Vision Statement

The citizens and individual communities along NC 73 together with the NCDOT recognize their mutual responsibility for the preservation and enhancement of this vital shared resource. They pledge that in 25 years the corridor between Lincolnton and Concord will effectively balance growth and economic vitality with regional and local transportation needs.

Individual community character will flourish while natural resources are preserved. All modes of movement of people and goods by foot, bicycle, automobile, truck, and transit will be accommodated in the corridor and integrated with the land use along it. Performance standards will be agreed upon and land use and public investment decisions will be guided by them.
Corridor Framework
Corridor Segments
The NC 73 Corridor Transportation/Land Use Plan is not a “one size fits all plan.” Recognizing that the corridor consists of communities, natural areas and growth conditions that vary from place to place, the corridor plan was developed as a series of segment plans. There are 15 different segments, ranging from less than two miles to more than three miles in length. Their current context ranges from mature suburban to semi-rural, but they share two things in common:

* They are all connected by and affected by NC 73, and
* They are all going to grow rapidly and extensively over the next twenty years.

The location of each of the segments on the corridor is shown on the facing map.
Corridor Framework – Corridor Segments

- Ironton
- West Lake
- Catawba Road
- Bailey Road
- West Kannapolis
- I-85
- US 321
- NC 16
- I-77
- Ramah Creek
- Ramah Church Road
- Rocky River
- Gilead Road
- Cowans Ford
- Sam Furr
- Coddle Creek
- NC 73 Bypass
- Anderson Creek
Corridor Framework
West of the Catawba River
From US 321 south of Lincolnton, NC 73 will be on a new alignment, joining with the existing NC 73 near the entrance to the Lincoln County Airport. This area is planned to become an employment and commercial development area. The growth will be further reinforced in the future by the planned Lincolnton Loop highway, and by the Rt. 150 extension, both of which will tie into the new NC 73 Bypass.

The central part of the corridor in Lincoln County is planned to have low density growth, since no sanitary sewer service is planned. NC 73 will either follow its existing alignment through all this area, or, as an alternative, would be on a new alignment south of the existing road through part of the area, to avoid disruption and displacement of the many residences along the existing road.

The area along the west side of Lake Norman is planned to have both water and sewer service, and will continue to experience rapid suburbanization. Lincoln County plans for neighborhood centers along the existing NC 16, including a center at NC 73. South of NC 73 and west of NC 16 is planned to become a commercial and employment center. The new NC 16, currently under construction, will increase access to Charlotte, I-485 and the rest of the region, supporting the continued growth of the area and changing traffic patterns. A limited network with a southern loop road through and around the neighborhood center will provide some relief to anticipated traffic levels on NC 73, avoiding the need for NC 73 to be more than 6 lanes through this area.
Corridor Framework – West of Catawba River
Corridor Framework
East of the Catawba River
East of the Catawba River is a complex planning area, due to the several abutting jurisdictions. The future land use plans of Cornelius, Davidson, Cabarrus County, Kannapolis and Concord, along with the existing zoning of Huntersville and Charlotte Area Transit System (CATS) transit oriented development, have been combined to indicate future land use along NC 73. Successful implementation of the NC 73 Corridor Transportation/Land Use Plan will be dependent on very pro-active cooperation among all of these jurisdictions.

The traffic volume across the Catawba River in 2025 is anticipated to be 50,000 cars per day. Because of right of way and environmental constraints, NC 73 will have to remain on its existing alignment through this area. With aggressive access management, four lanes of traffic can accommodate the traffic volume, allowing the river crossing to be one new two-lane bridge, assuming that the existing two-lane bridge can be refurbished.

If all of the increased traffic were to use Sam Furr Road, which is NC 73 through Huntersville, it would require at least an eight-lane major arterial or possibly some form of expressway. This would be in conflict with the quality of the residential and commercial development west of I-77, and destructive of the residential neighborhoods and retail developments east of I-77. To avoid this scale of road, a limited network is proposed through Huntersville, from about the current intersection with Beatties Ford Road to the vicinity of Ramah Church Road. This limited network would use Gilead Road, Huntersville-Concord Road and Ramah Church Road for a southern leg. It would use Catawba Avenue, Westmoreland Road, Bailey Road and Davidson-Concord Road for a northern leg. These two legs, in combination with a planned network of other arterials that are part of the MUMPO Transportation Plan, would limit the size of Sam Furr to six lanes through the commercial area east and west of I-77. While these would still be smaller roads than Sam Furr Road, they would still impose a change in scale of roadway adjacent to existing and planned residential developments. However, the proposed road typologies would be in keeping with suburban scale roads that will be compatible with the eventual growth in the area.

From Ramah Church Road to Odell School Road, NC 73 would remain on its existing alignment. This area is expected to experience significant residential growth, but in different forms in the various communities it serves. There will be a neighborhood center at Poplar Tent Church Road/Shiloh Church Road, and a Mixed Use Village Center at Odell School Road, where NC 73 will have to change to an urban scale.

From Odell School Road eastward, a limited network is proposed, with a southern connection to I-85 providing some relief to traffic along NC 73. This area in the future is planned to be low density residential around Coddle Creek Reservoir, business development around the new Kannapolis Parkway, and campus development or corporate park near the NC 73 connection to I-85.
Road Typologies

A series of road typologies have been developed as part of the NC 73 Corridor Transportation/Land Use Plan. The purpose of these typologies is to allow a variety of road designs to fit the varying land use and environmental contexts along the corridor, while continuing to function as a continuous travel route. The typologies provide a range from two travel lanes to six travel lanes, in order to meet the anticipated traffic volumes in different locations throughout the corridor.

As part of the access management strategy, all of the NC 73 typologies have medians, to help control the locations of left turns from abutting properties onto NC 73, of left turns from NC 73 to cross streets, and of allowable U turns at desirable locations.

Accommodation of pedestrians and bicycles is incorporated into most of the road typologies, as appropriate to the surrounding context and the nature of the anticipated traffic. Trees are located between the roadway pavement and sidewalks wherever possible, to provide a safe and attractive pedestrian environment.

The typologies deliberately do not rigidly follow NCDOT design standards in all cases, although most elements will comply. Eleven foot travel lanes are proposed throughout the corridor, which will be appropriate to the proposed speed limits. The distance between the edge of travel lanes and trees complies with AASHTO standards, but will not always comply with the recent NCDOT guidelines for tree planting, which were changed in 2004. NCDOT is urged to follow emerging guidance for adapting their design standards to the intended context of the NC 73 Corridor, such as Flexibility in Highway Design, A Guide for Achieving Flexibility in Highway Design, and the NCDOT Context Sensitive Solutions Goals and Working Guidelines.

Four intersection and interchange typologies have been included. The intent of these typologies is to illustrate one way to achieve the strategic goals of managing traffic at specific locations. The actual design and application of each of these intersection/interchange typologies will have to be determined in the Preliminary Engineering/Environmental phase of NC 73 development.

The typologies used are the ideally desirable roadway type. They should be followed by the counties and municipalities in reviewing development plans, to assure that adequate right-of-way is preserved for the eventual full development of the roadway. They should be used by NCDOT as the desirable configuration of the roadway to achieve the access management efficiency of roadway operations, and to be compatible with the intended land uses which will emerge in the corridor. There will undoubtedly be situations where topography, environmental constraints, existing development, or right-of-way availability will constrain the ability to fully realize the typology. At the time the plan was being prepared, investigation of the corridor indicated that each typology could be adapted to the locations for which it was proposed. Generally, for situations where existing development or environmental conditions are narrower than the full proposed right-of-way width, the space between the curb and the right-of-way line is generous to allow the roadway designer to fit the typology to the location and situation for which it is proposed.
Road Typologies – 4 Lane Highway

Location
The 4 lane highway typology is intended for use as a limited access facility. It will be appropriate for new alignment situations where it would transition from another limited access facility to a controlled access roadway.

Context
This typology is appropriate for relatively undeveloped areas where a new roadway can be built without unacceptable levels of disruption to existing communities or development, and with acceptable levels of environmental impact. For the NC 73 Corridor, it is proposed only as a new connection in western Lincoln County, south of Lincolnton.

Speed Limit
This typology is intended to be posted for 55 mph speed limits.

Traffic Levels
Because it is a limited access highway, the 4 lane highway can accommodate traffic levels in excess of 50,000 Average Annual Daily Traffic (AADT).

Right-of-Way
The right-of-way indicated for this typology could vary, depending on topography and drainage requirements. The right-of-way indicated should be considered a minimum right-of-way requirement.

Pedestrians and Bicycles
Pedestrians and bicycles are not appropriate on this road typology, due to the speed of traffic. Any pedestrian and/or bicycle provisions through sections of the corridor in which this typology is used should be accommodated separately, out of the right-of-way.

Transit
Any transit service on this typology would likely be bus service. Any stops, stations, or transfer points through sections of the corridor in which this typology is used should also be accommodated separately, out of the right-of-way.

Drainage
Drainage for this typology would be surface drainage in swales beside the roadway and/or in the median. Because the drainage will depend on topography and will be determined in the Preliminary Engineering/Environmental phase, the dimensions indicated for drainage swales should be considered as minimums.

Shoulders and/or Curbs
Paved shoulders as indicated are appropriate for this typology.

Median Landscape
Landscape could be provided in the median. Because of the proposed speed limit for this typology, any landscape should conform to NCDOT’s landscape guidelines.

Landscape in the Right-of-Way
Landscape could be provided in the right-of-way adjacent to the roadway. Because of the proposed speed limit for this typology, any landscape should conform to NCDOT’s landscape guidelines.
Landscape Outside the Right-of-Way
Any landscape outside the right-of-way, such as buffers or aesthetic treatments between the highway and adjacent neighborhoods or development, would be at the discretion of the local jurisdiction, and would be provided by the local jurisdiction.

Utilities
Since this typology is intended for new alignments, utilities should be outside of the right-of-way, preferably not visible from the roadway. No billboards or advertising signage should be visible from the roadway.

Comparable Roads
Comparable roads in the region include U.S. 321 in Lincoln County and the new NC 16 currently under construction in eastern Lincoln County.
Road Typologies – 4 Lane Highway
Road Typologies –
4 Lane Rural Boulevard

Location
The 4 lane rural boulevard typology is intended for use along existing NC 73 alignments.

Context
This typology is appropriate for existing alignment situations with either no existing development, or with rural density existing development. Any anticipated new development where this typology is used should be limited to new residential subdivisions which will not have driveways directly onto NC 73.

Speed Limit
This typology is intended to be posted for 45 mph speed limits.

Traffic Levels
The 4 lane rural boulevard, with the NC 73 Corridor access management strategy, should accommodate up to 40,000 AADT.

Right-of-Way
The right-of-way indicated for this typology could vary, depending on topography and drainage requirements. The right-of-way indicated should be considered a minimum right-of-way requirement.

Pedestrians and Bicycles
Pedestrians and bicycles are accommodated with a combined hike and bike trail within the right-of-way in this typology. The paved hike and bike trail should be separated as far as possible from the outside travel lane, for safety reasons. As an option, local jurisdictions could require that portions of the hike and bike trail be provided in new development adjacent to the roadway, if a trail is appropriate for the development. In those circumstances, the trail should connect to the trail in the right-of-way, and need not be provided in those sections where continuity of the rail system is provided outside of the right-of-way.

Transit
Any transit service on this typology would be bus service. Any stops through sections of the corridor in which this typology is used should be accommodated at a bus pullout within the right-of-way.

Drainage
Drainage for this typology would be surface drainage in swales beside the roadway. Because the drainage will depend on topography and will be determined in the Preliminary Engineering/Environmental phase, the dimensions indicated for drainage swales should be considered as minimums.

Shoulders and/or Curbs
Paved shoulders are not included as part of this typology.

Median Landscape
The median should have mountable curbs. Landscape should be provided in the median, consisting of ornamental trees, shrubs, and/or groundcovers in addition to grass. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

Landscape in the Right-of-Way
Because of the requirements for drainage swales and a hike/bike trail, and separation requirements for trees from the outside
travel lane, no trees are proposed between the travel lanes and the right-of-way.

**Landscape Outside the Right-of-Way**
A major goal of this typology is to retain the natural, rural atmosphere along NC 73, even though substantial growth may occur in the future. To maintain this atmosphere at any new development along this typology, a minimum natural landscape buffer should be maintained as shown, through requirements of local development ordinances. Typically, it is anticipated that there will be enough existing natural vegetation to provide this buffer. Where there is not enough existing vegetation, local development ordinances should require new plantings that will grow into a naturalistic landscape buffer. The landscape buffer width shown may vary, if required by local ordinances or if required for the protection of significant natural or historic features.

At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shade trees and shrubs to screen the view of parking pavement and the lower part of cars from view from the road.

**Utilities**
Utilities should be either underground, or placed within the natural landscape buffer area so that they are not visible from the roadway. No billboards or advertising signage should be visible from the roadway.
Road Typologies – 4 Lane Rural Boulevard
Road Typologies –
4 Lane Rural Parkway

Location
The 4 lane rural parkway typology is intended for use along existing NC 73 alignments with little or no existing development or environmental constraints, or for new alignment sections.

Context
The intent of this typology is to provide a rural divided road that can follow existing topography as closely as possible, to maintain a rural atmosphere even though new development might occur in the future. It would be preferable for the opposing lanes to not be parallel with each other, and to have differing vertical alignments as allowed by the existing topography.

This typology will be appropriate for existing alignment situations with no or very little existing development, or for new alignment sections with little existing development or environmental constraints, and adequate room for a generous right-of-way. Any anticipated new development where this typology is used should be limited to new residential subdivisions which will not have driveways directly onto NC 73, and which can be adequately visually buffered from view from the road to maintain a rural atmosphere.

Speed Limit
This typology is intended to be posted for 45 mph speed limits.

Traffic Levels
The 4 lane rural parkway, with the NC 73 Corridor access management strategy, should accommodate up to 40,000 AADT.

Right-of-Way
The right-of-way indicated for this typology could vary considerably, depending on topography, drainage requirements, and the ease of fitting the roadway into the landscape. The right-of-way indicated should be considered a minimum right-of-way requirement.

Pedestrians and Bicycles
Pedestrians and bicycles are to be accommodated with pedestrian and bicycle trails provided by the local jurisdiction outside of the right-of-way.

Transit
Transit service on this typology is anticipated to be bus service. Any bus stops through sections of the corridor in which this typology is used should be accommodated at a bus transit center outside of the right-of-way, or along bus routes on connecting streets.

The minimum median width for the 4 lane rural parkway could allow some form of fixed guideway transit. While this type of transit service is not included in the CATS System Plan or on any of the local Transportation Plans, there could be a desire to accommodate it in the long range future. If a local jurisdiction anticipates that they wish to reserve the right for fixed guideway transit future with this typology in the future, the median should be designed to minimize cross-sectional side slope.

Drainage
Drainage for this typology would be surface drainage in swales beside the roadway. Because the drainage will depend on topography and will be determined in the Preliminary Engineering/Environmental phase, the dimensions indicated for
drainage swales should be considered as minimums.

**Shoulders and/or Curbs**
Paved shoulders are not included as part of this typology.

**Median Landscape**
The median should have mountable curbs. Landscape should be provided in the median, consisting of ornamental trees, shrubs, and/or groundcovers in addition to grass. The landscape should be a naturalistic, informal design with plant materials, to complement the rural character of this typology. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

**Landscape in the Right-of-Way**
Because of the requirements for drainage swales, and separation requirements for trees from the outside travel lane, no trees are proposed between the travel lanes and the right-of-way line. If there are existing trees in the right-of-way, every effort should be made to preserve them as part of the roadway design.

**Landscape Outside the Right-of-Way**
A major goal of this typology is to retain the natural, rural atmosphere along NC 73, even though substantial growth may occur in the future. To maintain this atmosphere at any new development along this typology, a minimum natural landscape buffer should be maintained as shown, through requirements of local development ordinances. Typically, is it anticipated that there will be enough existing natural vegetation to provide this buffer. Where there is not enough existing vegetation, local development ordinances should require new plantings that will grow into a naturalistic landscape buffer. The landscape buffer width shown may vary, if required by local ordinances or if required for the protection of significant natural or historic features.

Where the character of the land is open with natural or scenic views, the views from the roadway toward those views should be preserved and not blocked with new landscape.

Commercial development or other uses with parking between the right-of-way and buildings would be inappropriate along this typology. Commercial or institutional uses with parking visible from the roadway should not be permitted with this typology. If there are any existing uses with parking that would potentially be visible from the roadway, the roadway should be aligned to avoid these views wherever possible, or to place the roadway so that a natural landscape buffer is provided.

**Utilities**
Utilities should be either underground, or placed within the natural landscape buffer area so that they are not visible from the roadway. No billboards or advertising signage should be visible from the roadway.

**Comparable Roads**
Comparable roads in the region include NC 49 in Randolph County.
Road Typologies – 4 Lane Rural Parkway
Road Typologies – 2 Lane Suburban Boulevard

Location
The 2 lane suburban boulevard typology is intended for use along alignments that are part of the NC 73 network strategy to relieve pressure on the NC 73 mainline traffic, and on some connecting streets that are directly related to NC 73 traffic volumes and operations.

Context
The intent of this typology is to provide a suburban scale road that is compatible with predominantly medium density residential and commercial development.

This typology will be appropriate for new or existing alignment situations with existing residential or small commercial development, or for new alignment sections.

Speed Limit
This typology is intended to be posted for 35 mph speed limits.

Traffic Levels
The 2 lane suburban boulevard, with the NC 73 Corridor access management strategy, should accommodate up to 15 - 20,000 AADT.

Right-of-Way
The right-of-way indicated for this typology could vary somewhat by reducing the area provided for landscape and sidewalks outside the curb line. Reduction of the right-of-way generally would be undesirable, since the planted area inside the right-of-way and the sidewalks are intended to provide a compatibility with the adjacent neighborhoods. The median, travel lane and bicycle lane widths should not be reduced, as they are necessary for effective operation of the roadway. The right-of-way should be reduced only when essential to fit into a constrained existing development situation.

Pedestrians and Bicycles
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown. Trees are to be provided between the curb line and the sidewalk for pedestrian comfort and safety.

Bicycle lanes are to be provided adjacent to the travel lanes as shown. The combination of the bicycle lane and travel lane are essential minimum widths, to allow for vehicles to pass in emergency or incident management situations, and to provide room for allowable U-turns.

Transit
Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used should be accommodated at a bus pullout within the right-of-way. The bus pullouts should be provided at median breaks to provide additional space for U-turns.

Drainage
Drainage for this typology would be curb and gutter with underground storm drains.

Shoulders and/or Curbs
Curb and gutter would be provided on the outside of bicycle lanes, and a mountable curb provided at the median.

Median Landscape
The median should have mountable curbs.
Landscape should be provided in the median, consisting of ornamental trees, shrubs, and/or groundcovers in addition to grass. The landscape should be designed to be compatible with the character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

**Landscape in the Right-of-Way**
Shade trees should be provided between the curb line and the sidewalk for pedestrian comfort and safety, and for encouraging slower traffic speeds on the roadway due to the “visual friction” they would create. Spacing of trees should generally be at 25 feet on center, depending on tree species used. An alternating pattern of trees on either side of the sidewalk would also be appropriate.

**Landscape Outside the Right-of-Way**
At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shrubs to screen the view of parking pavement and the lower part of cars from view from the road. In jurisdictions that allow parking between the right-of-way and buildings, the local jurisdiction should require a landscape screen to be provided as part of the development. Some jurisdictions in the NC 73 Corridor do not allow parking between the right-of-way and new buildings.

**Utilities and Signage**
Utilities should be either underground, or place behind adjacent buildings so that they are not visible from the roadway. Building or development identity signage should be lower level monument signs to be visible below the tree canopy.

**Comparable Roads**
Colony Road between Sharon View Road and Rea Road in south Charlotte exemplifies this road typology.
Road Typologies – 2 Lane Suburban Boulevard
Road Typologies –
4 Lane Suburban Boulevard

Location
The 4 lane suburban boulevard typology is intended for existing NC 73 alignments, and for connecting roads that are directly related to the NC 73 access management strategy and operations.

Context
The intent of this typology is to provide a suburban scale road that is compatible with predominantly medium to high density residential and commercial development.

This typology will be appropriate for new or existing alignment situations with existing residential or commercial development, or for new alignment sections.

Speed Limit
This typology is intended to be posted for 35 mph speed limits.

Traffic Levels
The 4 lane suburban boulevard, with the NC 73 Corridor access management strategy, should accommodate up to 40,000 AADT.

Right-of-Way
The right-of-way indicated for this typology could vary somewhat by reducing the area provided for landscape and sidewalks outside the curb line. Reduction of the right-of-way generally would be undesirable, since the planted area inside the right-of-way and the sidewalks are intended to provide a compatibility with the adjacent neighborhoods. The right-of-way should be reduced only when essential to fit into a constrained existing development or environmental situation.

Pedestrians and Bicycles
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown. Trees are to be provided between the curb line and the sidewalk for pedestrian comfort and safety.

Bicycle lanes are to be provided adjacent to the travel lane as shown. The bicycle lanes will help the road function efficiently, as they will provide additional turning room for busses and trucks.

Transit
Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used should be accommodated at a bus pullout within the right-of-way. The bus pullouts should be provided at median breaks to provide additional space for U-turns.

If a local jurisdiction anticipates a long range potential for fixed guideway transit where this typology is used, the median could be widened to a width that would accommodate the guideway plus left turn lanes in the median. While this type of transit service is not included in the CATS System Plan or on any of the local Transportation Plans, there could be a desire to accommodate it in the long range future. If a local jurisdiction anticipates that they wish to reserve the right for fixed guideway transit future with this typology in the future, they should preserve the additional right-of-way that would be required for the additional median width.

Drainage
Drainage for this typology would be curb and
gutter with underground storm drains.

**Shoulders and/or Curb**
Curb and gutter would be provided on the outside of the bicycle lanes, and a mountable curb provided at the median.

**Median Landscape**
The median should have mountable curbs. Landscape should be provided in the median, consisting of ornamental trees, shrubs, and/or groundcovers in addition to grass. The landscape should be designed to be compatible with the character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

**Landscape in the Right-of-Way**
Shade trees should be provided between the curb line and the sidewalk for pedestrian comfort and safety, and for encouraging slower traffic speeds on the roadway due to the “visual friction” they would create. Spacing of trees should generally be at 25 feet on center, depending on tree species used.

**Landscape Outside the Right-of-Way**
At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shrubs to screen the view of parking pavement and the lower part of cars from view from the road. In jurisdictions that allow parking between the right-of-way and buildings, the local jurisdiction should require a landscape screen to be provided as part of the development. Some jurisdictions in the NC 73 Corridor do not allow parking between the right-of-way and new buildings.

**Utilities and Signage**
Utilities should be either underground, or place behind adjacent buildings so that they are not visible from the roadway. Building or development identity signage should be lower level monument signs to be visible below the tree canopy.

**Comparable Roads**
Colony Road between Fairview Road and Sharon Road in Charlotte exemplifies this road typology.
Road Typologies – 4 Lane Suburban Boulevard
Road Typologies –  
6 Lane Suburban Boulevard

**Location**
The 6 lane suburban boulevard typology is intended for existing NC 73 alignments.

**Context**
The intent of this typology is to provide a suburban scale road that is compatible with predominantly medium to high density commercial development.

This typology will be appropriate for existing alignment situations with existing residential or commercial development.

**Speed Limit**
This typology is intended to be posted for 35 mph speed limits.

**Traffic Levels**
The 6 lane suburban boulevard, with the NC 73 Corridor access management strategy, should accommodate up to 50,000 – 60,000 AADT.

**Right-of-Way**
The right-of-way indicated for this typology could vary somewhat by reducing the area provided for landscape and sidewalks outside the curb line. Reduction of the right-of-way generally would be undesirable, since the planted area inside the right-of-way and the sidewalks are intended to provide a compatibility with the adjacent neighborhoods. The right-of-way should be reduced only when essential to fit into a constrained existing development or environmental situation.

Left turn traffic volumes in some instances could require two left turn lanes in the median. In those circumstances, the median would need to be correspondingly wider. Ideally, the right-of-way should be correspondingly wider, as well.

**Pedestrians and Bicycles**
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown. Trees are to be provided between the curb line and the sidewalk for pedestrian comfort and safety.

Bicycle lanes are to be provided adjacent to the travel lane as shown. The bicycle lanes will help the road function efficiently, as they will provide additional turning room for busses and trucks.

**Transit**
Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used should be accommodated at a bus pullout within the right-of-way, but it would be preferable for busses to be accommodated at an off-street bus transit center. Local jurisdictions should require developments to include space to accommodate bus transit centers in the areas indicated on the segment plans. If there needs to be bus pullouts, they should be provided at median breaks to provide additional space for U-turns.

If a local jurisdiction anticipates a long range potential for fixed guideway transit where this typology is used, the median could be widened to a width that would accommodate the guideway plus left turn lanes in the median. While this type of transit service is not included in the CATS System Plan or on any of the local Transportation Plans, there could be a desire to accommodate it in the long range future. If a local jurisdiction
anticipates that they wish to reserve the right for fixed guideway transit future with this typology in the future, they should preserve the additional right-of-way that would be required for the additional median width.

Drainage
Drainage for this typology would be curb and gutter with underground storm drains.

Shoulders and/or Curbs
Curb and gutter would be provided on the outside of the bicycle lanes, and a mountable curb provided at the median.

Median Landscape
The median should have mountable curbs. Landscape should be provided in the median, consisting of ornamental trees, shrubs, and/or groundcovers in addition to grass. The landscape should be designed to be compatible with the character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

Landscape in the Right-of-Way
Shade trees should be provided between the curb line and the sidewalk for pedestrian comfort and safety, and for encouraging slower traffic speeds on the roadway due to the “visual friction” they would create. Spacing of trees should generally be at 25 feet on center, depending on tree species used.

Landscape Outside the Right-of-Way
At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shrubs to screen the view of parking pavement and the lower part of cars from view from the road. In jurisdictions that allow parking between the right-of-way and buildings, the local jurisdiction should require a landscape screen to be provided as part of the development. Some jurisdictions in the NC 73 Corridor do not allow parking between the right-of-way and new buildings.

Utilities and Signage
Utilities should be either underground, or place behind adjacent buildings so that they are not visible from the roadway. Building or development identity signage should be lower level monument signs to be visible below the tree canopy.
Road Typologies – 6 Lane Suburban Boulevard
Road Typologies –
4 Lane Urban Boulevard

Location
The 4 lane urban boulevard typology is intended for existing NC 73 alignments.

Context
The intent of this typology is to provide an urban scale road that is compatible with high density mixed use and commercial development, with a strong pedestrian emphasis.

The character of development where this typology is used is anticipated to resemble small town or small urban village or town centers. Generally, further planning for this typology will be required in a small area plan as recommended in the segment plans, due to the need for coordination with landowners, businesses, neighborhoods, connecting streets.

Speed Limit
This typology is intended to be posted for 35 mph speed limits.

Traffic Levels
The 4 Lane Urban Boulevard, with the NC 73 Corridor access management strategy, should accommodate up to 40,000 AADT.

To maintain efficient traffic movement through the area at the lower speeds compatible with pedestrians, on-street parking would not be appropriate for this typology.

Right-of-Way
The right of way indicated for this typology should not be reduced. The right of way shown is considered to be a minimum, to provide a minimum width sidewalk and tree well/street furnishing zone.

Pedestrians and Bicycles
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown. At the option of the local jurisdiction, additional sidewalk width should be provided by requiring an additional building setback from the right of way line.

Bicycle lanes are to be provided adjacent to the travel lane as shown. The bicycle lanes will help the road function efficiently, as they will provide additional turning room for buses and trucks.

Transit
Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used could be accommodated at an off-street bus transit center. Local jurisdictions should require developments to include space to accommodate bus transit centers in the areas indicated on the segment plans. The bus transit centers should be planned to be integral with the development, following the principles of transit-oriented development.

Drainage
Drainage for this typology would be curb and gutter with underground storm drains.

Shoulders and/or Curbs
Curb and gutter would be provided on the outside of the bicycle lanes, and a mountable curb provided at the median.

Median Landscape
The median should have mountable curbs. Paved pedestrian refuge areas should be
provided in the median at pedestrian crosswalks.

Landscape should be provided in the median, consisting of shrubs and/or groundcovers. Some trees would be compatible with the typology, but there should be an emphasis on maintaining visual connections for pedestrians across the street. The landscape should be formal in nature, to be compatible with the anticipated character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

Landscape in the Right-of-Way
Shade trees should be provided in tree wells within the zone behind the curb line shown as a “Tree Well and Street Furnishing Zone,” for pedestrian comfort and safety, and for encouraging slower traffic speeds on the roadway due to the “visual friction” they would create. Spacing of trees should generally be at 25 feet on center, depending on tree species used and on coordination with street lighting and street furnishings.

Street furnishings, such as seating, bicycle racks, trash containers, etc., should also be located in this zone. Pedestrian scale lighting should be provided in the “Tree Well and Street Furnishing Zone” as well.

Landscape Outside the Right-of-Way
At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shrubs to screen the view of parking pavement and the lower part of cars from view from the road. New development should not have parking between the right-of-way and buildings.

Utilities and Signage
Utilities should be either underground, or placed behind adjacent buildings so that they are not visible from the roadway. A strategy for building or development identity signage should be developed as part of the small area plan in locations where this typology is anticipated.
Road Typologies – 4 Lane Urban Boulevard
Road Typologies –
4 Lane Village Center Street
(with Median)

**Location**
The four lane Village Center Street typology is intended for cross streets within mixed use or commercial areas.

**Context**
The intent of this typology is to provide a village or urban scale road that is compatible with higher density mixed use and commercial development, with a strong pedestrian emphasis.

The character of development where this typology is used is anticipated to resemble small town or small urban village or town centers. Generally, further planning for this typology will be required in a small area plan as recommended in the segment plans, due to the need for coordination with landowners, businesses, neighborhoods, connecting streets.

**Speed Limit**
This typology is intended to be posted for 25 mph speed limits, to be compatible with the anticipated pedestrian orientation of the context.

**Traffic Levels**
The 4 Lane Village Center Street is intended to serve streets where traffic volumes and speeds, and congestion, is less an issue than is the scale of the road in relation to the area within which it is located. On-street parking would be appropriate and expected for this typology.

**Right-of-Way**
The right of way indicated for this typology should not be reduced. The right of way shown is considered to be a minimum, to provide a minimum width sidewalk and tree well/street furnishing zone.

**Pedestrians and Bicycles**
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown. At the option of the local jurisdiction, additional sidewalk width should be provided by requiring an additional building setback from the right of way line.

Bicycle lanes are to be provided adjacent to the travel lane as shown. The bicycle lanes will help the road function efficiently, as they will provide additional turning room for busses and trucks. They also will provide a buffer between on-street parking and the outside travel lane.

**Transit**
Intersections should be designed with pedestrians in mind, including corner bulb-outs and crosswalks. Mid-block crossings and bulb-outs could also be appropriate in some locations.

Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used could be accommodated at an off-street bus transit center. Local jurisdictions should require developments to include space to accommodate bus transit centers in the areas indicated on the segment plans. The bus transit centers should be planned to be integral with the development, following the principles of transit-oriented development. If bus stops are provided along the street, they should be at corner bulb-outs.
**Drainage**
Drainage for this typology would be curb and gutter with underground storm drains.

**Shoulders and/or Curbs**
Curb and gutter would be provided on the outside of the parking lanes or bicycle lanes, and a mountable curb provided at the median.

**Median Landscape**
The median should have mountable curbs. Paved pedestrian refuge areas should be provided in the median at pedestrian crosswalks.

Landscape should be provided in the median, consisting of shrubs and/or groundcovers. Some trees would be compatible with the typology, but there should be an emphasis on maintaining visual connections for pedestrians across the street. The landscape should be formal in nature, to be compatible with the anticipated character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

**Landscape in the Right-of-Way**
Ornamental or shade trees should be provided in tree wells within the zone behind the curb line shown as a “Tree Well and Street Furnishing Zone,” for pedestrian comfort and safety, and for encouraging slower traffic speeds on the roadway due to the “visual friction” they would create. Spacing of trees should generally be at 25 feet on center, depending on tree species used and on coordination with street lighting and street furnishings.

Street furnishings, such as seating, bicycle racks, trash containers, etc., should also be located in this zone. Pedestrian scale lighting should be provided in the “Tree Well and Street Furnishing Zone” as well.

**Landscape Outside the Right-of-Way**
At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shrubs to screen the view of parking pavement and the lower part of cars from view from the road. New development should not have parking between the right-of-way and buildings.

**Utilities and Signage**
Utilities should be either underground, or placed behind adjacent buildings so that they are not visible from the roadway. A strategy for building or development identity signage should be developed as part of the small area plan in locations where this typology is anticipated.
Road Typologies – 4 Lane Village Center Street (with Median)
NC 73 Transportation / Land Use Corridor Plan

Road Typologies –  4 Lane Village Center Street (no Median)

**Location**
The four lane Village Center Street typology is intended for cross streets within mixed use or commercial areas.

**Context**
The intent of this typology is to provide a village or urban scale road that is compatible with higher density mixed use and commercial development, with a strong pedestrian emphasis.

The character of development where this typology is used is anticipated to resemble small town or small urban village or town centers. Generally, further planning for this typology will be required in a small area plan as recommended in the segment plans, due to the need for coordination with landowners, businesses, neighborhoods, connecting streets.

**Speed Limit**
This typology is intended to be posted for 25 mph speed limits, to be compatible with the anticipated pedestrian orientation of the context.

**Traffic Levels**
The 4 Lane Village Center Street is intended to serve streets where traffic volumes and speeds, and congestion, is less an issue than is the scale of the road in relation to the area within which it is located. On-street parking would be appropriate and expected for this typology.

**Right-of-Way**
The right of way indicated for this typology should not be reduced. The right of way shown is considered to be a minimum, to provide a minimum width sidewalk and tree well/street furnishing zone.

**Pedestrians and Bicycles**
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown.

Bicycle lanes are to be provided adjacent to the travel lane as shown. The bicycle lanes will help the road function efficiently, as they will provide additional turning room for buses and trucks. They also will provide a buffer between on-street parking and the outside travel lane.

**Transit**
Intersections should be designed with pedestrians in mind, including corner bulb-outs and crosswalks. Mid-block crossings and bulb-outs could also be appropriate in some locations.

Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used could be accommodated at an off-street bus transit center. Local jurisdictions should require developments to include space to accommodate bus transit centers in the areas indicated on the segment plans. The bus transit centers should be planned to be integral with the development, following the principles of transit-oriented development. If bus stops are provided along the street, they should be at corner bulb-outs.

**Drainage**
Drainage for this typology would be curb and gutter with underground storm drains.
Shoulders and/or Curbs
Curb and gutter would be provided on the outside of the parking lanes or bicycle lanes, and a mountable curb provided at the median.

Median Landscape
There is no median in this typology.

Landscape in the Right-of-Way
Ornamental or shade trees should be provided in tree wells within the zone behind the curb line shown as a “Tree Well and Street Furnishing Zone,” for pedestrian comfort and safety, and for encouraging slower traffic speeds on the roadway due to the “visual friction” they would create. Spacing of trees should generally be at 25 feet on center, depending on tree species used and on coordination with street lighting and street furnishings.

Street furnishings, such as seating, bicycle racks, trash containers, etc., should also be located in this zone.

Pedestrian scale lighting should be provided in the “Tree Well and Street Furnishing Zone” as well.

Landscape Outside the Right-of-Way
At existing commercial development or other uses with parking between the right-of-way and buildings, a landscape screen should be provided as shown, with shrubs to screen the view of parking pavement and the lower part of cars from view from the road. New development should not have parking between the right-of-way and buildings.

Utilities and Signage
Utilities should be either underground, or placed behind adjacent buildings so that they are not visible from the roadway. A strategy for building or development identity signage should be developed as part of the small area plan in locations where this typology is anticipated.
Road Typologies – 4 Lane Village Center Street (no Median)
Road Typologies – 6 Lane Urban Boulevard

Location
The six lane urban boulevard typology is intended for existing NC 73 alignments.

Context
The intent of this typology is to provide an urban scale road that is compatible with high density mixed use and commercial development, with a strong pedestrian emphasis.

The character of development where this typology is used is anticipated to resemble urban village or town centers. Generally, further planning for this typology will be required in a small area plan as recommended in the segment plans, due to the need for coordination with landowners, businesses, neighborhoods, connecting streets.

Speed Limit
This typology is intended to be posted for 25 mph speed limits, to be compatible with the anticipated pedestrian orientation of the context.

Traffic Levels
The 6 Lane Suburban Boulevard, with the NC 73 Corridor access management strategy, should accommodate up to 50 - 60,000 AADT.

To maintain efficient traffic movement through the area at the lower speeds compatible with pedestrians, on-street parking would not be appropriate for this typology.

Right-of-Way
The right of way indicated for this typology should not be reduced. The right of way shown is considered to be a minimum, to provide a minimum width sidewalk and tree well/street furnishing zone.

Left turn traffic volumes in some instances could require two left turn lanes in the median. In those circumstances, the median would need to be correspondingly wider. Ideally, the right-of-way should be correspondingly wider, as well.

Pedestrians and Bicycles
Pedestrians are to be accommodated with sidewalks adjacent to the roadway as shown. At the option of the local jurisdiction, additional sidewalk width should be provided by requiring an additional building setback from the right of way line.

Bicycle lanes are to be provided adjacent to the travel lane as shown. The bicycle lanes will help the road function efficiently, as they will provide additional turning room for busses and trucks.

Six lane roads can be intimidating and uncomfortable for pedestrian crossings. Pedestrian crosswalks should be well defined, and paved in a material which reflects the character of the surrounding area. Generous pedestrian refuges in the medians are essential.

Transit
Transit service on this typology is anticipated to be bus service. Any stops through sections of the corridor in which this typology is used could be accommodated at an off-street bus transit center. Local jurisdictions
should require developments to include space to accommodate bus transit centers in the areas indicated on the segment plans. The bus transit centers should be planned to be integral with the development, following the principles of transit-oriented development.

**Drainage**
Drainage for this typology would be curb and gutter with underground storm drains.

**Shoulders and/or Curb**
Curb and gutter would be provided on the outside of the bicycle lanes, and a mountable curb provided at the median.

**Median Landscape**
The median should have mountable curbs. Paved pedestrian refuge areas should be provided in the median at pedestrian crosswalks.

Landscape should be provided in the median, consisting of shrubs and/or groundcovers. Some trees would be compatible with the typology, but there should be an emphasis on maintaining visual connections for pedestrians across the street. The landscape should be formal in nature, to be compatible with the anticipated character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

**Drainage**
Drainage for this typology would be curb and gutter with underground storm drains.

**Shoulders and/or Curb**
Curb and gutter would be provided on the outside of the bicycle lanes, and a mountable curb provided at the median.

**Median Landscape**
The median should have mountable curbs. Paved pedestrian refuge areas should be provided in the median at pedestrian crosswalks.

Landscape should be provided in the median, consisting of shrubs and/or groundcovers. Some trees would be compatible with the typology, but there should be an emphasis on maintaining visual connections for pedestrians across the street. The landscape should be formal in nature, to be compatible with the anticipated character of existing and/or planned development in the area. The extent of landscape in the median, as well as responsibility for design and maintenance, is to be determined jointly between NCDOT and the local jurisdiction.

**Utilities and Signage**
Utilities should be either underground, or placed behind adjacent buildings so that they are not visible from the roadway. A strategy for building or development identity signage should be developed as part of the small area plan in locations where this typology is anticipated.
Road Typologies – 6 Lane Urban Boulevard
Road Typologies – Single Point Urban Diamond Interchange

**Location**
The Single Point Urban Diamond Interchange is intended for use at the NC 73/I-77 and NC 73/I-85 interchanges, at the time when reconstruction or improvements to those two Interstate freeways is undertaken.

**Context**
The intent of this typology is to provide an interchange that moves the traffic signal further from the existing locations at the exit ramps and requires only a three phase signal cycle. This will increase the spacing between the interchange signal and the next nearest NC 73 traffic signals. The current spacing creates congestion and signal timing problems because of the proximity of the signals.

This typology would only be used in an Interstate freeway setting.

**Speed Limit**
This typology is intended to be posted for 35 mph speed limits, to be compatible with the speed limits of the roadway typologies to which it connects.

**Traffic Levels**
Traffic volumes are not a factor in the use of this typology. The number of lanes passing across the interchange should be the same as those of the typologies to which it connects; however, the left turn maneuver can be accommodated with either one or two lanes.

**Right-of-Way**
The right of way for this typology will be determined by the geometric design of the interchange.

**Pedestrians and Bicycles**
Pedestrians are to be accommodated with sidewalks crossing the interchange bridge as shown. The pedestrian walkways should connect to the sidewalks of the typologies to which this typology connects.

Bicycle lanes are to be provided adjacent to the travel lane to provide continuity with the bicycle lanes on the connecting typologies.

**Transit**
Transit service on this typology is anticipated to be bus service. No stops within the interchange would be appropriate.

**Drainage**
Drainage for this typology would be determined by the geometric design of the interchange.

**Shoulders and/or Curbs**
Curb and gutter should be provided at each of the islands and around the pedestrian plaza.

**Median Landscape and Streetscape**
There is no median in this typology.

**Landscape and Streetscape in the Right-of-Way**
Ornamental trees, shrubs and ground cover should be provided within the traffic islands, consistent with visibility requirements for traffic.

The bridge structure, bridge rail, lighting and pedestrian infill area should have a high
level of architectural design that creates a distinctive gateway into the community.

**Landscape and Streetscape Outside the Right-of-Way**
Landscape outside the right-of-way, if any, would be addressed through the connecting roadway typologies.

**Utilities and Signage**
Location of any utilities located in the interchange would be determined by geometric design of the interchange.

**Comparable Roads**
Comparable roads in the region include the I-85/Beatties Ford Road interchange and the I-77/Tyvola Road interchange, though neither of these has the landscape and streetscape treatment which should be an integral part of this typology.
Road Typologies – Single Point Urban Diamond Interchange
Road Typologies –
Dual Right/Left Turn
Intersection

Location
The Dual Right/Left Turn Intersection is intended for use at intersections where it is desired to split the directional flow of traffic, either to more evenly distribute traffic volumes or to accommodate traffic turning toward a major route. Signal timing should prioritize the two lane right turn lanes and the two lane left turn lanes. Two locations in the NC 73 Corridor where this type of intersection might be appropriate are at NC 73 and Gilead Road (see the Catawba Road Segment) and at Catawba Avenue and Westmoreland Road (see the Westmoreland Road Segment).

The accompanying sketch is intended to illustrate the overall relationship of the intersecting streets, and should not be considered a geometric design guideline.

Context
The intent of this intersection typology will be determined by the context of the connecting typology.

Speed Limit
This typology is intended to be posted for the same speed limit as the roadway typologies to which it connects.

Traffic Levels
Traffic volumes are not a factor in the use of this typology. The number of lanes passing across the intersection should be the same as those of the typologies to which it connects.

Right-of-Way
The right of way for this typology will be determined by the geometric design of the interchange.

Pedestrians and Bicycles
Pedestrians are to be accommodated with sidewalks crossing the traffic islands as shown in the illustrative sketch. The pedestrian walkways should connect to the sidewalks of the typologies to which this typology connects.

Bicycle lanes are to be provided adjacent to the travel lane to provide continuity with the bicycle lanes on the connecting typologies. Bicycles turning left will need to use the traffic lanes within the intersection.

Transit
Transit service on this typology is anticipated to be bus service. No stops within the intersection would be appropriate.

Drainage
Drainage for this typology would be determined by the geometric design of the interchange.

Shoulders and/or Curbs
Curb and gutter should be provided at each of the islands and the median.

Median Landscape and Streetscape
The median would be determined by the connecting typology.

Landscape and Streetscape in the Right-of-Way
Ornamental trees, shrubs and ground cover should be provided within the traffic islands, consistent with visibility requirements for
Landscape and Streetscape Outside the Right-of-Way
Landscape outside the right-of-way, if any, would be addressed through the connecting roadway typologies.

Utilities and Signage
Location of any utilities located in the intersection should be underground, or receive the same treatment in the connecting typology.

Comparable Intersections
Comparable intersections in the region include the Sharon Road/Runnymead Lane and Sardis Road/Rama Road intersections in south Charlotte.
Road Typologies – Dual Right/Left Turn Intersection
Road Typologies –
Dual Right/Left Turn
Flyover Intersection

The Dual Right Turn/Left Turn Flyover Intersection typology is the same as the Dual Right/Left Turn Intersection, with the exception that the dual left turn movement would be accommodated with a free flow flyover instead of through the signalized intersection.

This typology would be used only when the left turn traffic volumes are too high for the dual left turn through the signalized intersection.

Because of the height that would be required for the flyover, and the consequent visibility, it should have a high level of architectural aesthetic treatment. The compatibility with any nearby residential or retail areas should be carefully coordinated with nearby neighborhoods and developments.
Road Typologies – Dual Right/Left Turn Flyover Intersection
Road Typologies – Roundabout Intersection

There may be intersections in the NC 73 Corridor where a roundabout would be an appropriate solution the complex junction of multiple roadways and a fairly even distribution of traffic, as well as a need to serve adjacent land uses.

Design of a roundabout intersection is a complex process, and has only recently been gaining acceptance and popularity in the U.S. It requires a detailed analysis of traffic volumes, computer modeling of traffic flows, and specific geometric design of the approach roads as well as the roundabout itself. That level of design and analysis is more appropriately performed in a Preliminary Engineering/Environmental phase of a project, instead of in a corridor plan.

The example shown here is a two lane roundabout at the NC 73 intersection of Sam Furr Road and Catawba Avenue, in Huntersville and Cornelius. The example is intended only to demonstrate that a two lane roundabout could physically fit into this location without displacement of any existing uses, and largely within the existing right-of-way.

Two lane roundabouts can accommodate volumes of up to 30,000 AADT if other roadway design conditions are appropriate. One interchange in Clearwater Beach, Florida, reportedly is currently successfully carrying approximately 55,000 AADT.

Two lane roundabouts can accommodate pedestrians, as can be seen in the above photograph. It may be necessary to provide pedestrian activated signals.
Road Typologies – Roundabout Intersection
NC 73 Corridor Access Management Strategy

The Access Management Strategy for the NC 73 Corridor is built around a number of elements which are applied consistently throughout the corridor. The intent of these is to help minimize the size of the road typologies used in each segment, as well as to realize the benefits of safety, efficiency and aesthetics. These elements are indicated on the segment plans, and should be followed when the various segments are being designed as an inherent part of the NC 73 Corridor Transportation/Land Use Plan.

There are additional techniques which should be applied to individual properties and situations and they are being planned. The NCDOT should design the roadway to incorporate these techniques, and the local jurisdictions should enforce these techniques through their development regulation and approval processes. Since these techniques should be applied on a case-by-case basis, they are incorporated into this plan as guidelines for NCDOT and the local jurisdictions in the Technical Appendix.

The elements which are incorporated throughout the corridor are:

- **Reconfigured Intersection**
  A number of major intersections throughout the corridor should be reconfigured to provide the continuity and directional movements to make NC 73 and its related roads function as they need to for the road typologies to effectively carry the anticipated traffic and serve the anticipated land uses. Illustrative examples are shown in the road typologies for some of these intersections or interchanges. Others will have to be designed in the Preliminary Engineering/Environmental phase of individual projects to meet the Access Management goals, and to resolve other design issues.

- **Signalized Intersection**
  Signalized intersections in the NC 73 Corridor access management strategy serve several purposes. The locations shown in the segment plans are the minimum distances considered desirable for the anticipated posted speed limits, to keep the signal spacing effective. They are located to provide control of left turns and U-turns across traffic, to limit those locations in order to minimize conflicts with oncoming traffic. And, they are located where they are considered most likely to best serve existing and anticipated development. While traffic signal guidance is provided by the Manual on Uniform Traffic Control Devices (MUTCD) through “warrants” for signal locations, and the time at which installation of signals at locations shown should follow those warrants in most cases, they should also be considered for installation when they would be appropriate for access management purposes.

- **Unsignalized Intersection with Left Turn Lane; Median Break**
  The unsignalized intersections shown on the segment plans serve the same purposes as described above for the signalized intersections. It will not be necessary to signalize these intersections because of anticipated traffic volumes. They could be considered for signalization when they meet the MUTCD warrants.
Unsignalized Right Turn Intersection; No Median Break

“Right-in/right-out” intersections and driveways are indicated on the segment plans where existing or anticipated land development will not be large enough to require a median break, or where the location of the median break would be unacceptably close to a proposed signalized or unsignalized intersection. Traffic from these intersections or driveways desiring to go left would make a right turn, and then make a legal, controlled U-turn at the next signalized or unsignalized intersection. This will eliminate left turns across oncoming traffic and improve the safety of the corridor.

Driveway Consolidation

To avoid an excessive number of driveways onto to roadway, whether from residential or non-residential properties, consolidation of adjacent driveways into one or two driveways serving multiple properties is proposed at a number of locations throughout the corridor. Determination of where this can actually be accomplished, and the most appropriate design for accomplishing it, will be made in the Preliminary Engineering/Environmental phase, when roadway design engineers can evaluate actual conditions and work with the affected property owners.

Natural Landscape Buffer; No New NC 73 Driveways

The segment plans indicate many locations where a natural buffer is proposed. There are also locations where the anticipated land development indicates “no new NC 73 driveways.” It is intended that no new driveways should be permitted onto NC 73 in these locations. Under North Carolina law, access to a property on a public road cannot be denied unless there is another means of access to the property from a public road. If there are applications for new driveways along NC 73 for which approval cannot be denied because that would be the only means of access to the property, the approval of access should be provisional, with the requirement that the access be reconnected to other streets or roads when they are built in the future.

Directional Intersections

In some instances, a left turn across traffic may be essential and unavoidable. To accommodate those instances, a directional intersection will provide a left turn lane, but not a full median break, so that left turns can be made from NC 73 onto a street or property. However, no left turn is possible out of the street or property.
Segment Plans

The fifteen segment plans of the NC 73 Corridor are shown with proposed road typologies, access management features, anticipated future land uses, and proposed road design and land use actions.

The drawings illustrate the intent of the plan to achieve a road network that will serve the existing and planned land uses in the corridor, that will be adequate for the levels of traffic anticipated in 2025, and that will serve transit, pedestrians and bicycles, as well as cars and trucks.

The plans, with the descriptions of transportation criteria and access to adjacent land uses are strategic in nature. They are meant to provide guidance to local communities in order to preserve adequate rights-of-way, to require managed access to existing and new development, and to coordinate other related transportation facilities. They are also meant as a guide to NCDOT to follow as a basis for engineering design.

The final features and dimensions of all of the plan elements will be determined in the Environmental, Preliminary Engineering and Final Engineering phases of project development.
Segment – NC 73 Bypass

**Location:** US 321 to Low Bridge Road  
**Context:** Commercial and Employment Center  
**Length:** 4.9 miles  
**Responsible Jurisdiction(s):** Lincoln County
Segment – NC 73 Bypass

NC 73 Transportation / Land Use Corridor Plan
## Segment – NC 73 Bypass

### Criteria

<table>
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<th>Design Criteria</th>
<th>Anticipated 2025 Traffic</th>
<th>Posted Speed Limit</th>
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<tr>
<td></td>
<td>US 321 to NC 27: 14,000 ADT</td>
<td>55 mph from US 321 to NC 27</td>
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<tr>
<td></td>
<td>NC 27 to Low Bridge Road: 18,000 AADT</td>
<td>45 mph from NC 27 to Airport Road</td>
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<td>35 mph from Airport Road to Low Bridge Road</td>
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### NC 73 Road Typologies

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<th>Airport Road to Low Bridge Road</th>
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<tbody>
<tr>
<td></td>
<td>4 Lane Highway</td>
<td>4 Lane Suburban Boulevard</td>
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### Related Road Typologies

<table>
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<tr>
<th>Related Road Typologies</th>
<th>Hill Road</th>
<th>Salem Church Road</th>
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<tbody>
<tr>
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<td>4 Lane Suburban Boulevard</td>
<td>4 Lane Suburban Boulevard</td>
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### Reconfigured Intersections and/or Interchanges

<table>
<thead>
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<th>NC 73 at US 321</th>
<th>Interchange to be constructed as part of NC 150 Extension</th>
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<td>NC 73 at Salem Church Road</td>
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<td>NC 73 at Hill Road</td>
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<td>NC 73 at NC 27</td>
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### Transit

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### Modified Connections to Local Roads

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<tr>
<th>Modified Connections to Local Roads</th>
<th>Mt. Vernon Church Road, Old NC 73, and Oakwood Circle</th>
<th>Connections to be changed as part of NC 73 design in Environmental/Preliminary Engineering phase</th>
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### Related Roads not part of the NC 73 Plan

<table>
<thead>
<tr>
<th>Related Roads not part of the NC 73 Plan</th>
<th>Parallel Roads in Commercial and Employment Center Developments</th>
<th>To be required as part of development approvals</th>
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## Segment – NC 73 Bypass
### Land Use and Access

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>US 321 to CSX Railroad</strong></td>
<td>Commercial and Employment Center, per Lincoln County Land Use Plan – no direct access to NC 73; develop 4 lane suburban boulevards as part of developments for access to NC 73 interchanges; developments to construct internal circulation streets for access to 4 lane suburban boulevards</td>
</tr>
<tr>
<td><strong>Railroad to Link Drive</strong></td>
<td>Airport Mixed Use District, per Lincoln County Land Use Plan – no direct access to NC 73; access NC 73 only at Airport Road extension signalized intersection; extend Airport Road to NC 73 and realign Oakwood Circle to connect to Old NC 73</td>
</tr>
<tr>
<td><strong>Link Drive to Camp Creek Road</strong></td>
<td>Airport Mixed Use District north of NC 73 – no additional full intersections on NC 73; space any new NC 73 driveways at minimum of 330 ft. apart; consolidate existing driveways wherever possible</td>
</tr>
<tr>
<td></td>
<td>Existing Single Family Residential south of NC 73 – consolidate existing driveways wherever possible; driveways to be right-in, right-out only</td>
</tr>
<tr>
<td><strong>Camp Creek Road to Low Bridge Road</strong></td>
<td>Low Density Residential, per Lincoln County Land Use Plan north of NC 73 – no new NC 73 driveways for subdivision developments</td>
</tr>
<tr>
<td></td>
<td>Existing Single Family Residential south of NC 73 – consolidate existing driveways wherever possible; driveways to be right-in, right-out only</td>
</tr>
</tbody>
</table>
Segment – Ironton (Alternative A)

**Location:** Low Bridge Road to Maxwell Farm Lane

**Context:** Low Density Residential

**Length:** 5.2 miles

**Responsible Jurisdiction(s):** Lincoln County
Segment – Ironton (Alternative A)

- Old Plank Road
- Beth Haven Church Road
- Maxwell Farm Lane
- Furnace Road
- Low Bridge Road
- Lambs Way
- Nolen Acres Lane
- Chase Drive
- Greenway Road
- Newnan Lane
- Hunsucker Trail
- Leeper’s Creek
- New Fer Process Road
- Leeper Bridge Road
- Low density residential; no new NC 73 driveways or intersections

- See NC 73 Bypass Segment
- See Ironton Alternative B
- Low density residential; no new NC 73 driveways or intersections

- See Anderson Creek Segment
- See NC 73 Transportation / Land Use Corridor Plan 102
### Criteria

<table>
<thead>
<tr>
<th>Design Criteria</th>
<th>Anticipated 2025 Traffic</th>
<th>Posed Speed Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC 73 Road Typologies</td>
<td>Low Bridge Road to Maxwell Farm Lane</td>
<td>45 mph</td>
</tr>
<tr>
<td>Related Road Typologies</td>
<td>None</td>
<td>4 Lane Rural Boulevard</td>
</tr>
<tr>
<td>Reconfigured Intersections and/or Interchanges</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Transit</td>
<td>Fixed Guideway</td>
<td>None</td>
</tr>
<tr>
<td>Transit Centers</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Bus</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Modified Connections to Local Roads</td>
<td>Old Plank Road and Brevard Place Road at NC 73</td>
<td>Connections to be changed as part of NC 73 design in Environmental/Preliminary Engineering phase</td>
</tr>
<tr>
<td>Related Roads not part of the NC 73 Plan</td>
<td>None</td>
<td>None</td>
</tr>
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</table>
## Segment – Ironton (Alternative A)

### Land Use and Access

<table>
<thead>
<tr>
<th>Segment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Bridge Road to Reinhardt Circle East</td>
<td>Existing church, large lot single family residences, industrial property and Century Farm Historic site north of NC 73 – no new NC 73 driveways for subdivision developments. Existing Single Family Residential south of NC 73 – consolidate existing driveways wherever possible; driveways to be right-in, right-out only.</td>
</tr>
<tr>
<td>Reinhardt Circle East to Amity Church Road</td>
<td>Low Density Residential, per Lincoln County Land Use Plan north of NC 73 – no new NC 73 driveways for subdivision developments. Low Density Residential, per Lincoln County Land Use Plan south of NC 73 – no new NC 73 driveways for subdivision developments; consolidate existing driveways wherever possible; driveways to be right-in, right-out only.</td>
</tr>
<tr>
<td>Amity Church Road to Lambs Way</td>
<td>Existing Single Family Residential north and south of NC 73 - consolidate existing driveways wherever possible; driveways to be right-in, right-out only. East Lincoln Middle School north of NC 73 – no new NC 73 driveways.</td>
</tr>
<tr>
<td>Lambs Way to Beth Haven Church Road</td>
<td>Existing Single Family Residential north and south of NC 73 - consolidate existing driveways wherever possible; driveways to be right-in, right-out only. Low Density Residential, per Lincoln County Land Use plan north of NC 73 – no new NC 73 driveways for subdivision developments.</td>
</tr>
<tr>
<td>Beth Haven Church Road to Maxwell Farm Lane</td>
<td>Existing Single Family Residential north and south of NC 73 - consolidate existing driveways wherever possible; driveways to be right-in, right-out only. Tucker’s Grove Camp Historic Site north of NC 73 – no new NC 73 driveways.</td>
</tr>
</tbody>
</table>
Segment – Ironton (Alternative B)

**Location:** Low Bridge Road to Maxwell Farm Lane

**Context:** Low Density Residential

**Length:** 4.6 miles

**Responsible Jurisdiction(s):** Lincoln County
Segment – Ironton (Alternative B)

Realignment of NC 73 as 4 lane rural parkway; no new NC 73 driveways; maximum of 5 new NC 73 intersections as shown.

Existing NC 73 remains 2 lane undivided.

Low density residential; no driveways to new bypass; max. 1 additional signalized intersection on bypass.

Low density residential; no connections to new bypass.

Possible Alternative (to be considered in environmental/preliminary engineering phase).

See NC 73 Bypass Segment.

Century Farm Historic Site.

Reinhardt Circle.

LowBridgeRoad.

NolenAcresLane.

Old NC 73.

BrevardPlaceRoad.

DalmatianLane.

BaldwinRoad.

CromwellRoad.

OldPlunkRoad.

Historic Site.

Machpelah Church & Cemetery Historical Site.

Anderson Creek Segment.
### Segment – Ironton (Alternative B)

#### Criteria

<table>
<thead>
<tr>
<th>Design Criteria</th>
<th>Anticipated 2025 Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Bridge Road to Reinhardt Circle: 16,000 ADT</td>
</tr>
<tr>
<td></td>
<td>Old NC 73: 6,000 AADT</td>
</tr>
<tr>
<td></td>
<td>Reinhardt Circle to Brevard Place Road: 12,000 ADT</td>
</tr>
<tr>
<td></td>
<td>Brevard Place Road to Maxwell Farm Lane: 14,000 ADT</td>
</tr>
</tbody>
</table>

| Posted Speed Limit | 45 mph |

<table>
<thead>
<tr>
<th>NC 73 Road Typologies</th>
<th>Low Bridge Road to Reinhardt Circle</th>
<th>4 Lane Rural Boulevard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reinhardt Circle to Maxwell Farm Lane</td>
<td>4 Lane Rural Parkway</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Road Typologies</th>
<th>Old NC 73</th>
<th>Existing NC 73 to remain 2 lane undivided</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reconfigured Intersections and/or Interchanges</th>
<th>None</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Transit</th>
<th>Fixed Guideway</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Transit Centers</td>
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<tr>
<td>Bus</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Modified Connections to Local Roads</th>
<th>Reinhardt Circle at Old NC 73 and Maxwell Farm Lane at Old NC 73</th>
<th>Connections to be changed as part of NC 73 design in Environmental/Preliminary Engineering phase</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Related Roads not part of the NC 73 Plan</th>
<th>None</th>
</tr>
</thead>
</table>
## Segment – Ironton (Alternative B)
### Land Use and Access

| Low Bridge Road to Reinhardt Circle East | Existing church, large lot single family residences, industrial property and Century Farm Historic site north of NC 73 – no new NC 73 driveways for subdivision developments. Existing Single Family Residential south of NC 73 – consolidate existing driveways wherever possible; driveways to be right-in, right-out only. |
| Reinhardt Circle East to Maxwell Farm Lane | Low Density Residential, per Lincoln County Land Use Plan north and south of NC 73 – no new NC 73 driveways for subdivision developments; maximum of 5 new NC 73 intersections as shown. |
| Existing NC 73: Reinhardt Circle East to Maxwell Farm Lane | No change to existing; new development not subject to NC 73 access management guidelines. |
Segment – Anderson Creek

**Location:** Maxwell Farm Lane to Killian Creek

**Context:** Low Density Residential

**Length:** 2.4 miles

**Responsible Jurisdiction(s):** Lincoln County
Segment – Anderson Creek

Low Density Rural Area; no additional NC 73 intersections; no new NC 73 driveways
### Segment – Anderson Creek
#### Criteria

<table>
<thead>
<tr>
<th>Design Criteria</th>
<th>Anticipated 2025 Traffic</th>
<th>Posted Speed Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tyler Hatley Lane to Ingleside Farm Road: 30,000 AADT</td>
<td>45 mph</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NC 73 Road Typologies</th>
<th>Maxwell Farm Lane to Killian Creek</th>
<th>4 Lane Rural Boulevard</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Related Road Typologies</th>
<th>None</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reconfigured Intersections and/or Interchanges</th>
<th>NC 73 at Ingleside Farm Road</th>
<th>Redesign interchange for direct connection as part of NC 73 design in Environmental/Preliminary Engineering phase</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Transit</th>
<th>Fixed Guideway</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit Centers</td>
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<td>None</td>
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<tr>
<td>Bus</td>
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<tr>
<th>Modified Connections to Local Roads</th>
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<th>Connections to be changed as part of NC 73 design in Environmental/Preliminary Engineering phase</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Related Roads not part of the NC 73 Plan</th>
<th>None</th>
</tr>
</thead>
</table>
### Segment – Anderson Creek

#### Land Use and Access

| Maxwell Farm Lane to Killian Creek | Low Density Residential, per Lincoln County Land Use Plan north and south of NC 73 – no new NC 73 driveways for subdivision developments; existing single family residential north and south of NC 73 – consolidate existing driveways wherever possible; driveways to be right-in, right-out only |

---

NC 73 Transportation / Land Use Corridor Plan 112
Segment – West Lake Norman

Location: Killian Creek to Club Drive
Context: Community Mixed Use Center
Length: 3.8 miles
Responsible Jurisdiction(s): Lincoln County
Segment – West Lake Norman

Residential – no new NC 73 driveways; max. 1 additional signalized intersection west of High School.

Possible Alternatives
Commercial and Employment Center; max. 1 additional signalized intersection west of East Lincoln High School; driveway spacing 660 ft. min.

New 2 lane suburban boulevards – build with developments

Neighborhood Center – Area Plan needed

Residential – no new NC 73 driveways; additional signalized intersections as shown

Commercial and Employment Center; max. 1 additional signalized intersection west of East Lincoln High School; driveway spacing 660 ft. min.

New 2 lane suburban boulevards – build with developments

4 lane suburban boulevard

4 lane rural boulevard

6 lane suburban boulevard

Club Drive

Sedgebrook Drive West

Killian Farm Road

Forney Creek

Bridge over NC 16

North Carolina 16

Residential – no new NC 73 driveways; additional signalized intersections as shown
### Segment – West Lake Norman

#### Criteria

<table>
<thead>
<tr>
<th>Design Criteria</th>
<th>Anticipated 2025 Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ingleside Farm Road to New NC 16: 29,000 ADT</td>
</tr>
<tr>
<td></td>
<td>New NC 16 to Pilot Knob Road: 36,000 AADT</td>
</tr>
<tr>
<td></td>
<td>Pilot Knob Road to Club Drive: 43,000 ADT</td>
</tr>
</tbody>
</table>

| Posted Speed Limit               | 35 mph                                                                                   |

### NC 73 Road Typologies

| Killian Creek to Little Egypt Road | 4 Lane Rural Boulevard                                                                   |
| Little Egypt Road to Pilot Knob Road | 6 Lane Suburban Boulevard                                                                |
| Pilot Knob Road to Club Drive     | 4 Lane Suburban Boulevard                                                                |

### Related Road Typologies

| Old NC 16                          | 4 Lane Suburban Boulevard from Little Egypt Road to Pilot Knob Road                      |
| Pilot Knob Road                    | 4 Lane Suburban Boulevard from NC 73 to Old NC 16                                       |
| Little Egypt Road                  | 2 Lane Suburban Boulevard from NC 73 to Old NC 16                                       |
| Little Egypt Road Extension        | 2 Lane Suburban Boulevard from Old NC 16 to NC 73 at Club Drive, to be built as part of future developments |
| Killian Farm Road/Pilot Knob Road Connector | 2 Lane Suburban Boulevard from NC 73 at Pilot Knob Road to Little Egypt Road Extension, to be built as part of future developments |

### Reconfigured Intersections and/or Interchanges

| NC 73 at New NC 16                | Interchange to be constructed as part of New NC 16 construction                          |
| NC 73 at Salem Church Road        | Interchange to be designed in Environmental/Preliminary Engineering phase               |
| NC 73 at Hill Road                | Interchange to be designed in Environmental/Preliminary Engineering phase               |
| NC 73 at NC 27                    | Interchange to be designed in Environmental/Preliminary Engineering phase               |

### Transit

<table>
<thead>
<tr>
<th>Fixed Guideway</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit Centers</td>
<td>None</td>
</tr>
<tr>
<td>Bus</td>
<td>None</td>
</tr>
</tbody>
</table>

### Modified Connections to Local Roads

| Pilot Knob Road | Connection to Killian Farm Road/Pilot Knob Road Connector and closing of NC 73 connection to be built as part of future developments |

### Related Roads not part of the NC 73 Plan

| New NC 16 | South of NC 73 currently under construction; north of NC 73 is TIP R-2206; Rufus Road is under discussion as a possible local road |

NC 73 Transportation / Land Use Corridor Plan