Attachment
Bobby Lewis, PE, Chief Operating Officer, w/ Attachment
Joy Hicks, Government Affairs and Policy Director, w/ Attachment

Report for the North Carolina General Assembly
Joint Legislative Transportation Oversight Committee
Joint Legislative Education Oversight Committee

Reference:

Session Law 2017-57 SECTION 34.6A.(c), 34.6A.(d) 34.6A.(e)
Senate Bill 257 - *Appropriations Act of 2017*

Road Improvements Adjacent to North Carolina Schools

Prepared for

North Carolina Department of Transportation

WBS No. 50088.15.9FS1

Prepared by

VHB Engineering NC, P.C. (C-3705)

January 31, 2018



Executive Summary

In response to *Section 34.6A of Session Law 2017-57 (Senate Bill 257)*¹, the North Carolina Department of Transportation (NCDOT) in collaboration with the North Carolina Department of Public Instruction (DPI) and the North Carolina Department of Administration (Division of Non-Public Education) conducted the “Road Improvements Adjacent to North Carolina Schools” report for the Joint Transportation Oversight Committee and the Joint Education Oversight Committee of the North Carolina General Assembly. To expedite the completion of the report, the NCDOT Mobility and Safety Division retained the services of the engineering firm VHB to research and assemble the data for this legislative study.

This report provides the following information:

(1) All schools, including private and charter, that have been opened, relocated, or expanded statewide between July 1, 2015 and July 1, 2017.

This report identifies 285 new, expanded or relocated schools. Of that total, 85 were public, 59 were charter, and 141 were private. The majority of the identified sites were new schools on new or existing sites.

(2) The types of road improvements required for each school identified in subdivision (1) of this subsection.

Of the 285 identified schools, 63 had road improvements. Of the 63 sites, 35 were public, 23 were charter, and 5 were private. The remaining 222 school sites did not have road improvements identified of which 136 are private.

This report identifies a wide range of traditional road and intersection improvements for school sites. Some of the typical road and intersection improvements identified included roadway and geometric construction, lane and shoulder widening, turn lane and taper construction, intersection improvements, driveway improvements, channelization (raised islands and medians), curb and gutter, drainage work and pavement overlays.

In addition to traditional road construction improvements there were also companion traffic control and positive guidance improvements that included traffic signals (new and upgraded), pedestrian signals and crossings, signing and pavement markings (including regulatory school zones and speed limits).

(3) Whether each road improvement identified in subdivision (2) of this subsection is to a road maintained by the State or a municipality.

For the 63 school sites with road improvements there were 125 road sections identified. Of these road improvements, 117 sections (94 percent) were made to state-maintained roads and highways. The remaining 8 road improvement sections (6 percent) were associated with city or municipality maintained streets.

¹ A copy of Section 34.6A.(c), 34.6A.(d), 34.6A.(e) of Senate Bill 257(NC 2017 Appropriations Act) is provided in Appendix F

(4) *Whether each road improvement identified in subdivision (2) of this subsection is to a road adjacent to the school property.*

Of the 125 study-identified road improvements, 82 (66 percent) were adjacent to or along a road that had school property frontage. The remaining 43 road improvements (34 percent) were similar in type but considered off-site, primarily by distance from the school or by being on a road that the school did not have frontage or direct access to.

(5) *A description of any disputes or appeals raised by the schools identified in subdivision (1) of this subsection concerning the road improvements identified in subdivision (2) of this subsection.*

The project team conducted interviews and surveys to identify documentation of disputes or appeals raised by the schools. None of the study participants provided documentation of specific appeals, concerns or disputes.

While the project team did not encounter specific documented appeals or complaints, participants shared the following concerns with the project team during phone or direct conversation:

- Resource impact caused by the iterative negotiation approval process for determining required improvements.
- Addition of unanticipated road improvements after a project design had been approved.
- Treatment of a public agency (county schools) like a commercial development regarding access/driveway permit process.
- Scope, location and impact (cost) of off-site improvements.
- Specific traffic study findings, disagreement between traffic consultant and agency staff.
- Distinction and ultimate authority between NCDOT driveway/access permit authority and local government site approvals and authority.

The interviews and surveys revealed that most of the appeals and concerns were expressed verbally with NCDOT District staff during access reviews and negotiations. Further, some interviewees felt the review criteria were not clear for sites that were reviewed by agency headquarters' staff (Congestion Management). They noted that municipalities often go along with NCDOT recommendations.

Under Chapter 5 of this report, there are additional cases cited that have involved varying degrees of appeal and negotiation for school related road improvements.

(6) *The total cost (design and construction) for each road improvement identified under subdivision (2) of this subsection.*

Utilizing a combination of interviews, surveys and project related documentation, actual and/or estimated road improvement costs were compiled. Road improvement costs did not itemize or separately detail traffic control, maintenance of traffic or preliminary engineering, surveys, or design. Road improvement costs, associated with preliminary engineering and design, were calculated as a percentage of the road improvement investment utilizing generalized project engineering and design cost ranges of 10 to 15 percent of each improvement.

There are 63 schools identified with road improvements, with a cumulative construction cost calculated at 41.3 million dollars. The estimated preliminary engineering and design cost range is calculated to be between 4.1 and 6.2 million dollars. The total design plus construction cost for the road improvements identified is calculated to be between 45.5 million and 47.5 million dollars for the two-year study period. The average road design and construction cost is between \$775,000 and \$810,000 per school.

(7) The funding source for the payment of the costs incurred for each road improvement identified in subdivision (2) of this subsection.

For the schools with identified road improvements, 95 percent of the road improvements (\$39.4 million) were funded by the school. In approximately 4 percent (\$1.3 million) of the cases, NCDOT funding was applied. The remaining 1 percent (\$0.5 million) involved municipal or other funds.

(8) For the period covering July 2, 2017 through July 1, 2020; Identify (i) the number of schools, including private and charter, that will be opened, relocated, or expanded, (ii) the types of road improvements anticipated to be required for each school identified, and (iii) the total cost for each road improvement anticipated to be required for each school identified.

The number of forecasted schools for the three (3) year period is 269. Of these, 102 are public, 32 are charter and 135 are private.

The types of road improvements expected to be associated with the future school sites include left and right turn lanes and tapers, road widening, intersection improvements, driveway improvements, sidewalk, medians and raised island channelization, curb and gutter, drainage work and pavement overlays.

For the 269 forecast schools, it is estimated that an investment of \$60 million will be needed for the design and construction of road improvements. This equates to \$20 million annually.

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Introduction

Project Background

In response to requirements set forth by the North Carolina General Assembly under Section 34.6A.(c), 34.6A.(d) and 34.6A.(e) of Session Law 2017-57 (Senate Bill 257), the North Carolina Department of Transportation (NCDOT) has conducted a “Road Improvements Adjacent to North Carolina Schools” report to submit to the North Carolina General Assembly’s Joint Transportation Oversight Committee and Joint Education Oversight Committee by February 1, 2018.

This report includes the following information:

- (1) All schools, including private and charter, that have been opened, relocated, or expanded statewide between July 1, 2015 and July 1, 2017.
- (2) The types of road improvements required for each school identified in subdivision (1) of this subsection.
- (3) Whether each road improvement identified in subdivision (2) of this subsection is to a road maintained by the State or a municipality.
- (4) Whether each road improvement identified in subdivision (2) of this subsection is to a road adjacent to the school property.
- (5) A description of any disputes or appeals raised by the schools identified in subdivision (1) of this subsection concerning the road improvements identified in subdivision (2) of this subsection.
- (6) The total cost (design and construction) for each road improvement identified under subdivision (2) of this subsection.
- (7) The funding source for the payment of the costs incurred for each road improvement identified in subdivision (2) of this subsection.
- (8) For the period covering July 2, 2017 through July 1, 2020, identify (i) the number of schools, including private and charter, that will be opened, relocated, or expanded, (ii) the types of road improvements anticipated to be required for each school identified, and (iii) the total cost for each road improvement anticipated to be required for each school identified.

For the purposes of this report, the definition of “road improvements” is consistent with the description provided in Senate Bill 257, which specifically references the following:

“roadway construction, including: pavement installation and medians; ditches and shoulders; storm drainage pipes, culverts, and related appurtenances; and, where required, curb and gutter; signals, including pedestrian safety signals; street lights; sidewalks; and design fees.”

Road improvements for North Carolina schools include a wide range of treatments and combinations of treatments including features such as turn lanes and tapers, traffic signals (new and upgrades), intersection upgrades, roundabouts, road alignment improvements, pavement overlays, pavement markings and signing, raised channelization, radius improvements, lane and shoulder widening, and improvements to sight distance.

1

Identified Schools

Schools Identified (July 1, 2015 through July 1, 2017)

North Carolina's more than 10 million residents are served by a combination of public, charter, and private schools operating under traditional, year-round, and other innovative schedules. Published data for the public, charter and private schools in North Carolina indicate the following snapshot of schools:

Table 1. Snapshot of Number of North Carolina Public and Non-Public Schools

School Category	Number of Schools	Percent of Total
Public (also includes Statewide school category)	2,464	73%
Charter	173	5%
Private	755	22%
Total	3,392	100%

Reference: NC Department of Public Instruction and the North Carolina Division of Non-Public Education (NC Division of Administration)

Much like growth and employment statistics, North Carolina's physical school numbers are dynamic. The overall trend for the number of North Carolina schools has been steadily increasing, and each year, additional schools are relocated, scheduled for renovations, or replaced. Due to the lack of a unified source of public, private, and charter school site information, there are differences in the data that are reported, published, and updated for the different categories of schools.

North Carolina's growing counties have experienced more recent school growth. The following table focuses on counties with populations over 200,000 and their contribution to North Carolina's total population.

Table 2. North Carolina Counties with Populations Over 200,000

Geography Name	July 1, 2010 Population Estimate	Percent of 2010 Total	July 1, 2016 Population Estimate	Percent of 2016 Total
North Carolina	9,558,979	100%	10,146,788	100%
Buncombe County	238,776	2%	256,088	3%
Cabarrus County	178,649	2%	201,590	2%
Durham County	270,878	3%	306,212	3%
Forsyth County	351,463	4%	371,511	4%
Gaston County	206,077	2%	216,965	2%
Guilford County	489,489	5%	521,330	5%
Mecklenburg County	923,314	10%	1,054,835	10%
New Hanover County	203,298	2%	223,483	2%
Union County	202,117	2%	226,606	2%
Wake County	906,965	9%	1,046,791	10%
10-County Totals	3,971,026	42%	4,425,411	44%

Estimates based on US Census Bureau, Population Estimates Program.

The ten highest-population counties contribute approximately 44 percent (4.425 million residents) of North Carolina's 10.1 million residents. In other words, one tenth of North Carolina's counties contribute nearly half of North Carolina's overall population.

Using a combination of published and provided school site data from the North Carolina Department of Public Instruction, and North Carolina Division of Non-Public Education, records provided by NCDOT (14 Divisions and 38 District offices) and select municipality and local education agencies, the following table summarizes the number of public, charter and private schools that were identified under this study as being new, expanded, or relocated between July 1, 2015 and July 1, 2017.

Table 3. New, Expanded, or Relocated School Sites in North Carolina (July 2015 to July 2017)

School Category	Number of Identified New, Expanded or Relocated Sites Opened between July 1, 2015 and July 1, 2017	Average Sites per Year (2-year Study)
Public	85	42
Charter	59	29
Private	141	70
Total	285	141

In addition to using the published school site data and NCDOT driveway permit records (for sites with access onto state-maintained roads), the project team reached out to municipalities, local education agencies, and North Carolina-based charter and private school organizations to verify and supplement the identified school listings. It should be noted that some school closings occurred during the defined study period (3 charter and 13 private).

2

Type of Road Improvement

Schools Identified with Road Improvements

The Road Improvements Adjacent to Schools legislation (Section 34.6A.(a)) provides the following description of road improvements:

"The term 'improvements,' as used in this subdivision, refers to all facilities within the right-of-way required to be installed to satisfy the road cross-section requirements depicted upon the approved plans. These facilities shall include roadway construction, including pavement installation and medians; ditches and shoulders; storm drainage pipes, culverts, and related appurtenances; and, where required, curb and gutter; signals, including pedestrian safety signals; street lights; sidewalks; and design fees. Improvements shall not include any costs for public utilities."

Table 4 shows the breakdown of school sites with road improvements from the previously-identified sites in Table 3.

Table 4. Number of Sites with Identified Road Improvements by School Type

School Type	Total Sites Identified for Report	Sites with Identified Road Improvements
Public	85	35
Charter	59	23
Private	141	5
Total	285	63

Based on the records shared by NCDOT's 38 District offices and materials and data provided by local education agency facility teams and charter school representatives, there were 58 public and charter schools that opened between July 1, 2015 and July 1, 2017 and reported having road and/or intersection improvements. Approximately 60 percent of the new, expanded and relocated public and charter schools did not have road improvements identified.

Of the identified new, expanded, or relocated public, charter and private school sites, 222 (roughly 78 percent) had no road improvements. Private schools represented 136 sites which is over half of the schools with no road improvements.

For private school sites, in addition to the Department of Administration's Non-Public School Division's published data, records from NCDOT's 38 District offices, and outreach to North Carolina based private school organizations were utilized to identify and attempt to verify qualifying sites. The project team supplemented local NCDOT reviews and site knowledge with online aerial mapping resources, geolocating and performing visual reviews using online aerial and street level mapping tools of each of the identified private school sites.

Type of Road Improvement

A wide range of road and intersection improvements and combinations of road and traffic control treatments are utilized for school access operations and safety. Left and right turn lanes are often utilized at school entrances and adjacent intersections.

Referencing Senate Bill 257 text that provides examples of intended road improvements under **SECTION 34.6A.(a)**:

“roadway construction, including pavement installation and medians; ditches and shoulders; storm drainage pipes, culverts, and related appurtenances; and, where required, curb and gutter; signals, including pedestrian safety signals; street lights; sidewalks; and design fees.”

Road widening, intersection improvements, roundabouts, channelization islands, traffic control devices, are just a few of the improvements that may be combined or installed individually to provide for improved traffic flow, operations and safety.

Of the identified sites with road improvements, the following table summarizes the types of school road improvements:

Table 5. Types and Overall Numbers of Improvements

Type of Road or Intersection Improvement	Total Number of Each Treatment Identified
Left Turn Lane	62
Right Turn Lane	63
Sidewalk	35
Curb and Gutter	52
Drainage	10
Road Construction (widening and three-lane cross section)	36
Median or Island	12
Traffic Signal (new and upgraded)	15
Pedestrian Signal	3
Utility Relocation (associated with transportation improvements)	4

3

Road System Maintenance

State or City Road Maintenance

North Carolina's schools are located across a range of properties and adjacent land uses. There are physical site configurations, orientations, street connections and vehicular and pedestrian circulation schemes that are unique to each site. The road improvements adjacent to schools' data sources and methodology relied heavily on available development records, associated site and road improvement plans and the availability of agency and contractor staff and their voluntary participation.

North Carolina's road network includes over 106,000 centerline miles of street and highways and approximately 80 percent of the centerline road mileage is state-maintained (15,125 miles of primary highways (Interstate, US and NC highways) and 65,000 miles of secondary roads). The remaining North Carolina mileage is comprised of municipality-maintained streets (22,800 miles) and other state agency roads (820 miles) and Federal land roads (3,240 miles)².

Based on the reviews of over 285 school sites, highway or street access to schools was predominately through one of the following street maintenance system scenarios:

- State-maintained road(s) exclusively.
- Municipality-maintained road(s) exclusively.

Of the identified school sites with road improvements, the following general distribution of road improvements, road maintenance responsibility, and school property frontage proximity were found:

Table 6. Road Improvements by Road Maintenance Responsibility

Total Number of Road Improvements	State Maintained Road Improvements	Municipal Maintained Road Improvements
125	115 (92%)	10 (8%)

² Source North Carolina Official State Road Mileages 2016 (07/27/2017 update)

4

Proximity of Road Improvement to School Property

Proximity of Road Improvement to School Property

School sites are located across a wide range of properties with varying acreages, topography, and features with assorted adjacent land uses that create a variety of site layouts, access connections and traffic circulation schemes.

The roads surrounding a school and the traffic being serviced by those roads add to the uniqueness of each school site and transportation plan. Due to these variations, each site requires case by case planning and design to satisfy existing and future conditions.

The following basic scenarios reflect cases that were encountered during the study:

- Road improvement was for a school access or intersection that was adjacent to the school property or along the school property's road frontage.
- Road improvement was "off-site" or not adjacent to the school.

Of the identified school sites with road improvements, the following general distribution of road improvement locations relative to school property proximity was identified:

Table 7. Breakdown of School Road Improvements Adjacent and Not Adjacent to School Property

School Type	Road Improvements		Total
	Adjacent to School	Off-site or Not Adjacent to School	
Public (85)	61	27	88
Charter (59)	19	13	32
Private (141)	2	3	5
Totals	82	43	125

5

Disputes or Appeals by School

Disputes or Appeals by School

With interviews and communications with NCDOT staff, local education agency staff, and other involved representatives, an effort to identify specific issues, disputes and appeals from the school concerning road improvements was made.

Examples of e-mail threads, letters or phone calls were requested. There were limited documented disputes or appeals provided by agency participants.

Communication via phone with NCDOT staff provided some indication that applicants understood and agreed to the conditions of access and driveway permits and did not typically object or express concern or complaints.

If the school is represented by consultants, the agents' focus is on the timely securing of the needed permits to allow project to move forward and stay on schedule.

Example cases that include additional perspective into disputes or appeals are listed below:

- Case I: South Garner High School – number and magnitude of on and off-site road improvements required to multiple secondary roads (White Oak Road, Hebron Church Road, New Bethel Church Road, Clifford Road and primary route (NC 50).
- Case II: College Preparatory & Leadership Academy, in Jamestown, appealed a City of High Point requirement for turn lane improvements on I-85 Business. The school had sought relief from previously negotiated phased improvements recommended by the traffic study. As a result, NCDOT funded the turn lane work.

6

Road Improvement Cost

Cost of Road Improvements (Design and Construction)

The predominate road improvement scenarios identified under this study included:

- No school-related road improvements were identified.
- Road improvements were funded by the school.
- Road improvements were funded by NCDOT.
- Road improvements were funded by municipality.

In addition to the traditional cases, there were several other improvement scenarios and sequences. Some examples were:

- Collaborative cases where widening is performed by one partner and then the pavement overlay and final markings are coordinated under resurfacing efforts (state or city).
- After a school opens, additional operational and/or safety improvements are made after traffic patterns stabilize or a problem develops.
- Scheduled State Transportation Improvement Program (STIP) project or other thoroughfare and development improvements that include and improve network roads that the school utilizes for ingress, egress and connectivity.
- Phased improvements that are advance negotiated and triggered by specific enrollment, expansion and school size, or traffic thresholds.

Road improvement design and construction costs are variable and subject to many of the same factors that influence all construction.

Example considerations and impacts include but are not limited to: competition, economy of scale, flexibility of schedule (or time limitations), economic climate, seasonal and weather considerations, amount and complexity of preparatory site work required, utility conflicts or connections of service, right of way limitations and conflicts, complexity of project, amount, types and distributions of traffic, maintenance of traffic impacts and costs, environmental issues, conflicts with other development and active transportation projects, condemnations, and unanticipated constructability issues.

Provided project cost data often included site grading and utility connection costs. Section 34.6A.(a) states “Improvements shall not include any cost for public utilities.” Where identified, adjustments were made to exclude these costs.

Regarding the two-year sample of 63 identified school sites with road improvements, the following table (Table 8) summarizes the general breakdown of average identified road improvement costs by school type:

Table 8. Total Cost Paid for School Road Improvements by School Type

Type with Improvement	School	NCDOT	Municipality	Total
Public (35)	\$ 27,245,310	\$ 299,794	\$ 526,544	\$ 28,071,648
Charter (23)	\$ 11,249,258	\$ 816,201		\$ 12,065,459
Private (5)	\$ 943,853	\$ 265,000		\$1,208,853
All Schools (63)	\$ 39,438,422	\$ 1,380,995	\$ 526,544	\$ 41,345,961
Percentage	95%	4%	1%	
Including Design:			Cost plus 10%	\$ 45,480,557
			Cost plus 15%	\$ 47,547,855

Unless itemized design costs were available and provided for road improvements, preliminary engineering and school road improvement design costs were determined by applying accepted industry design cost ranges for projects of 10 to 15 percent of the total project effort. The investigation, interview and survey effort attempted to secure design and construction costs directly from the schools and their contractors, but for many of the identified sites the itemized cost break outs were not available within the time frame specified for this study.

Site complexity, the number and configuration of access points and the function and demands of the highway or road the school is accessing all have an impact on the necessary investment in the identification (often through traffic impact study) design, and construction of road improvements. Separate conditions associated with local government rezoning.

School sites with access onto primary high-speed routes and higher speed secondary routes encounter higher design speeds, longer tapers, greater sight distance requirements, and often additional geometric and traffic control improvements. School sites that have the benefit of a transportation network of interconnected streets, service by and access by and for multiple modes will generally be able to better distribute and process the concentrations of school traffic.

While the intent of this report was to attempt to provide a snap shot of road improvements associated with schools that were constructed between July 1, 2015 and July 1, 2017, it is critical that the variability in property and constructability factors, surrounding transportation infrastructure and condition, existing and future traffic demands and the uniqueness of each school site and access scenario be emphasized.

Road improvement costs were not directly available for many of the identified sites since complex school projects often aggregate site work and road improvement costs. Utilizing available project cost data (including estimates, invoices, bid information and even bond amounts) and in consultation with NCDOT, school and school contractors, the study provides either directly secured cost break outs for the identified road improvements or NCDOT approved measures to determine a representative cost for a specific road improvement.

Each school site is unique in its construction scope and complexity. Table 9 summarizes the range and average cost per school.

Table 9. Costs per School Site for Identified Schools with Road Improvements

Range of Road Improvement Costs	Average Road Improvement Cost
\$12,700 to \$3.6 million	\$775,000 to \$810,000

7

Funding Source

Funding Source of Identified Road Improvements

For the school sites that were identified with associated road improvements, the general categories of road improvement funding include:

- (1) **School** paid for the road improvement(s) as part of the new construction, expansion or relocation process.
- (2) **NCDOT** paid for the road improvement(s).
- (3) **City/Municipality** paid for road improvement(s).
- (4) **Private Developer** paid for road improvement(s).
- (5) **Other Combinations**, including joint/multi-party participation, public thoroughfare type reimbursements (usually through local governments), and payment in lieu arrangements (also through local governments).

Schools fund School Road Improvements in 90 percent of the cases studied. In the remaining cases, NCDOT provided funding for 9 percent of the cases and in approximately 1 percent of the cases other funding combinations paid for the road improvements.

For the sites identified under this study, most road improvements were the financial responsibility of the school and/or the school's contractor.

8

Looking Forward

Estimates for July 2, 2017 to July 1, 2020

Under *Session Law 2017-57 section 34.6A.(d)* the following projections and estimates are provided for public, charter and private schools projected to be opened, expanded or relocated during the three years between July 2, 2017 and July 1, 2020:

- i) **The number of public, charter and private schools expected to be opened, relocated or expanded.**

Table 10. Expected New, Expanded and Relocated Schools

School Category	Public	Charter	Private	Total
Number Expected July 2, 2017 and July 1, 2020 (3-Year Estimates)	102	32	135	269

The estimates for the number of schools with occupation dates during the upcoming three years were arrived at using a combination of approaches. The Charter school three-year projection was provided by the NC Office of Charter Schools and considered historical growth and applications received to date. The Private school estimate was based solely on the most recent 10 years of new private school data published by the Department of Administration's Division of Non-Public Education. The estimate for regular Public schools involved a combination of reviewing 15-plus years of historical growth, reviews of available capital improvement plans and construction status reports, and consultation with LEA and NCDOT District Engineering staff.

- ii) **The types of road improvements anticipated to be required.**

While the nature and degree of impacts from the school road improvement legislation is yet to be determined, the basic type of road improvements would be consistent with those documented under Chapter 2. Those primary road improvement categories include left and right turn lanes, basic road widening, traffic signals (new and upgraded), sidewalks, curb and gutter, medians, and raised islands and channelization.

iii) The estimated cost for road improvements anticipated to be required for future schools.

Due to the sensitivity of road improvements and associated costs to the eventual selected site, surrounding transportation infrastructure (condition and traffic handling capabilities) generated estimates for future sites do not have basic survey, preliminary engineering, right of way and utility information, and critical constructability facts. As such, these preliminary estimates are subject to extreme variation. Utilizing data obtained under the two-year before study, the following estimates can be interpolated:

Table 11. Estimated Future Cost for School Road Improvements by School Type with New, Expanded and Relocated Construction

Description	Public	Charter	Private	Total
Future Schools July 2, 2017 and July 1, 2020	102	32	135	269
Percentage with Road Improvements	50%	50%	5%	
Forecast Number of Sites	51	16	7	74
Average Cost Per School	\$ 810,000			
Three-Year Costs (Design and Construction)	\$ 41.31 million	\$ 12.96 million	\$ 5.67 million	\$ 59.94 million
Annual / Per Year Costs (Design and Construction)	\$ 13.8 million	\$ 4.3 million	\$ 1.9 million	\$ 20 million

Not all forecast school sites will be expected to have associated road improvements. For the purposes of this report, a representative percentage of future school sites that would be anticipated to require road improvements was applied to each school category. The average costs that were obtained for the 2015 and 2016 school year sites were utilized to estimate the forecast magnitude of investment over the upcoming three years (school years of 2018, 2019 and 2020).

DISCLAIMER: Many factors influence the design and construction phases of new, expanded and relocated schools. The above three-year “Looking Forward” estimates are based on published future school site information, approved and submitted charter school applications and forecasts, and published historical growth trends. Changes in legislation, school construction bond packages and other federal, state and local funding streams can greatly influence the school construction and reconstruction pipeline and occupation schedules. No inflation was applied to the future road improvement cost estimates, which are essentially present value estimates based on school related road improvement construction that was completed between July of 2015 and July 2017.

APPENDIX A

School Identification

Tables of Identified New, Expanded or Relocated School Sites

July 1, 2015 to July 1, 2017

School Road Improvement Study

School Identification

Study ID (Co)(No)	County	NCDOT Division	Type			Project Scope			School Name	Year Completed Between July 1, 2015 July 1, 2017	Year Closed	School Location (Physical Address)	Google Map Link or Physical Location Coordinates	Type Road Improvements														Funding Source (Percent)					Cost of Road Improvement by Funding Source		
			Public	Charter	Private	New	Expanded	Relocated						Left Turn Lane	Right Turn Lane	Sidewalk	Curb & Gutter	Drainage	Roadway Construct	Median or Island	Traffic Signal	Pedestrian Signal	Street Lights	Right-of-way	Utility Relocation	Design	School	NCDOT	Municipality	Developer	Other	School	NCDOT	Municipality	
Bt1	Bertie	1			x	x			Freedom Academy	2015		1144 Hexlena Road, Aulander	https://goo.gl/maps/xA3UaVsxmvG2																	\$	-				
Cd1	Camden	1	x			x			Camden Early College High	2016		103-A US Highway 158 West, Camden	https://goo.gl/maps/D6dzkVifEsA2																	\$	-				
Nn1	Northampton	1	x			x			Northampton High Early College	2017		4671 NC 46 HWY West, Gaston	https://goo.gl/maps/4TeA1Ftt75y																	\$	-				
PK1	Pasquotank	1	x			x			Elizabeth City Pasquotank Early College	2016		1208 N Road St, Elizabeth City	https://goo.gl/maps/bek47xXYmhu																	\$	-				
PK2	Pasquotank	1		x		x			NE Acad of Aerospace & Advanced Tech	2015		1810 Weeksville Rd, Elizabeth City	https://goo.gl/maps/zw2ocPEWkBq																	\$	-				
Pk3	Pasquotank	1			x	x			Grace Montessori Academy	2017		104 Commercial Boulevard, Elizabeth City	https://goo.gl/maps/aJP3rXXukA42																	\$	-				
Wa1	Washington	1	x			x			Washington Early College High	2017		102 NC Hwy 32 North, Roper	https://goo.gl/maps/ovWEnKMvg1r																	\$	-				
Ct1	Carteret	2			x	x			New Life Christian Academy	2015		301 Friendly Road, Morehead City	https://goo.gl/maps/PhX1NZnRrbU2																	\$	-				
Cr1	Craven	2			x	x			Peletah Academic Center for Excellence	2017		2305 Neuse Boulevard, New Bern	https://goo.gl/maps/eRAGByE8CDs																	\$	-				
Cr2	Craven	2			x	x			Strait Path Academy	2015		145 Jonestown Road, Dover	https://goo.gl/maps/Rr4q5zCDMTp																	\$	-				
Gr1	Greene	2			x	x			Covenant of Faith Christian Academy	2017		3035 Hwy 123 North, Hookerton	https://goo.gl/maps/E7wcatpQcKs																	\$	-				
Ln1	Lenoir	2			x	x			Miss Charlie's Child Develop. Center	2016		1503 W. Vernon Ave, Kinston	https://goo.gl/maps/p4ckTVDz5872																	\$	-				
Pm1	Pamlico	2			x	x			Gateway Christian Academy	2015	16	532 Hale Road, New Bern	https://goo.gl/maps/nWgzCzKsaVN2																	\$	-				
Pt1	Pitt	2	x			x			East Carolina Laboratory School	2018		811 Howell St, Greenville	https://goo.gl/maps/MKZnD8LfQ72																	\$	-				
Pt2	Pitt	2	x			x			PCS Early College High	2016		1959 Warren Drive, Winterville	https://goo.gl/maps/QKD8rsTXoo82																	\$	-				
Pt3	Pitt	2		x		x			Ignite Innovation Academy	2016		901 Staton Rd, Suite 204, Greenville	https://goo.gl/maps/CQGhshcrqn22																	\$	93,750				
Pt4	Pitt	2		x		x			Winterville Charter Academy	2015		4160 Bayswater Road, Winterville	https://goo.gl/maps/My5hzBnd2gA2		1															\$	175,000				
Pt5	Pitt	2			x	x			Children's Montessori School	2016	16	100 Hungate Dr, Greenville	https://goo.gl/maps/vUccZLjEC1T2																	\$	-				
Pt6	Pitt	2			x	x			Children's World Academy	2016		1525 East Arlington Blvd, Greenville	https://goo.gl/maps/oVww4C33pYw																	\$	-				
Pt7	Pitt	2			x	x			Deeper Life Academy	2016		7465 Pitt Street, Grimesland	https://goo.gl/maps/Ej7bhStunP42																	\$	-				
Pt8	Pitt	2			x	x			Stroke of Faith Academy	2015	17	2872 NC 118, Grifton	https://goo.gl/maps/ZecBmJsVAB32																	\$	-				
Pt9	Pitt	2			x	x			Third Street Academy	2015		600 W Third Street, Greenville	https://goo.gl/maps/trCDiFEK54t																	\$	-				
Bk1	Brunswick	3		x		x			South Brunswick Charter	2016		2260 Achievement Ave SE, Bolivia	https://goo.gl/maps/yEqGjZYiqM2		3															\$	819,125				
Bk2	Brunswick	3			x	x			Canipe Academy	2016		368 Fairway Dr Boiling Spring Lakes, Southport	https://goo.gl/maps/qZPKADoDVMT2																	\$	-				
Dp1	Duplin	3	x				x		BF Grady Elementary	2016		2627 North NC 11 / NC 903 Hwy, Albertson	https://goo.gl/maps/Tfu7rojnAYM2		1															\$	95,850				
Dp2	Duplin	3	x				x		Kenansville Elementary	2016		328 Limestone Rd, Kenansville	https://goo.gl/maps/cMCe865BBim																	\$	-				
Dp3	Duplin	3	x				x		Rose Hill-Magnolia Elementary	2016		1329 Brooks Quinn Rd, Rose Hill	https://goo.gl/maps/Qt9BWc9IzqA2		1															\$	64,600				
Dp4	Duplin	3	x				x		Warsaw Elementary	2016		158 Lanefield Rd, Warsaw	https://goo.gl/maps/KpHnH1DZMW82		4															\$	1,081,250				
Dp5	Duplin	3			x	x			Zelophehad's Daughters Christian	2017		185 Creekside Hills Dr, Magnolia	https://goo.gl/maps/ESYZwDbbrd32																	\$	-				
Jo1	Jones	3	x			x			Jones PK-12 School	2017		1490 Highway 58, Trenton	https://goo.gl/maps/rZnPeswNB6S2																	\$	505,625				
Nh1	New Hanover	3	x			x			Porters Neck Elementary	2017		416 Edgewater Club Rd, Wilmington	https://goo.gl/maps/izKlmpQkQtk		1															\$	210,000				
Nh2	New Hanover	3		x		x			Coastal Preparatory Academy: CFA	2017		1135 Pandion Dr, Wilmington	https://goo.gl/maps/kcwVXwZhS5s																	\$	-				
Nh3	New Hanover	3		x		x			Girls Leadership Acad of Wilmington	2016		606 South College Rd, Wilmington	https://goo.gl/maps/6swvSVZdgaH2																	\$	-				
Nh4	New Hanover	3		x		x			SEA-Tech High	2017		4500 Blue Clay Road, Castle Hayne	https://goo.gl/maps/7gBTBUYqDn42																	\$	-				
Nh5	New Hanover	3		x		x			Temporary Sidbury Road Elementary	2016		5301 Sidbury Road, Castle Hayne	https://goo.gl/maps/tGGvpNB2FHM2		1															\$	334,375				
Nh6	New Hanover	3			x	x			Peace Rose Montessori School	2015		2173 Wrightsville Ave, Wilmington	https://goo.gl/maps/qZ6JsafYwP62																	\$	-				
Os1	Onslow	3	x			x			Onslow Early College	2017		444 Western Blvd, Jacksonville	https://goo.gl/maps/9wbJdAR5ia52																	\$	-				
Os2	Onslow	3			x	x			Abundant Life Christian Academy	2017		1518 Gumbranch Road, Jacksonville	https://goo.gl/maps/yiRWbPMYco42																	\$	-				
Os3	Onslow	3			x	x			Grace Classical School	2017		910 Pine Valley Rd, Jacksonville	https://goo.gl/maps/2v4QYvWAjr92																	\$	-				
Os4	Onslow	3			x	x			North Shore Academy	2016		1355 NC Hwy 210, Sneads Ferry	https://goo.gl/maps/5MJ1UYHBn4E2																	\$	-				

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Pd1	Pender	3	x			x		Surf City K-8 School	2017		450 Shepards Rd, Hampstead	https://goo.gl/maps/iwimX7Tbpk72	3	1												100				\$ 708,125			
Pd2	Pender	3				x	x	Penderlea Christian Academy	2017		8348 Penderlea Highway, Willard	https://goo.gl/maps/iHeCqL36do22																		\$ -			
Pd3	Pender	3				x	x	Topsail Montessori School	2015		101 Whitebridge Rd, Hampstead	https://goo.gl/maps/ct5oQs4z1PU2																		\$ -			
Ss1	Sampson	3				x	x	The Point Christian Academy	2016		460 Reeda Branch Rd, Roseboro	https://goo.gl/maps/FvpVfwMDRkj2																		\$ -			
Jn1	Johnston	4	x			x		JoCo Sch Career Technical Leadership Acad	2017		600 S Fayetteville St, Clayton	https://goo.gl/maps/QxWSPki8Fin																		\$ -			
Jn2	Johnston	4	x			x		Micro Elementary	2017		301 E Main St, Selma	https://goo.gl/maps/QmxZoSH2G4R2																		\$ -			
Jn3	Johnston	4	x			x		Swift Creek Middle	2018		325 Norris Rd, Clayton	https://goo.gl/maps/IVTTIQoCRp82	1	2		4		1							100					\$ 1,121,485			
Jn4	Johnston	4	x			x		The Innovation Academy at South Campus	2017		521 Martin Luther King Jr Dr, Smithfield	https://goo.gl/maps/d79dfQ5kxBs																		\$ -			
Jn5	Johnston	4		x		x		Johnston Charter Academy	2017		800 Town Centre Blvd, Clayton	https://goo.gl/maps/JoefiT9otQ2	1												100					\$ 350,000			
Wa1	Wayne	4	x			x		Grantham Middle	2015		3093 US Hwy 13 S, Goldsboro	https://goo.gl/maps/4jzR8woNdt		1				1							100					\$ 516,875			
Wa2	Wayne	4	x			x		Spring Creek Middle	2015		3579 NC-111, Seven Springs	https://goo.gl/maps/s1rr6FapEfB2																		\$ -			
Wn1	Wilson	4	x			x		Wilson Academy of Applied Technology	2017		4510 Old Stantonsburg Rd, Wilson	https://goo.gl/maps/uHrvpTiR15n																		\$ -			
Dm1	Durham	5		x		x		Excelsior Classical Academy CFA	2015		4100 N Roxboro Street, Durham	https://goo.gl/maps/eFP8F8nkpz																		\$ -			
Dm2	Durham	5		x		x		KIPP Durham College Preparatory	2015		1107 Holloway Street, Durham	https://goo.gl/maps/oLBfsmhdaw																			\$ -		
Dm3	Durham	5		x		x		NC Virtual Academy	2015		4220 NC Highway 55, Suite 130, Durham	https://goo.gl/maps/5f8FtXzKsx32																		\$ -			
Dm4	Durham	5		x		x		North Carolina Connections Academy	2015		2700 Meridian Parkway, Suite 300, Durham	https://goo.gl/maps/v88RMhmU1XF2																		\$ -			
Dm5	Durham	5		x			x	Research Triangle Charter	2016		2418 Ellis Rd, Durham	https://goo.gl/maps/8RZzMYe1mAv																		\$ -			
Dm6	Durham	5		x				x RTP High	2016		3106 E. NC54, Research Triangle Park	https://goo.gl/maps/i6QQCD3ArUH2																		\$ -			
Dm7	Durham	5				x	x	AHES-Genesis Schools of Hop	2017		3209 Yorktown Ave, Suite 171, Durham	https://goo.gl/maps/klzUo7VjGZu																		\$ -			
Dm8	Durham	5				x	x	Empowered Minds Academy	2017		1217 Holloway Street, Durham	https://goo.gl/maps/sK9tNYxsh3u																			\$ -		
Dm9	Durham	5				x	x	Gift of Knowledge Academy	2017		3026 Wake Forest Highway, Durham	https://goo.gl/maps/4moy8vg3zgR2																		\$ -			
Dm10	Durham	5				x	x	Kids R Kids RTP School	2016		2502 Presidential Drive, Durham	https://goo.gl/maps/AhvEo4DPTvs																		\$ -			
Dm11	Durham	5				x	x	Our Playhouse Preschool & Kin	2015		2400 University Drive, Durham	https://goo.gl/maps/Z1M26hf2TFG2																		\$ -			
Dm12	Durham	5				x	x	Veritas Collaborative School	2015		615 Douglas St., Ste. 500, Durham	https://goo.gl/maps/cJAfKPIG4wt																		\$ -			
Fn1	Franklin	5		x		x		Youngsville Academy	2015		249 Holden Road, Youngsville	https://goo.gl/maps/SP9fHzmK4EE2																		\$ -			
Fn2	Franklin	5				x	x	True Light Shines Academy	2015		7428 Pearces Road, Louisburg	https://goo.gl/maps/vq3pRiTEAa32																		\$ -			
Fn3	Franklin	5				x	x	Agape International Christian Acad	2017		120 Weathers St, Suite A, Youngsville	https://goo.gl/maps/iFvu6ESFmaQ2																		\$ -			
Ps1	Person	5	x			x		Person Early Col for Innovation & Leadership	2017		1715 College Drive, Roxboro	https://goo.gl/maps/7uqnUFzzVno																		\$ -			
Ps2	Person	5				x	x	Progressive Learning Academy	2017		201 N. Main St, Suite 112-116, Roxboro	https://goo.gl/maps/z9U1Wci1Y192																		\$ -			
Vn1	Vance	5		x				x Vance Charter	2017		2090 Ross Mill Rd, Henderson	https://goo.gl/maps/orMt3hNai652	2													100				\$ 312,500			
Wk1	Wake	5	x			x		Abbotts Creek Elem (E20)	2015		9900 Durant Rd, Raleigh	https://goo.gl/maps/kTjXT1QJdT2		1	3	5		2	1	1	1					32	68			\$ 249,794	\$ 526,544		
Wk2	Wake	5	x			x		Apex Friendship High (H10)	2015		7801 Humie Olive Rd, Apex	https://goo.gl/maps/ywVCZV1rpB92	3	3	1	1		1							100					\$ 2,770,388			
Wk3	Wake	5	x			x		Beaverdam Elem (E36)	2016		3591 Tarheel Club Rd, Raleigh	https://goo.gl/maps/qtyhdzhauDB2	2	1	2	3		1	1	1					100					\$ 1,182,088			
Wk4	Wake	5	x					x Brooks Museums Magnet Elem	2017		700 Northbrook Dr, Raleigh	https://goo.gl/maps/hQuinUXYrFU2																		\$ -			
Wk5	Wake	5	x					x Bryan Road Elem	2017		8200 Bryan Rd, Garner	https://goo.gl/maps/bi2WukNvgQ32						1							100					\$ 2,760,571			
Wk6	Wake	5	x					x Crossroads FLEX High	2017		5651 Dillard Dr, Cary	https://goo.gl/maps/JaLEPFWSTkM2																		\$ -			
Wk7	Wake	5	x					x Green Elem	2016		5307 Six Forks Rd, Raleigh	https://goo.gl/maps/NMujCEHpsFG2								1					100					\$ 64,264			
Wk8	Wake	5	x					x Green Level High	2017		7612 Roberts Rd, Cary	https://goo.gl/maps/3fUdFZisiM2	2	1	2	2		2	1	1					100					\$ 2,430,225			
Wk9	Wake	5	x					x Highcroft Drive Elem	2015		5415 Highcroft Dr, Cary	https://goo.gl/maps/xwXhHYH1fk																		\$ -			
Wk10	Wake	5	x					x Hortons Creek Elem (E33)	2017		7615 O’Kelly Chapel Road, Cary	https://goo.gl/maps/B8qRjWNed1r	4	2	3	2			3						100					\$ 933,084			

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Wk11	Wake	5	x				x		Mills Park Elem	2016		509 Mills Park Dr, Cary	https://goo.gl/maps/NHv3xR9y4X12															\$	-			
Wk12	Wake	5	x			x			Oakview Elem (E43)	2016		11500 Holly Springs New Hill Road, Apex	https://goo.gl/maps/nxYb5qRFHU2	1	2					1							100		\$	304,750		
Wk13	Wake	5	x			x			Pine Hollow Mid (M8)	2016		5365 Bartram Pl, Raleigh	https://goo.gl/maps/mk2Djd4ro87B2			1	1		3	1							100		\$	1,257,647		
Wk14	Wake	5	x			x			Pleasant Grove Elem (E38)	2016		3605 Pleasant Grove Church Rd, Morrisville	https://goo.gl/maps/8yizNYP47AA2	1	1		3		1								100		\$	440,337		
Wk15	Wake	5	x			x			River Bend Mid (M13)	2017		6620 Perry Creek Rd, Raleigh	https://goo.gl/maps/xA2G5uxGtwD2																\$	-		
Wk16	Wake	5	x			x			Rogers Lane Elem	2017		201 N Rogers Ln, Raleigh	https://goo.gl/maps/TC7UngcKGG2	1	1	3	2		1		1	1				100		\$	606,430			
Wk17	Wake	5	x				x		Rolesville Elem	2017		307 S Main St, Rolesville	https://goo.gl/maps/sh4ytojg7Vp																\$	-		
Wk18	Wake	5	x			x			Scotts Ridge Elem (E32)	2015		6601 Apex Barbecue Rd, Apex	https://goo.gl/maps/XH1nxiFBRVz	6	6	2	3									100		\$	829,295			
Wk19	Wake	5	x			x			South Garner High (H8)	2016		8228 Hebron Church Rd, Garner	https://goo.gl/maps/rR342EFwnL22	5	2	3	4	4	3		1				2	1	100		\$	3,693,808		
Wk20	Wake	5	x			x			White Oak Elem (E37)	2016		1512 White Oak Church Rd, Apex	https://goo.gl/maps/Z8KhaLZ3ymu		2			1	1							100		\$	1,462,941			
Wk21	Wake	5		x		x			Central Wake Charter High	2016		1425 Rock Quarry Road, Raleigh	https://goo.gl/maps/vXEktE7qXb72															\$	-			
Wk22	Wake	5		x		x			Connections Academy	2017		1280 Buck Jones Rd, Cary	https://goo.gl/maps/5pTewWZVC2B2															\$	-			
Wk23	Wake	5		x		x			N Wake College & Career Academy	2017		931 Durham Rd, Wake Forest	https://goo.gl/maps/mVWPieIMWQnE2															\$	-			
Wk24	Wake	5		x		x			PAVE Southeast Raleigh Charter	2015		3420 Idlewood Village Dr, Raleigh	https://goo.gl/maps/1nCNwrG54Gn															\$	-			
Wk25	Wake	5		x		x			Peak Charter Academy	2017		1601 Orchard Villas Ave, Apex	https://goo.gl/maps/FB5xKa6vTjv															\$	-			
Wk26	Wake	5		x		x			Pine Springs Preparatory Academy	2017		220 Rosewood Centre Dr, Holly Springs	https://goo.gl/maps/5fsviluyd82															\$	-			
Wk27	Wake	5			x	x			Commission Leadership Academy	2015		3328 Forestville Rd, Raleigh	https://goo.gl/maps/U64UsnJQ4BU2															\$	-			
Wk28	Wake	5			x	x			Dynamic Opportunities	2017		3315 Wade Ave, Raleigh	https://goo.gl/maps/6N642hEvzUR2															\$	-			
Wk29	Wake	5			x		x		Harris Creek Elem	2016		3829 Forestville Rd, Raleigh	https://goo.gl/maps/eok9IDUSBNz															\$	-			
Wk30	Wake	5			x	x			Hatcher Grove Christian Academy	2016		3404 Davis Drive, Cary	https://goo.gl/maps/zMYFdfogYhC2															\$	-			
Wk31	Wake	5			x	x			Heritage Leadership Academy	2017		2080 E Williams St, Apex	https://goo.gl/maps/LBv4DpwGY32															\$	-			
Wk32	Wake	5			x	x			Rejoice Sch of Education & Performing Arts	2015	17	237 Friendship Chapel Road, Wake Forest	https://goo.gl/maps/HpyALZbiCGK2															\$	-			
Wk33	Wake	5			x	x			Renaissance Montessori	2016		610 Nottingham Dr, Cary	https://goo.gl/maps/edhDLip1nJ2															\$	-			
Wk34	Wake	5			x	x			Thales Academy - Knightdale	2017		525 Carolinian Ave, Knightdale	https://goo.gl/maps/57DQy1bkg542															\$	-			
Wk35	Wake	5			x		x		Wake Christian Academy	2016		5500 Wake Academy Dr, Raleigh	https://goo.gl/maps/dhSe2ceSRwS2	1	1											100			\$	265,000		
Wk36	Wake	5			x	x			Wake Academy	2016	17	107 Quade Drive, Cary	https://goo.gl/maps/xGBumpyoj162															\$	-			
Ht1	Harnett	6	x			x			Harnett Co Early College	2018		660 E Johnson St, Dunn	https://goo.gl/maps/qEmVW4WLzjq															\$	-			
Bl1	Bladen	6		x		x			Emereau: Bladen	2017		995 Airport Rd, Elizabethtown	https://goo.gl/maps/KA3BulwFZzy															\$	-			
Cu1	Cumberland	6			x	x			Academy at New Life	2015		6501 Camden Rd, Fayetteville	https://goo.gl/maps/xUruqn7H8ZQ2															\$	-			
Cu2	Cumberland	6			x	x			Destiny Now Academy	2015		2567 Owen Drive, Fayetteville	https://goo.gl/maps/teCAC5KELdw															\$	-			
Cu3	Cumberland	6			x	x			Riverside Christian Academy	2015		2010 Middle River Loop, Fayetteville	https://goo.gl/maps/or9EUITzUYv															\$	-			
Cu4	Cumberland	6			x	x			First Impressions Academy	2016		6965 Nexus Court, Fayetteville	https://goo.gl/maps/ZT2vmX3Skk															\$	-			
Cu5	Cumberland	6			x	x			Focus Academy at Overhills	2016		751 Lillington Highway, Spring Lake	https://goo.gl/maps/Ysk8UWbYsD2															\$	-			
Cu6	Cumberland	6			x	x			God's Heritage Christian Academy	2016		5204 Hodge St, Fayetteville	https://goo.gl/maps/WfQzCUBVetL2															\$	-			
Rb1	Robeson	6			x	x			Lumberton Christian Academy	2015		950 Link Haw Road, Lumberton	https://goo.gl/maps/nYDumipGNtv															\$	-			
Al1	Alamance	7		x			x		River Mill Academy	2016		235 Cheeks Ln, Graham	https://goo.gl/maps/GA5FixUq8PQ2															\$	-			
Al2	Alamance	7			x	x			Apostolic Lighthouse Christian	2016		6150 Lindley Mill Road, Graham	https://goo.gl/maps/FmSG1un9JDF2															\$	-			
Al3	Alamance	7			x	x			GW Taylor Institute of College & Career Readiness	2017		628 N. First Street, Mebane	https://goo.gl/maps/94k28EYDfru															\$	-			
Al4	Alamance	7			x	x			Positive Day School	2016		229 N. Graham Hopedale Rd, Burlington	https://goo.gl/maps/5435wAN8X3y															\$	-			

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			Public	Charter	Private	New	Expanded						Relocated	Left Turn Lane	Right Turn Lane	Sidewalk	Curb & Gutter	Drainage	Roadway Construct	Median or Island	Traffic Signal	Pedestrian Signal	Street Lights	Right-of-way	Utility Relocation	Design	School	NCDOT	Municipality	Developer	Other	School	NCDOT	Municipality	
Gf1	Guilford	7		x		x		Gate City Charter Academy	2016		123 Flemingfield Road, Greensboro	https://goo.gl/maps/5rCxSw4beXu	1	1		2		1		1							100				\$	625,000			
Gf2	Guilford	7		x		x		Piedmont Classical High	2015		1401 Lees Chapel Rd, Greensboro	https://goo.gl/maps/r9wWCAWiNGE2	1	1						1							100				\$	465,000			
Gf3	Guilford	7		x			x	The College Prep & Leadership Acad of High Point	2016		5700 Riverdale Drive, Jamestown	https://goo.gl/maps/88uwBFetMax	1	1						1							100					\$	140,000		
Gf4	Guilford	7			x	x		Oxford Preparatory School	2016		6041 Landis Rd, Oxford	https://goo.gl/maps/94aszV7bV7U2	1	1												100					\$	218,250			
Gf5	Guilford	7			x	x		Bryan School	2015	17	324 S. Elm Street Suite 300, Greensboro	https://goo.gl/maps/28PysdzCjvu																			\$	-			
Gf6	Guilford	7			x	x		Charlotte Sports Academy	2017		900 16th Street, Greensboro	https://goo.gl/maps/QtZnXCvqFT2																			\$	-			
Gf7	Guilford	7			x	x		God's Heritage Christian Day Sch	2016	17	3717 Sunnymcrest Ave, Greensboro	https://goo.gl/maps/lJzD4fx2YdC2																			\$	-			
Gf8	Guilford	7			x	x		Greater Vision Academy	2015		2367 Wagoner Rd, Gibsonville	https://goo.gl/maps/RD7igLQ6omR2																			\$	-			
Gf9	Guilford	7			x	x		Impact Journey School	2017		4705 N. Church Street, Greensboro	https://goo.gl/maps/AE7ZmDUGSel2																			\$	-			
Gf10	Guilford	7			x	x		Lionheart Academy of the Triad	2015		1734 Battleground Ave, Greensboro	https://goo.gl/maps/2qwm8dSfwuw																			\$	-			
Gf11	Guilford	7			x	x		The Covenant School	2016		3906 W. Friendly Avenue, Greensboro	https://goo.gl/maps/5MP3bLJLQIR2																			\$	-			
Gf12	Guilford	7			x	x		You Are Our Future Academy	2017		900 16th Street, Greensboro	https://goo.gl/maps/QtZnXCvqFT2																			\$	-			
Gf13	Guilford	7			x	x		YouthSpring School	2016		4501 Old Battleground Rd, Greensboro	https://goo.gl/maps/wB18vj2fcQ62																			\$	-			
Or1	Orange	7		x		x		ENO River Academy Charter High	2016		1220 NC-57, Hillsborough	https://goo.gl/maps/ZGyt88UnjYR2																			\$	-			
Or2	Orange	7			x	x		Accelerator School LLC	2017		29 S. Circle Drive, Chapel Hill	https://goo.gl/maps/G5sPr8AMAVC2																			\$	-			
Rh1	Rockingham	7		x		x		Bethany Community School	2017		1288 Hudson Rd, Summerfield	https://goo.gl/maps/BjLApMHDnl12	3	2						1							100					\$	276,201		
Ch1	Chatham	8	x			x		Chatham School of Science & Eng	2016		501 Martin Luther King Jr Blvd, Siler City	https://goo.gl/maps/UejtmM5N8Ep																			\$	-			
Ch2	Chatham	8			x	x		Holy Youth Christian Academy	2016		615 Old Lystra Road, Chapel Hill	https://goo.gl/maps/h4tECIcS2ex																			\$	-			
Hr1	Harnett	8			x	x		Independence Montessori Acad	2016		84 Tingen Road, Broadway	https://goo.gl/maps/6g7wcAYi9aQ2																			\$	-			
Ho1	Hoke	8			x	x		Canyon Hills Treatment Facility	2016		769 Aberdeen Road, Raeford	https://goo.gl/maps/3274HjDUh72																			\$	-			
Ho2	Hoke	8			x	x		Cape Fear Christian High	2017		7623 Rockfish Road, Raeford	https://goo.gl/maps/58vKgf5i1w																			\$	-			
Ho3	Hoke	8			x	x		Precious Haven Learning Acad	2015		181 Bostic Road, Raeford	https://goo.gl/maps/e2pM7KGKCVu																			\$	-			
Le1	Lee	8			x	x		Carolina Christian Academy	2017		115 N. 7th St, Sanford	https://goo.gl/maps/AD4U2R2x8HG2																			\$	-			
Mg1	Montgomery	8	x			x		Montgomery County Early College	2018		1011 Page St, Troy	https://goo.gl/maps/vMMk483lbyB2																			\$	-			
Mr1	Moore	8			x	x		Fellowship Christian Academy	2017		1305 Hulsey Road, Carthage	https://goo.gl/maps/nJm5U1Ttkvj																			\$	-			
Rd1	Randolph	8		x		x		Uwharrie Charter Academy	2015		5326 US Hwy 220 Business S, Asheboro	https://goo.gl/maps/gHMmQbl8Z752	3														100				\$	595,000			
Rd2	Randolph	8			x	x		Trinity Christian School	2016		5017 Plainfield Road, Sophia	https://goo.gl/maps/ojmA9C8M6WK2																			\$	-			
Dd1	Davidson	9	x			x		Oak Grove High	2017		3507 Midway School Rd, Winston-Salem	https://goo.gl/maps/Nti9Gum1V1582																			\$	-			
Dd2	Davidson	9			x	x		Walters Grove Baptist Academy	2016		2610 Cid Rd, Lexington	https://goo.gl/maps/TKdD97pfkr32																			\$	-			
Dv1	Davie	9	x			x		Davie County High	2018		180 War Eagle Drive, Mocksville	https://goo.gl/maps/kFbHQCTeq1P2		2				1									100				\$	793,750			
Fs1	Forsyth	9			x	x		Eunice Kennedy Shriver Day School	2015		725 Waughtown Street, Winston-Salem	https://goo.gl/maps/tPZzW7cQTRC2																			\$	-			
Fs2	Forsyth	9			x	x		Faith Academy Christian School	2016		2305 Elbon Drive, Winston-Salem	https://goo.gl/maps/XoPGwDW1PmS2																			\$	-			
Rw1	Rowan	9			x	x		Good People Academy	2016		120 E. Innes St, Salisbury	https://goo.gl/maps/kgi8DbuaN782																			\$	-			
Rw2	Rowan	9			x	x		Salisbury Adventist School	2016		305 Rudolph Rd, Salisbury	https://goo.gl/maps/amCWEnHazrM2																			\$	-			
Rw3	Rowan	9			x	x		Yadkin Path Montessori	2017		2135 Bringle Ferry Road, Salisbury	https://goo.gl/maps/q6fqdTXxiNz																			\$	-			
Cb1	Cabarrus	10	x			x		GW Carver Elementary	2017		525 East C St, Kannapolis	https://goo.gl/maps/GKXMzG97RgD2																			\$	-			
Cb2	Cabarrus	10	x			x		Kannapolis Middle	2017		1445 Oakwood Ave, Kannapolis	https://goo.gl/maps/EWCX1WawLpE2	1	1				1								1	100				\$	502,947			
Cb3	Cabarrus	10	x			x		Cabarrus Early College of Technology	2017		670 Concord Parkway North, Concord	https://goo.gl/maps/VQblgLwZ1aG2																			\$	-			
Cb4	Cabarrus	10	x			x		W. R. Odell Elementary	2017		1885 Odell School Rd, Concord	https://goo.gl/maps/dDvdclFhfpSA2	1	1												100				\$	456,750				
Cb5	Cabarrus	10		x				Cabarrus Charter School	2016		355 Poplar Crossing Dr NW, Concord	https://goo.gl/maps/GPTSh8H4wzy						1		1						100				\$	500,000				
Cb6	Cabarrus	10		x		x		Kannapolis Charter Academy	2016		1911 Concord Lake Road, Kannapolis	https://goo.gl/maps/ZwwgDYpm9op		1	1	1		1								100				\$	502,654				
Cb7	Cabarrus	10			x	x		Faith Christian Academy	2016		904 Chipola Street, Kannapolis	https://goo.gl/maps/bwG7Y45ZzdH2																			\$	-			

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			Public	Charter	Private	New	Expanded	Relocated						Left Turn Lane	Right Turn Lane	Sidewalk	Curb & Gutter	Drainage	Roadway Construct	Median or Island	Traffic Signal	Pedestrian Signal	Street Lights	Right-of-way	Utility Relocation	Design	School	NCDOT	Municipality	Developer	Other	School
MC1	Mecklenburg	10	x			x			Charlotte Teacher Early College	2018		9201 University City Blvd, Charlotte	https://goo.gl/maps/Uw696Wr1h4z															\$	-			
MC2	Mecklenburg	10	x			x			eLearning Academy	2017		800 Everett Place, Charlotte	https://goo.gl/maps/8snnG8kxwgD2															\$	-			
MC3	Mecklenburg	10	x			x			Harper Middle College High	2017		315 W Hebron St, Charlotte	https://goo.gl/maps/EDKdhVRHFKo															\$	-			
MC4	Mecklenburg	10	x			x			J T Williams Secondary Montessori	2018		2400 Carmine St, Charlotte	https://goo.gl/maps/wV64xhtLNZK2															\$	-			
MC5	Mecklenburg	10	x			x			JM Alexander Middle	2017		12010 Hambright Rd, Huntersville	https://goo.gl/maps/LVzmMPF9D72	1	1	1									100			\$	519,680			
MC6	Mecklenburg	10	x			x			Lawrence Orr Elementary	2015		4835 Shamrock Dr, Charlotte	https://goo.gl/maps/mhvo9KVnkbv	1	1	1	1	1		1					100			\$	320,855			
MC7	Mecklenburg	10	x			x			Marie G Davis	2018		3351 W Griffith St, Charlotte	https://goo.gl/maps/FmPxQNZjh3U2															\$	-			
MC8	Mecklenburg	10	x			x			Merancas Middle College High	2018		11930 Verhoeff Dr, Huntersville	https://goo.gl/maps/JKV27bLqyaG2															\$	-			
MC9	Mecklenburg	10	x			x			Nations Ford ES (at Waddell) (13)	2016		7050 Nations Ford Rd, Charlotte	https://goo.gl/maps/gjsuKodtLXu								1				100			\$	25,165			
MC10	Mecklenburg	10	x			x			Newell Elementary	2015		325 Rocky River Rd W, Charlotte	https://goo.gl/maps/VmFYv4GRjt						1						100			\$	570,300			
MC11	Mecklenburg	10	x			x			Oakhurst STEAM Academy	2015		4511 Monroe Rd, Charlotte	https://goo.gl/maps/x6sj2blw9py			1	1								100			\$	91,196			
MC12	Mecklenburg	10	x			x			Parkside Elementary	2015		2945 Johnston-Oehler Rd, Charlotte	https://goo.gl/maps/LRD0uy6LuZT2		1	1	1			1					100			\$	152,355			
MC13	Mecklenburg	10	x			x			Renaissance West STEAM Academy	2018		3241 New Renaissance Way, Charlotte	https://goo.gl/maps/7gxP6sAiaf8															\$	-			
MC14	Mecklenburg	10	x			x			Starmount Academy of Excellence	2015		1600 Brookdale Ave, Charlotte	https://goo.gl/maps/gZadfaKT8cn															\$	-			
MC15	Mecklenburg	10	x			x			Statesville Road Elementary (13)	2016		5833 Milhaven Ln, Charlotte	https://goo.gl/maps/2oVh9luch52	1		1	1								100			\$	183,230			
MC16	Mecklenburg	10	x			x			Vaughan Academy of Technology	2018		8601 Old Concord Rd, Charlotte	https://goo.gl/maps/YKYnWN37Eky															\$	-			
MC17	Mecklenburg	10		x		x			Charlotte Lab School	2015		301 E 9th Street, Charlotte	https://goo.gl/maps/pGWZXELTML82															\$	-			
MC18	Mecklenburg	10		x		x			Charlotte Teacher Early College	2017		9201 University City Blvd	https://goo.gl/maps/Kc91s1zt89s															\$	-			
MC19	Mecklenburg	10		x			x		Freedom Drive Charter	2017		2701 & 2615 Freedom Drive, Charlotte	https://goo.gl/maps/Q1U1r1LVW6K2															\$	-			
MC20	Mecklenburg	10		x		x			Lake Norman Charter Elementary	2017		10019 Hambright Road, Huntersville	https://goo.gl/maps/5Q4f5d8kA832	1	1										100			\$	389,375			
MC21	Mecklenburg	10		x			x		Lake Norman Charter School	2017		12435 S Old Statesville Rd, Huntersville	https://goo.gl/maps/baoT7b6iGnt															\$	-			
MC22	Mecklenburg	10		x		x			Mallard Creek STEM Academy	2016		9142 Browne Rd, Charlotte	https://goo.gl/maps/VTiqMn93xaz		1	1	1		1						100			\$	197,633			
MC23	Mecklenburg	10		x		x			Matthews Charter Academy	2016		2332 Mount Harmony Church Rd, Matthews	https://goo.gl/maps/Nsl1Zs8AC7z		1	2	2		1						100			\$	455,075			
MC24	Mecklenburg	10		x		x			Movement Charter	2017		2701-B Freedom Dry, Charlotte	https://goo.gl/maps/6oP9ziTA5H2															\$	-			
MC25	Mecklenburg	10		x			x		Pioneer Spring Charter	2016		9300 Bob Beatty Rd, Charlotte	https://goo.gl/maps/oenZXQm96eE2	1											100			\$	70,000			
MC26	Mecklenburg	10		x		x			Queen City STEM School	2015		8701 Mallard Creek Rd, Charlotte	https://goo.gl/maps/eFxrQmQ3Gs															\$	-			
MC27	Mecklenburg	10		x		x			Stewart Creek High	2015		2701-F Freedom Drive, Charlotte	https://goo.gl/maps/VDcf568hKat															\$	-			
MC28	Mecklenburg	10		x		x			Unity Classical Charter	2017		1929 W Arrowood Rd, Charlotte	https://goo.gl/maps/NtzcWUK9bN32															\$	-			
MC29	Mecklenburg	10		x		x			UpROAR Leadership Academy	2017		5500 North Tryon St, Charlotte	https://goo.gl/maps/gvTcjsFJN6o			1									100			\$	12,720			
MC30	Mecklenburg	10		x		x			VERITAS Community School, CFA	2015		2600 Grimes Street, Charlotte	https://goo.gl/maps/KUxheG1UNSI2															\$	-			
MC31	Mecklenburg	10			x	x			Bradford Preparatory	2016		2502 State Rd 2469, Charlotte	https://goo.gl/maps/hmwpVohpQjH2	1	1		3	1					1	100			\$	353,620				
MC32	Mecklenburg	10			x	x			Combine Academy	2017		646 Matthew-Mint Hill Road, Matthews	https://goo.gl/maps/xB1Yn6W4xzo															\$	-			
MC33	Mecklenburg	10			x	x			Cornerstone Adventist Academy	2017		11431 University City Boulevard, Charlotte	https://goo.gl/maps/Zx9mkDqN2zk2															\$	-			
MC34	Mecklenburg	10			x	x			Davidson Center for Learning	2017		452 S. Main Street, Suite 110, Davidson	https://goo.gl/maps/masLZXDjps62															\$	-			
MC35	Mecklenburg	10			x	x			Davidson Green School	2015		511 S Main St, Davidson	https://goo.gl/maps/SmaXT7U3ij52															\$	-			
MC36	Mecklenburg	10			x	x			Daystar Arising Academy	2017		1311 Matthews Mint-Hill Rd. Matthews	https://goo.gl/maps/HkdGB5tgr82															\$	-			
MC37	Mecklenburg	10			x	x			Einstein School of Charlotte	2016		3307 Rea Rd c/o Good Shep. Ch, Charlotte	https://goo.gl/maps/T2pUBmeU9YT2															\$	-			
MC38	Mecklenburg	10			x	x			ELA Christian School	2016		512 West 32nd Street, Charlotte	https://goo.gl/maps/TBpnayLr1522															\$	-			
MC39	Mecklenburg	10			x	x			Faith Baptist Christian School	2015		6840 Wilson Grove Road, Charlotte	https://goo.gl/maps/PVbjyEuFUH82															\$	-			
MC40	Mecklenburg	10			x	x			Friendship Day Sch. for Sci. & Arts	2017		3301 Beatties Ford Road, Charlotte	https://goo.gl/maps/FAR1GF8kU922															\$	-			
MC41	Mecklenburg	10			x	x			Howard Levine Child Development Center	2016		3404 West Boulevard, Charlotte, NC	https://goo.gl/maps/cf8PY72P1nt															\$	-			
MC42	Mecklenburg	10			x	x			Intellicor International Academy	2017		4301 Shamrock Drive, Charlotte	https://goo.gl/maps/yqvOC2U8bTF2															\$	-			

School Road Improvement Study

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MC43	Mecklenburg	10			x	x		K-2 Academy	2017		605 South Street, Davidson	https://goo.gl/maps/dxMhUi944Fw																			\$	-				
MC44	Mecklenburg	10			x	x		Kent Academy	2015		1819 Charlotte Drive, Charlotte	https://goo.gl/maps/iHYWnxDMtxx																			\$	-				
MC45	Mecklenburg	10			x	x		Kidville Kovar Child Development	2017		2624 Milton Road, Charlotte	https://goo.gl/maps/zwRazek9v972																			\$	-				
MC46	Mecklenburg	10			x	x		Kidz Place Academy - Badger	2016		1240 Badger Court, Charlotte	https://goo.gl/maps/rgbGfaxDcx62																			\$	-				
MC47	Mecklenburg	10			x	x		Kidz Place Academy - Charlotte	2016	17	7008 - 7 E W.T. Harris Blvd, Charlotte	https://goo.gl/maps/R3KejVVEYa32																			\$	-				
MC48	Mecklenburg	10			x	x		Legacy Leadership Academy	2016		1994 University City Church Dr, Huntersville	https://goo.gl/maps/ZiwWG5QNVSB2																			\$	-				
MC49	Mecklenburg	10			x	x		Lorraine Academy	2015	17	3242 Ridge Rd, Charlotte	https://goo.gl/maps/HHfqcvDvTYN2																			\$	-				
MC50	Mecklenburg	10			x	x		Mallard Creek Learning Center	2015		8765 Browne Road - Unit A, Charlotte	https://goo.gl/maps/4ngZzMmrSiS2		1		1											100				\$	161,983				
MC51	Mecklenburg	10			x	x		NDC Academy	2017		1025 E. 36th Street, Charlotte	https://goo.gl/maps/eEPzjwFA7fk																			\$	-				
MC52	Mecklenburg	10			x	x		Prosperity Guidepost Montessori	2017		4755 Prosperity Church Road, Charlotte	https://goo.gl/maps/Mju8beD43Ym																			\$	-				
MC53	Mecklenburg	10			x	x		R.C. Smith Christian Academy	2016		11901 Eastfield Rd, Huntersville	https://goo.gl/maps/n9KGfnyWZ9C2	1													100					\$	210,000				
MC54	Mecklenburg	10			x	x		Shining Stars Academy - Arrowood	2016		14115 Lancaster Highway, Charlotte	https://goo.gl/maps/8FQb4iqnixm																			\$	-				
MC55	Mecklenburg	10			x	x		SOAR Academy	2015	17	2409 Plantation Center Dr., Suite A, Matthews	https://goo.gl/maps/xGZGmk32FzL2																			\$	-				
MC56	Mecklenburg	10			x	x		T.A.P.S. Preparatory Academy	2017		9100 Olmsted Drive, Charlotte	https://goo.gl/maps/hsEBV5LK1ND2																			\$	-				
MC57	Mecklenburg	10			x	x		Tools Academy Christian School	2015	16	20823 B North Main St, Cornelius	https://goo.gl/maps/3fzRrWETvKk																			\$	-				
St1	Stanly	10		x			x	Oakboro Choice STEM	2017		1244 N Main St, Oakboro	https://goo.gl/maps/nXdbi13FH8S2																			\$	-				
St2	Stanly	10			x	x		Uwharrie Academy	2017		125 Charter Street, Albemarle	https://goo.gl/maps/c3di6nLVCE2																			\$	-				
Un1	Union	10		x		x		Union Day School	2016		8120 Kensington Dr, Waxhaw	https://goo.gl/maps/xCK1uh9oLaT2																			\$	-				
Un2	Union	10		x		x		Union Prep. Academy at Indian Trail	2016		2324 Younts Rd, Indian Trail	https://goo.gl/maps/V24cuphNxow	1	1	2	2		1	1							100					\$	656,182				
Un3	Union	10			x	x		Abundant Life Christian Academy	2015		4224 Blanchard Cir., Indian Trail	https://goo.gl/maps/wwwmdmzveY92																			\$	-				
Un4	Union	10			x	x		Anderson Academy	2017		1915 Hasty Road, Marshville	https://goo.gl/maps/CdYK1uGeExl2																			\$	-				
Un5	Union	10			x	x		Classical Liberal Arts Academy	2015		1621 Stack Road, Monroe	https://goo.gl/maps/flydegke6k42																			\$	-				
Un6	Union	10			x	x		Kids R Kids Learning Academy	2016		5549 Potter Rd, Matthews	https://goo.gl/maps/ZVpvotMQ5TK2																			\$	-				
Un7	Union	10			x	x		Kingdom Bridge Academy	2016		10015 Royal Colony Dr, Waxhaw	https://goo.gl/maps/XalouXMWuvN2																			\$	-				
Un8	Union	10			x	x		Marvin Academy	2017		1525 Crane Road, Waxhaw	https://goo.gl/maps/GBzrFUjt2Q2																			\$	-				
Wt1	Watauga	11	x				x	Watauga Innovation Academy	2015		300 Go Pioneers Dr, Boone	https://goo.gl/maps/o5mthryktSE2																			\$	-				
Sy1	Surry	11			x	x		Inspire Learning Center, LLC	2017		360 Stanford Church Road, Siloam	https://goo.gl/maps/hphmSJ7RSJD2																			\$	-				
Sy2	Surry	11			x	x		Salem Christian Academy	2015		430 Rockford Road, Dobson	https://goo.gl/maps/dfggahClvi92																			\$	-				
Sy3	Surry	11			x	x		Yadkin Valley Community School	2016		240 Standard Street, Elkin	https://goo.gl/maps/BR4ySduXjg12																			\$	-				
Cl1	Cleveland	12		x				x	Pinnacle Classical Academy	2017		900 S Post Rd, Shelby	https://goo.gl/maps/6KbSgxpnb8s		3				1								100					\$	400,000			
Id1	Iredell	12	x				x		Agriculture & Science Early College	2017		158 Raider Rd, Olin	https://goo.gl/maps/d8CmZ9wrznM2																		\$	-				
Id2	Iredell	12	x					x	North Iredell High	2017		156 Raider Rd, Olin	https://goo.gl/maps/BAfgzHcyRHm																		\$	-				
Id3	Iredell	12		x		x			Iredell Charter Academy	2016		251 Home Improvement Street, Troutman	https://goo.gl/maps/MbuahdWSLDD2	2	1	1	1									100					\$	734,000				
Id4	Iredell	12		x		x			Langtree Charter High	2016		185 W Waterlynn Rd, Mooresville	https://goo.gl/maps/ZKCxx4pPYR22	1	4	1	3		3		1					100					\$	3,860,950				
Id5	Iredell	12			x	x			Independence Day Academy	2016		724 Saint Cloud Drive, Statesville	https://goo.gl/maps/THmPFBJSMTs																		\$	-				
Id6	Iredell	12			x	x			Outreach Academy	2015		1424 Rickert St, Statesville	https://goo.gl/maps/jp8Lk46bFCH2																		\$	-				
Id7	Iredell	12			x	x			Primrose School of Lake Norman	2017		173 Raceway Drive, Mooresville	https://goo.gl/maps/1HDoGxiNpFT2																		\$	-				
Lc1	Lincoln	12		x				x	Lincoln Charter School - Denver	2017		7834 Galway Ln, Denver	https://goo.gl/maps/NsEVVeaouCL2																		\$	-				
Ax1	Alexander	12			x		x		Alexander Early College	2017		230 Industrial Blvd, Taylorsville	https://goo.gl/maps/FRPzm6PYaFm																		\$	-				
Ax2	Alexander	12			x		x		Alexander Christian Acad, Calvary Chapel	2017		61 C. I. Chatman Court, Taylorsville	https://goo.gl/maps/XYaNCkUpnmn																		\$	-				
Ax3	Alexander	12			x		x		Alexander Christian Acad, Hiddenite	2017		7860 NC 90, Stoney Point	https://goo.gl/maps/FGXHEMYawVy																		\$	-				
Ct1	Catawba	12			x		x		Teen Challenge NC Adolescent	2015		6692 Valwood Rd, Conover	https://goo.gl/maps/eCPrNaSo3dU2																		\$	-				

Study ID (Co){No}	County	NCDOT Division	Type			Project Scope			School Name	Year Completed Between July 1, 2015 July 1, 2017	Year Closed	School Location (Physical Address)	Google Map Link or Physical Location Coordinates	Type Road Improvements														Funding Source (Percent)		Cost of Road Improvement by Funding Source				
			Public	Charter	Private	New	Expanded	Relocated						Left Turn Lane	Right Turn Lane	Sidewalk	Curb & Gutter	Drainage	Roadway Construct	Median or Island	Traffic Signal	Pedestrian Signal	Street Lights	Right-of-way	Utility Relocation	Design	School	NCDOT	Municipality	Developer	Other	School	NCDOT	Municipality
Cv1	Cleveland	12			x	x			Charity Christian School	2016		113 Charity Church Rd, Lawndale	https://goo.gl/maps/Wi6Kdduirbr																\$	-				
Gt1	Gaston	12	x			x			Gaston Co Schs Virtual Academy	2017		366 W Garrison Blvd, Gastonia	https://goo.gl/maps/ad2KAjYtQpH2																\$	-				
Gt2	Gaston	12	x			x			Hawks Nest STEAM Academy	2017		3430 Robinwood Rd, Gastonia	https://goo.gl/maps/vkGMaIV946x																\$	-				
Gt3	Gaston	12			x	x			Hope Collegiate Academy	2015		625 E. 2nd Avenue, Suite 1, Gastonia	https://goo.gl/maps/cbaTGHit6wg																\$	-				
Ln1	Lincoln	12			x	x			Denver Christian Academy	2016		2243 NC 16 Business, Denver	https://goo.gl/maps/9vqwwoopRGx																\$	-				
Bu1	Buncombe	13	x			x			Asheville Primary	2017		441 Haywood Rd, Asheville	https://goo.gl/maps/bNe6QYdGLQQ2																\$	-				
Bu2	Buncombe	13	x				x		Charles D Owen High	2016		99 Lake Eden Rd, Black Mountain	https://goo.gl/maps/MCWHScNyn1G2																\$	-				
Bu3	Buncombe	13	x				x		Charles D Owen Middle	2017		730 Old Us 70, Swannanoa	https://goo.gl/maps/pQ6a9hsspsN2																\$	-				
Bu4	Buncombe	13	x				x		Clyde A Erwin High (1972)	2016		60 Lees Creek Rd, Asheville	https://goo.gl/maps/IT3jGMvEfw62															\$	-					
Bu5	Buncombe	13	x			x			Enka Intermediate	2017		125 Asheville Commerce Pkwy, Candler	https://goo.gl/maps/Njvei7m9zsN2				1		2		1	1				80	20				\$	50,000	\$	207,445
Bu6	Buncombe	13	x				x		Fairview Elementary	2016		1355 Charlotte Hwy, Fairview	https://goo.gl/maps/NduEYH5ZTG62																\$	-				
Bu7	Buncombe	13	x			x			Montford North Star Academy	2017		90 Montford Ave, Asheville	https://goo.gl/maps/nVFEWfGfuwu																\$	-				
Bu8	Buncombe	13	x				x		North Buncombe Elementary	2015		251 Flat Creek Church Rd, Weaverville	https://goo.gl/maps/kdVMYmWYElQ2								1					100			\$	85,000				
Bu9	Buncombe	13			x	x			Black Mountain Academy	2017		501 W State St, Black Mountain	https://goo.gl/maps/nRv5jpP8iv62																\$	-				
Bu10	Buncombe	13			x	x			Canterbury Classical School	2017		385 Hazel Mill Rd, Asheville	https://goo.gl/maps/X1654u3UjnH2																\$	-				
Bu11	Buncombe	13			x	x			French Broad River Academy	2016		191 Lyman St, #316, Asheville	https://goo.gl/maps/1snYMHKsXDq																\$	-				
Bu12	Buncombe	13			x	x			Montford Hall	2016		75 Zillicoa St, Asheville	https://goo.gl/maps/9BtZ4Wi2LPv																\$	-				
Bu13	Buncombe	13			x	x			Woodson Branch Nature School	2017		14555 US Hwy 25/70, Marshall	https://goo.gl/maps/CFeGbyJ75fR2																\$	-				
Bk1	Burke	13	x				x		Heritage Middle	2016		1951 Enon Rd, Valdese	https://goo.gl/maps/7KpkJK9GnAu	1												100			\$	297,000				
Bk2	Burke	13			x	x			Christ Classical Academy	2016		400 Malcolm Blvd, Connelly Springs	https://goo.gl/maps/P6CgWwJkKnz																\$	-				
Md1	McDowell	13	x				x		East McDowell Middle	2016		676 State Street, Marion	https://goo.gl/maps/yKuuyH2TuMr																\$	-				
Md2	McDowell	13	x				x		McDowell High	2016		600 McDowell High School Rd, Marion	https://goo.gl/maps/TS885uYddCm																\$	-				
Md3	McDowell	13	x				x		West McDowell Middle	2016		346 W McDowell High School Rd, Marion	https://goo.gl/maps/XEoggP5vqUG2																\$	-				
Rd1	Rutherford	13		x				x	Lake Lure Classical Academy	2015		1058 Island Creek Rd, Lake Lure	https://goo.gl/maps/6ux8TKy2KsR2																\$	-				
Rd2	Rutherford	13			x	x			Faith Academy	2015		191 Walkaloosa Way, Mooresboro	https://goo.gl/maps/2CKbtMGkQpH2																\$	-				
Ck1	Cherokee	14			x	x			Shepherd Academy	2017		68 Fairfax Drive, Murphy	https://goo.gl/maps/5S8zrxjxpTp																\$	-				
Hw1	Haywood	14		x				x	Shining Rock Classical Academy	2015		1023 Dellwood Road, Waynesville	https://goo.gl/maps/h5qDxtSymVr		1	1	1									100			\$	100,920				
Hw2	Haywood	14		x		x			Shining Rock Classical Academy: CFA	2016		21 Shackford Hall Road, Lake Junaluska	https://goo.gl/maps/NeNi7DuRAHX2																\$	-				
Hw3	Haywood	14			x	x			Blue Ridge Adventist Christian	2017		119 Hampshire Drive, Waynesville	https://goo.gl/maps/Zyk49iWVfvS2																\$	-				
Hn1	Henderson	14		x		x			FernLeaf Community Charter	2016		58 Howard Gap Rd, Fletcher	https://goo.gl/maps/2QUoYa2keN22																\$	-				
Hn2	Henderson	14			x	x			Canongate Catholic High	2015		4110 Hendersonville Rd. Ste. 10, Fletcher	https://goo.gl/maps/2zQU1a3p75Q2																\$	-				
Hn3	Henderson	14			x	x			Naturally Grown School	2015		75 Bryson Road, Mills River	https://goo.gl/maps/eUNfTK5ebEP2																\$	-				
Hn4	Henderson	14			x	x			North Carolina Christian Academy	2016	17	425 Linda Vista Drive, Hendersonville	https://goo.gl/maps/ZcdZB1bcenT2																\$	-				
Hn5	Henderson	14			x	x			St. Gerard House	2017		705 Oakland Street, Hendersonville	https://goo.gl/maps/hdSDPEhpQ792																\$	-				
Hn6	Henderson	14			x	x			Talisman Semesters School	2015	17	64 Gap Creek Rd, Zirconia	https://goo.gl/maps/jqxxTZSZSnR2																\$	-				
Hn7	Henderson	14			x	x			The Way Christian Academy	2016		1315 Old Spartanburg Hwy, Hendersonville	https://goo.gl/maps/42YM9JpgTbu																\$	-				
Hn8	Henderson	14			x	x			Timbersong Academy - Bat Cave	2017		2420 Middle Fork Road, Hendersonville	https://goo.gl/maps/q4Q2cVaiACp																\$	-				
Hn9	Henderson	14			x	x			Upward Adventist School	2015		957 Upward Rd, Flat Rock	https://goo.gl/maps/PySt4q3xof22																\$	-				
Js1	Jackson	14	x			x			Catamount School	2017		100 Smoky Mountain Dr, Sylva	https://goo.gl/maps/LV4VUfoTX8t																\$	-				
Tr1	Transylvania	14			x	x			Calvary Baptist Mission Academy	2017		100 Cemetery Road, Pisgah Forest	https://goo.gl/maps/LbTUfahaNk32																\$	-				
Totals													62	63	35	52	10	36	12	15	3	0	0	4	1					\$ 39,230,977	\$ 1,380,995	\$ 733,989		
																											\$ 41,345,961							

APPENDIX B

Road Improvement Details

Tables of Identified New, Expanded or Relocated School Sites with

Identified Road Improvement Details

July 1, 2015 to July 1, 2017

School Road Improvement Study

Road Improvement Details

Division	Study ID (Co)(No)	Road Name	Adjacent to School	Maintained By	Description of any disputes or appeals / additional notes	Road Improvement Type and Cost																		
						Left Turn Lane		Right Turn Lane		Sidewalk		Curb & Gutter		Drainage	Roadway Const.	Median or Island	Traffic Signal	Ped Signal	Street Lights	Right-of-way	Utilities and other cost	Design	Sub Total	Total
						Cost	Bay (ft)	Cost	Bay (ft)	Cost	LF	Cost	LF											
2	Pt3	Staton Rd	x	State	Three lane section across frontage										\$93,750							\$93,750	\$ 93,750	
	Pt4	E Fire Tower Rd/ East Bayswater Rd		State													\$62,500					\$62,500	\$ 175,000	
		E Fire Tower Rd/ West Bayswater Rd (EB)		State				\$112,500	180													\$112,500		
3	Bk1	Sunset Harbor Rd SE/Driveway (SB)	x	State		\$308,000	220															\$308,000	\$ 819,125	
		Sunset Harbor Rd SE/NC211 Southport-Supply Rd SE (WB)		State		\$203,125	325															\$203,125		
		Sunset Harbor Rd SE/NC211 Southport-Supply Rd SE (NB)		State		\$308,000	220															\$308,000		
	Dp1	NC 11 / NC 903 Hwy	x	State	Rt turn lane with island			\$93,750	150								\$2,100					\$95,850	\$ 95,850	
	Dp3	Brooks Quinn Rd	x	State	Rt turn lane with island			\$62,500	100								\$2,100					\$64,600	\$ 64,600	
	Dp4	Lanefield Rd / N Driveway (SB)	x	State	Three lane frontage			\$93,750	150							\$706,250						\$800,000	\$ 1,081,250	
		Lanefield Rd / S Driveway (SB)	x	State				\$125,000	200													\$125,000		
		Lanefield Rd / NC 50 (EB)		State	Additional turn lanes			\$93,750	150													\$93,750		
		Lanefield Rd / NC 50 (NB)		State				\$62,500	100													\$62,500		
	Jo1	NC 58	x	State	Five lane section across frontage										\$505,625						\$505,625	\$ 505,625		
	Nh1	Edgewater Club Road	x	State		\$210,000	150															\$210,000	\$ 210,000	
	Nh5	Sidbury Rd / School Driveway	x	State	Temp location, 3 lane section											\$271,875						\$271,875	\$ 334,375	
		Sidbury Rd / Dairy Farm Rd (EB)		State		\$62,500	100															\$62,500		
	Pd1	Shepards Rd / School Driveway (WB)	x	State		\$350,000	250																\$350,000	\$ 708,125
		Shepards Rd / Perkins Dr (EB)		State				\$54,375	87														\$54,375	
		Shepards Rd / NCSO (EB)		State		\$93,750	150																\$93,750	
		NCSO / Shepards Rd (NB)		State		\$210,000	150																\$210,000	
4	Jn3	Norris Rd	x	State	None indicated	\$280,000	200	\$234,375	375			\$10,110	455		\$597,000							\$1,121,485	\$ 1,121,485	
	Jn5	Town Centre Blvd (Financial Dr)		State	Off campus	\$350,000	250															\$350,000	\$ 350,000	
	WA1	US Hwy 13 South	x	State	Three lane section across frontage			\$112,500	180						\$404,375							\$516,875	\$ 516,875	
5	Vn1	Ross Mill Rd	x	State	Center turn lane	\$312,500	500															\$312,500	\$ 312,500	
	Wk1	Durant Rd / Dunn Road		State	Signal on state road			\$93,750	150	\$11,600	290	\$6,444	290				\$138,000					\$249,794	\$ 776,338	
		Dunn Rd (Proposed Throughfair)		Municipality	Driveway part of a city throughfair plan					\$55,200	1380	\$30,664	1380	\$46,545	\$261,492							\$393,901		
		Durant Rd / EMS Driveway (Shaired)	x	Municipality	Sharing driveway with Wake EMS					\$15,200	380	\$8,444	380		\$109,000							\$132,644		
	Wk2	Humie Olive Rd	x	State	None indicated					\$112,000	2800				\$1,550,000							\$1,662,000	\$ 2,770,388	
		Whistling Quail Run		State		\$140,000	100	\$100,000	160													\$240,000		
		Blazing Trail Dr		State		\$168,000	120															\$168,000		
		Evans Rd / Humie Olive Rd		State				\$125,000	200			\$10,888	490									\$135,888		
		Old US Hwy 1		State		\$252,000	180	\$312,500	500													\$564,500		
	Wk3	Tarheel Club Rd	x	State	Offset intersection of Tarheel Club/Tarheel Clubhouse					\$23,600	590	\$13,110	590		\$135,417							\$172,127	\$ 1,182,088	
		Tarheel Club Rd/Tarheel Clubhouse Rd	x	State						\$33,600	840	\$17,776	800	\$129,005		\$6,000					\$186,381			
		Tarheel Clubhouse Rd	x	State					\$102,080	2552				\$549,500							\$651,580			
		Old Milburnie Rd / Tarheel Club Rd		State				\$93,750	150					\$78,250							\$172,000			
	WK5	Bryan Rd	x	State	School site on gravel road										\$2,760,571							\$2,760,571	\$ 2,760,571	
	Wk7	Snelling Rd	x	State	signal timing in scope, other road work internal									\$178,434	\$850,108		\$64,264				\$43,929	\$1,136,735	\$ 64,264	
WK8	Roberts Rd	x	State	RtBay = 250 + 200 + 175, center lane for LtB	\$700,000	500	\$390,625	625	\$83,200	2080											\$1,173,825	\$ 2,430,225		
	Green Level Church Rd	x	State	LtB = 300 + 570	\$1,218,000	870			\$38,400	960											\$1,256,400			

School Road Improvement Study

Road Improvement Details

Division	Study ID (Co){(No)}	Road Name	Adjacent to School	Maintained By	Description of any disputes or appeals / additional notes	Road Improvement Type and Cost																		
						Left Turn Lane		Right Turn Lane		Sidewalk		Curb & Gutter		Drainage	Roadway Const.	Median or Island	Traffic Signal	Ped Signal	Street Lights	Right-of-way	Utilities and other cost	Design	Sub Total	Total
						Cost	Bay (ft)	Cost	Bay (ft)	Cost	LF	Cost	LF											
5	Wk10	O'Kelly Chapel Rd (EB) / Claystone Ln	x	State		\$93,750	150																\$93,750	\$ 933,084
		O'Kelly Chapel Rd (EB) / Stonecroft Ln	x	State	Extend EB LT lane to 150 ft, 900 SW&CG	\$31,250	50			\$36,000	900	\$19,998	900				\$36,664						\$123,912	
		O'Kelly Chapel Rd (WB) / Yates Store Rd	x	State	Extend WB LT lane to 325 ft	\$31,250	50			\$38,000	950	\$21,109	950				\$42,218						\$132,577	
		O'Kelly Chapel Rd (WB) / Stonecroft Ln	x	State	Extend WB LT lane to 400 ft	\$71,875	115																\$71,875	
		O'Kelly Chapel Rd (EB) / Greenlevel Ch Rd	x	State	500 ft Raised Island					\$187,500	300						\$22,220						\$209,720	
		O'Kelly Chapel Rd (EB) / NC55	x	State	Extend EB LT lane to 600 ft					\$281,250	450												\$281,250	
		Yates Store Rd (NB)	x	State						\$20,000	500												\$20,000	
	Wk12	Holly Springs-New Hill Rd / Dw1 (WB)	x	State					\$62,500	100													\$62,500	\$ 304,750
		Holly Springs-New Hill Rd / Dw2 (EB)	x	State		\$175,000	125									\$36,000							\$211,000	
		Holly Springs-New Hill Rd / Dw2 (WB)	x	State					\$31,250	50													\$31,250	
	Wk13	Bartram Place	x	State												\$207,603							\$207,603	\$ 1,257,647
		Leesville Ch Rd	x	State								\$8,095	364			\$687,628							\$695,723	
		Leesville Rd / Strickland Rd Intersection		State						\$6,188	154					\$227,108		\$121,025					\$354,321	
	Wk14	Pleasant Grove Church Rd (Airport Rd)	x	State		\$50,000	80	\$93,750	150			\$14,364	320	\$6,725	\$133,818					\$52,250			\$350,907	\$ 440,337
		Comstock Road	x	State								\$2,540	175			\$56,169				\$30,721			\$89,430	
	Wk16	N Rogers Lane	x	State	Signal w poles	\$280,000	200	\$93,750	150	\$32,680	817						\$200,000						\$606,430	\$ 606,430
	Wk18	Apex Barbecue Rd / DW 1 - Headhewn Dr (EB)	x	State		\$62,500	100	\$43,750	100	\$25,720	\$643	\$14,287	643										\$146,257	\$ 829,295
		Apex Barbecue Rd / DW 1 - Headhewn Dr (WB)	x	State		\$125,000	200																\$125,000	
		Apex Barbecue Rd / DW 2 - Scotts Ridge Trail (EB)	x	State		\$62,500	100	\$65,625	150														\$128,125	
		Apex Barbecue Rd / DW 2 - Scotts Ridge Trail (WB)	x	State		\$62,500	100					\$14,287	643										\$76,787	
		Apex Barbecue Rd / Town Side Dr (SB)		State				\$9,375	150														\$9,375	
		Apex Barbecue Rd / South Salem St (Old US1){EB}		State				\$125,000	200														\$125,000	
		Apex Barbecue Rd / South Salem St (Old US1){SB}		State				\$125,000	200														\$125,000	
		Apex Barbecue Rd / South Salem St (Old US1){NB}		State		\$93,750	150																\$93,750	
	Wk19	New Bethel Church Rd	x	State		\$207,666	325			\$16,073	1043	\$16,489	1070	\$19,899	\$133,290								\$393,417	\$ 3,693,808
		Hebron Church Rd	x	State	Likely cost for water mitigation	\$175,725	275	\$93,750	150	\$39,326	2552	\$40,297	2615	\$113,492	\$42,024					\$199,935			\$704,549	
		Clifford Rd	x	State	Utility cost for water and sewer	\$206,468	270			\$9,400	610	\$9,585	622	\$33,755						\$1,141,589			\$1,400,797	
		Hebron Church Rd/White Oak Rd		State	Roadway cost is 665 ft paved sholder	\$363,686	375					\$4,238	275	\$41,062									\$408,986	
		New Bethel Church Rd/Benson Rd NC50		State		\$137,943	450	\$156,250	250						\$138,444								\$432,637	
		New Bethel Church Rd/Benson Rd NC50		State													\$115,000					\$238,422	\$353,422	
	Wk20	White Oak Church Rd/Ridgeback Rd/School	x	State	Roundabout at driveway									\$204,929	\$1,133,012								\$1,337,941	\$ 1,462,941
		White Oak Church Rd/Green Level W Rd		State	left turn lane			\$125,000	200														\$125,000	
Wk35	Franklin Pierce Dr / Simpkins Rd		State	None Indicated	\$140,000	100																\$140,000	\$ 265,000	
	Simkins Rd/Fayetteville Rd - US401		State				\$125,000	200														\$125,000		
7	Gf1	Flemingfield Road	x	State	None Indicated									\$259,584								\$259,584	\$ 625,000	
		Flemingfield Road/Burlington Rd		State		\$182,000	130	\$93,750	150			\$9,666	435			\$80,000						\$365,416		
	Gf2	Yanceyville St/Lorraine Rd	x	State	None Indicated	\$251,250	200	\$93,750	150							\$120,000						\$465,000	\$ 465,000	
	Gf3	US70 / Riverdale Dr	x	State	City required turn lane school stated high bus ridership	\$46,875	150	\$78,125	125							\$15,000						\$140,000	\$ 140,000	
	Gf4	Landis Rd	x	State	None Indicated	\$112,000	80																\$112,000	\$ 218,250
		US158/ Tabbs Creek Rd		State				\$106,250	170														\$106,250	
Rh1	Hudson Road	x	State	Rd widening: Tapers and Turn Lanes on US-158										\$196,201	\$80,000							\$276,201	\$ 276,201	
8	Rd1	US Hwy 220 Business S	x	State		\$595,000	425															\$595,000	\$ 595,000	

School Road Improvement Study

Road Improvement Details

Division	Study ID (Co)(No)	Road Name	Adjacent to School	Maintained By	Description of any disputes or appeals / additional notes	Road Improvement Type and Cost																		
						Left Turn Lane		Right Turn Lane		Sidewalk		Curb & Gutter		Drainage	Roadway Const.	Median or Island	Traffic Signal	Ped Signal	Street Lights	Right-of-way	Utilities and other cost	Design	Sub Total	Total
						Cost	Bay (ft)	Cost	Bay (ft)	Cost	LF	Cost	LF											
9	Dv1	Farmington Rd & N Driveway	x	State	Three lane section across frontage			\$31,250	50						\$700,000							\$731,250	\$ 793,750	
		Farmington Rd & S Driveway	x	State				\$62,500	100												\$62,500			
10	Cb2	Oakwood Ave	x	State	widening on SR-1745 (Oakwood Ave)	\$189,000	135	\$140,625	225											\$48,322	\$377,947	\$ 502,947		
		Azalea Ave		Municipality	Improve turning radii									\$125,000							\$125,000			
	Cb4	Davidson Hwy	x	State		\$238,000	170	\$218,750	350												\$456,750	\$ 456,750		
	Cb5	Poplar Crossing Dr NW	x	State	Unidentified improvements									\$475,000		\$25,000					\$500,000	\$ 500,000		
	Cb6	Concord Lake Rd	x	State	Unidentified improvements			\$75,000	120	\$24,600	615	\$15,554	700		\$387,500						\$502,654	\$ 502,654		
	MC5	Hambright Rd / West Driveway	x	State		\$359,375	575	\$93,750	150	\$61,000	1525	\$5,555	250								\$519,680	\$ 519,680		
	MC6	Shamrock Dr	x	Municipality		\$280,000	200			\$17,520	438	\$9,732	438			\$13,603					\$320,855	\$ 320,855		
	MC9	Nations Ford Rd	x	Municipality													\$25,165					\$25,165	\$ 25,165	
	MC10	Rocky River Rd W	x	Municipality	Overall Contribution for Road Improvements										\$570,300						\$570,300	\$ 570,300		
	MC11	Monroe Rd	x	State	Sidewalk along frontage					\$22,800	570	\$12,665	570									\$35,465	\$ 91,196	
		Chippendale Rd	x	Municipality	Relocate road to intersection					\$26,400	660	\$29,330	1320									\$55,730		
	MC12	Johnston-Oehler Rd	x	Municipality	Contribution to CDOT for Road Improvements			\$125,000	200	\$4,000	100	\$1,111	50			\$22,244						\$152,355	\$ 152,355	
	MC15	Milhaven Ln	x	Municipality		\$143,750	230			\$36,036	901	\$3,444	155									\$183,230	\$ 183,230	
	MC20	Hambright Rd	x	State		\$280,000	200	\$109,375	175													\$389,375	\$ 389,375	
	MC22	Browne Rd	x	State				\$62,500	100	\$28,400	710	\$6,333	285		\$100,400							\$197,633	\$ 197,633	
	MC23	Stevens Mill Rd	x	State				\$62,500	100	\$4,400	110	\$3,066	138									\$69,966	\$ 455,075	
		Mount Harmony Church Rd/Stevens Mill Rd	x	State						\$18,000	450	\$20,109	905		\$347,000							\$385,109		
	MC25	Old Statesville Rd		State		\$70,000	50															\$70,000	\$ 70,000	
	MC29	North Tryon St	x	State	Installed siewalk					\$12,720	318											\$12,720	\$ 12,720	
	MC31	N Tryon St		State	Extend left turn lane	\$280,000	200			\$8,000	200	\$6,666	300									\$294,666	\$ 353,620	
		I-485 Exit Ramp		State	Reduce right turn lane radii							\$5,288	238									\$5,288		
		Morehaad Rd / Salome Ch Rd		State				\$47,000	150			\$6,666	300									\$53,666		
	MC50	Browne Road / DeArmon Road	x	State	WB right turn lane on DeArmon Rd			\$156,250	250			\$5,733	258									\$161,983	\$ 161,983	
	MC53	Eastfield Rd	x	State	Center turn lane	\$210,000	150															\$210,000	\$ 210,000	
	Un2	Younts Rd (SB)	x	State		\$250,000	400															\$250,000	\$ 656,182	
		Younts Rd (NB)	x	State				\$250,000	400	\$19,320	483	\$11,554	520			\$2,400						\$283,274		
Brown Lane		x	Municipality	Pave two lanes w C&G, SW					\$6,200	155	\$7,333	330		\$109,375							\$122,908			
12	Cl1	Joes Lake Rd / East Driveway	x	State	Relocating to Joe Lake Road			\$81,250	130												\$81,250	\$ 400,000		
		Joes Lake Rd / Middle Driveway	x	State	Three lane section across frontage			\$106,250	170						\$131,250						\$237,500			
		Joes Lake Rd / West Driveway	x	State				\$81,250	130												\$81,250			
	ld3	Charlotte Hwy US21 / Crosstie Ln		State		\$595,000	425	\$125,000	200	\$9,000	225	\$5,000	225								\$734,000	\$ 734,000		
	ld4	W. Waterlynn Rd	x	State	Widen along frontage					\$44,800	1120				\$250,000							\$294,800	\$ 3,860,950	
		W. Waterlynn Rd / Charlotte Hwy-US21 (SE)		State	Center turn lane	\$1,260,000	900	\$203,125	325			\$5,555	250								\$1,468,680			
		W. Waterlynn Rd / Charlotte Hwy-US21 (NW)		State	New lane 780 ft			\$171,875	275			\$8,333	375		\$487,500						\$667,708			
		Charlotte Hwy / W. Waterlynn Rd (SW)		State	2-600 ft SB lanes 1-450 ft SB lane			\$171,875	275			\$12,888	580		\$1,031,250		\$120,000				\$1,336,013			
Brawley Sc Rd / Roundkeep Ln-Commerce Pk Rd (NB)			State				\$93,750	150												\$93,750				
13	Bu5	Sand Hill Rd		State	Widen Sand Hill Rd and Signal adjustments							\$8,888	400		\$198,557						\$207,445	\$ 257,445		
		Sand Hill Rd / Jacob Holm Way (paid NCDOT)		State	Paid by NCDOT										\$30,000		\$10,000	\$10,000			\$50,000			
	Bu8	Flat Creek Church Rd	x	State	None												\$85,000				\$85,000	\$ 85,000		
	Bk1	Enon Rd	x	State	Widen due to traffic safety concerns	\$297,000	225														\$297,000	\$ 297,000		
14	Hw1	Dellwood Road (US19)	x	State	None			\$81,223	200	\$11,920	298	\$7,777	350								\$100,920	\$ 100,920		

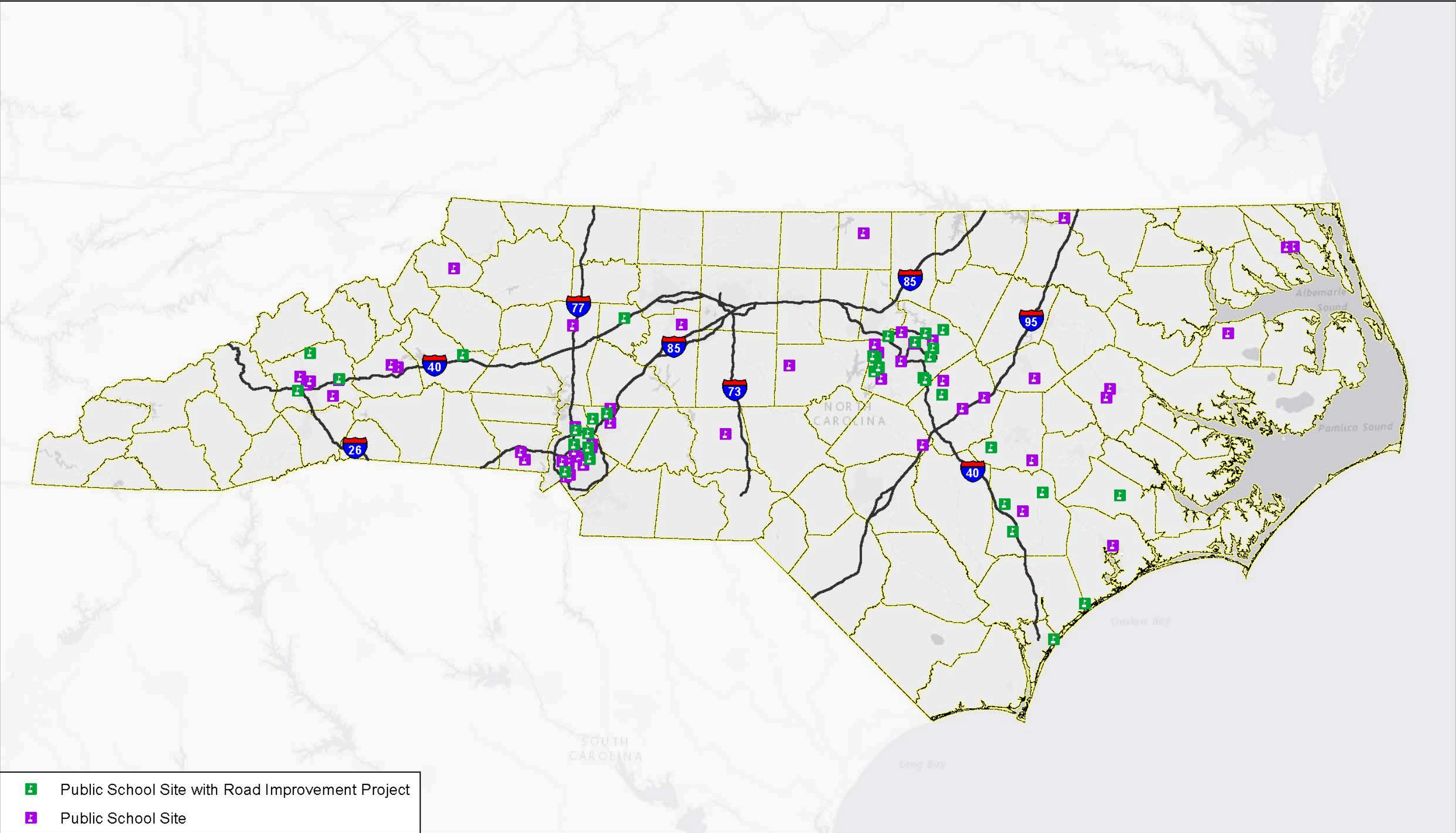
APPENDIX C

GIS Maps

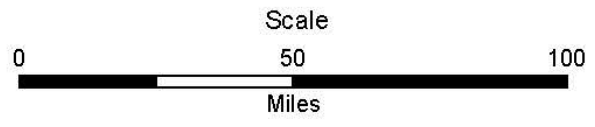
Maps of Identified New, Expanded or Relocated School Sites

Public, Charter and Private

July 1, 2015 to July 1, 2017



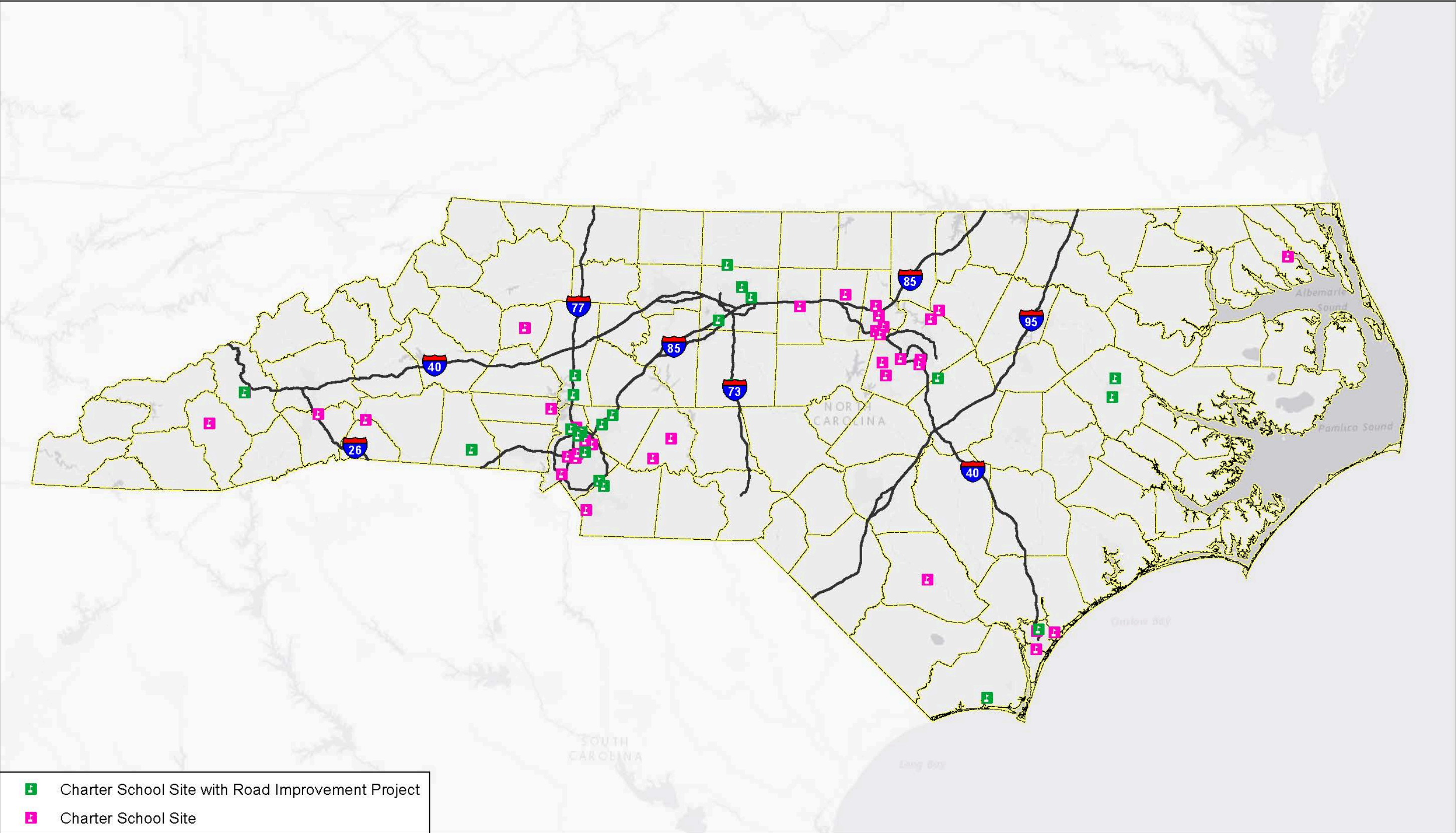
-  Public School Site with Road Improvement Project
-  Public School Site





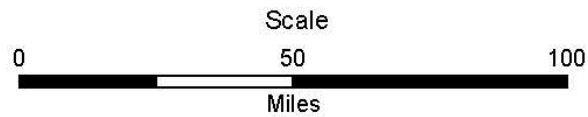
Road Improvements Adjacent to Schools

Public School Sites (New, Expanded, Relocated)
Date: July 1, 2015 to July 1, 2017





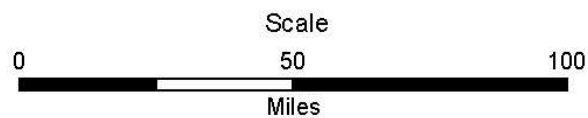
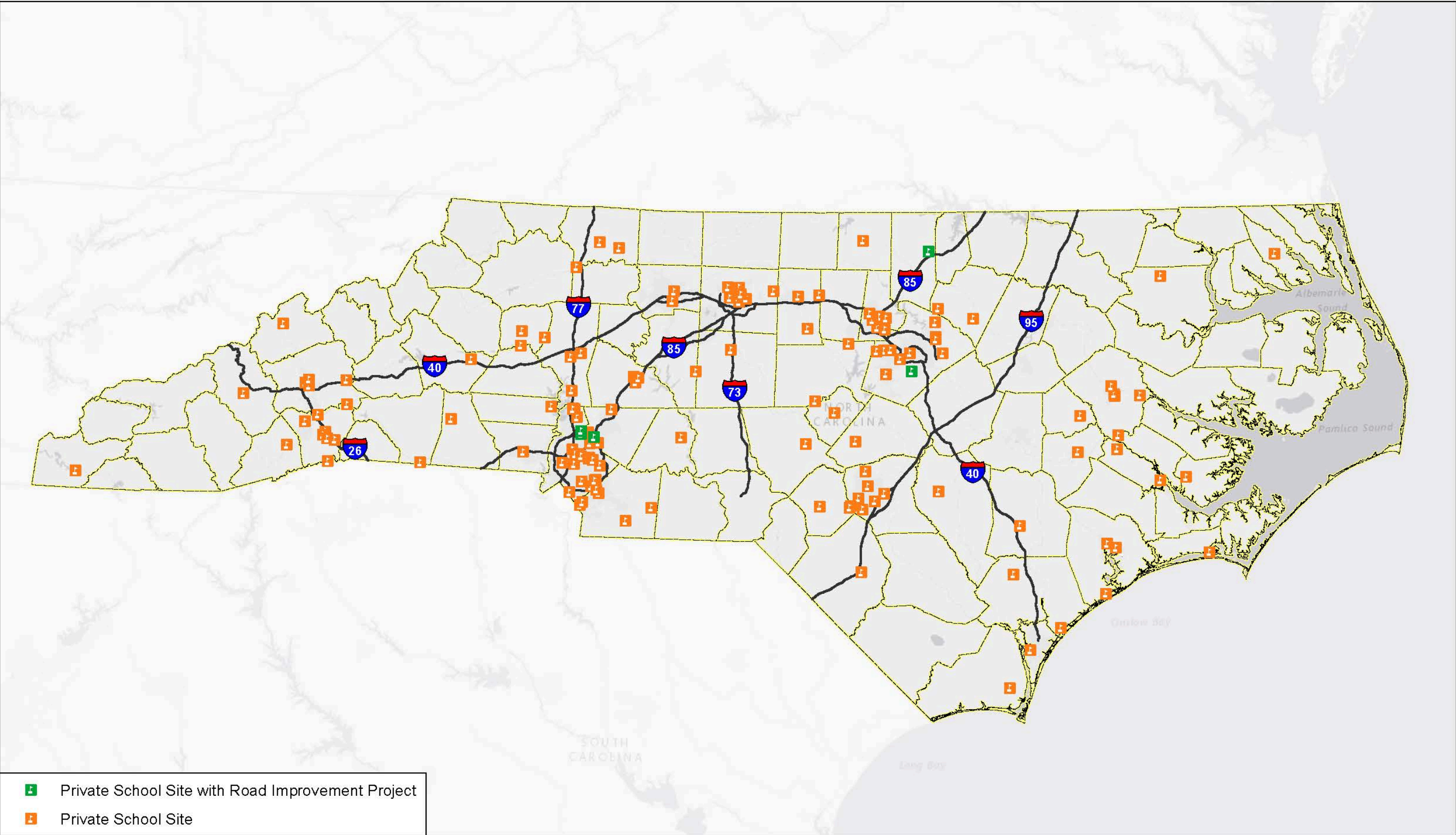
-  Charter School Site with Road Improvement Project
-  Charter School Site



Road Improvements Adjacent to Schools

Charter School Sites (New, Expanded, Relocated)
Date: July 1, 2015 to July 1, 2017





Road Improvements Adjacent to Schools

Private School Sites (New, Expanded, Relocated)

Date: July 1, 2015 to July 1, 2017



APPENDIX D

Example Design and Construction Time Frames for Major School Construction Projects

Example of Reported Wake County Design and Construction Phases

	Start Design Phase	Notice to Proceed (begin of Construction Phase)	Construction Phase Completed	Design Phase (in days)	Construction Phase (in days)	Total Design to Completion of Construction (in days)	Approximate Number of Project Months
Pleasant Grove Elementary (E-38)	3/18/14	4/22/15	8/1/16	400	467	867	28.52
Oakview Elementary (E-43)	4/8/14	5/6/15	7/29/16	393	450	843	27.73
Beaverdam Elementary (E-36)	4/16/14	6/3/15	7/25/16	413	418	831	27.34
South Garner High (H-8)	3/14/13	6/19/14	7/18/16	462	760	1222	40.20
White Oak Elementary (E-37)	3/17/14	5/20/15	7/18/16	429	425	854	28.09
Green Elementary	8/23/13	1/26/15	6/1/16	521	492	1013	33.32
Pine Hollow Middle (M-8)	4/2/13	10/14/14	5/15/16	560	579	1139	37.47
Scotts Ridge Elementary (E-32)	5/13/13	6/18/14	8/3/15	401	411	812	26.71
Abbotts Creek Elementary (E-20)	4/20/13	6/18/14	7/29/15	424	406	830	27.30
Apex Friendship High	2/8/12	5/8/13	6/9/15	455	762	1217	40.03
Richland Creek Elementary	12/21/11	4/10/13	6/10/14	476	426	902	29.67
Wake Young Women's Leadership Academy	2/12/12	1/9/13	8/1/13	332	204	536	17.63
Wake Young Men's Leadership Academy	2/24/12	1/2/13	8/1/13	313	211	524	17.24
Rolesville High	7/16/10	6/9/11	7/1/13	328	753	1081	35.56
Average				421.93	483.14	905.07	29.77
Avg. Years				1.16	1.32	2.48	

Wake County Design and Construction Phases <https://www.wcpss.net/Page/2858>

APPENDIX E

Resources and Links

References Links to Organize

Legislation Reference:

Senate Bill 257: Session Law 2017-57 [Appropriation Act of 2017]

<http://www.ncga.state.nc.us/gascripts/BillLookUp/BillLookUp.pl?Session=2017&BillID=s257&submitButton=Go>

Fiscal Research Statement for Senate Bill 778 (2016)

<https://ncleg.net/Sessions/2015/FiscalNotes/Senate/PDF/SFN0778v4n1.pdf>

North Carolina Department of Public Instruction:

NC DPI – Educational Directory & Demographical Information Exchange

<http://www.ncpublicschools.org/fbs/accounting/eddie/>

NC DPI School Planning Section

<http://www.schoolclearinghouse.org/>

North Carolina Office of Charter Schools

<http://www.ncpublicschools.org/charterschools/schools/>

North Carolina Department of Administration:

NC Division of Non-Public Education

<https://ncadmin.nc.gov/citizens/private-school-information>

NC Directory of Private Schools

<https://ncadmin.nc.gov/citizens/private-school/nc-directory-private-schools>

APPENDIX F

Road Improvements Adjacent To Schools Section 34.6A.(c)

The Department of Transportation, in collaboration with the Department of Public Instruction, shall develop a report covering the period from July 1, 2015, through July 1, 2017, that provides all of the following information:

- (1) All schools, including private and charter, that have been opened, relocated, or expanded.
- (2) The types of road improvements required for each school identified in subdivision (1) of this subsection.
- (3) Whether each road improvement identified in subdivision (2) of this subsection is to a road maintained by the State or a municipality.
- (4) Whether each road improvement identified in subdivision (2) of this subsection is to a road adjacent to the school property.
- (5) A description of any disputes or appeals raised by the schools identified in subdivision (1) of this subsection concerning the road improvements identified in subdivision (2) of this subsection.
- (6) The total cost for each road improvement identified under subdivision (2) of this subsection.
- (7) The funding source for the payment of the costs incurred for each road improvement identified in subdivision (2) of this subsection.

Road Improvements Adjacent To Schools Section 34.6A.(d)

In addition to the information required under subdivisions (1) through (5) of subsection (c) of this section, and for the period covering July 2, 2017 through July 1, 2020, the report required under subsection (c) of this section shall identify (i) the number of schools, including private and charter, that will be opened, relocated, or expanded, (ii) the types of road improvements anticipated to be required for each school identified, and (iii) the total cost for each road improvement anticipated to be required for each school identified.

Road Improvements Adjacent To Schools Section 34.6A.(e)

The Department of Transportation shall submit the report required under subsection (c) of this section to the Joint Legislative Transportation Oversight Committee and the Joint Legislative Education Oversight Committee by February 1, 2018.