



North Carolina Department of Transportation

July 2012

SUBJECT: North Carolina Department of Transportation's Tree Planting Initiatives

The North Carolina Department of Transportation has implemented various tree planting initiatives that have resulted in maintained areas and naturalized forested right-of-way that embodies the beauty of the State. Tree planting initiatives began in the 1960's with reforestation efforts along interstates and included the Dogwood and Redbud initiative the Dogwood and Redbud initiative was started in the 1980's and has successfully seen the establishment of these flowering trees all over the State, Approximately 58,000 pines were planted along I-85 in memory of the Americans lost Vietnam.

In 1996 the Department expanded its tree planting to include the Green Roads Initiative. The Green Road initiative stressed cooperation between the Department of Transportation, Department of Correction, Division of Forest Resources, and the Department of Environment and Natural Resources. This effort resulted in the planting of over 700 acres of trees and further enhanced the natural habitat for birds and other wildlife, reduced mowing cost, and highlighted the beauty of the State.

The Department also incorporates reforestation of pines, dogwoods and redbuds construction projects since these initiatives have started. NCDOT reforested thousands of acres of wetlands for mitigation to compensate for the impacts to environmentally sensitive areas associated with the Departments construction efforts.

The Department of Transportation values the benefits of establishing forested areas along the highways and wetland mitigation sites but has also recognized the complications associated with maintaining a safe corridor for the traveling public. The tree seedlings have grown and spread to develop into the large over story canopy trees that we see today along our roadsides. The current situation that the Department faces is one that has reduced the safety zone along the highway that a driver has to recover from a lane departure incident.

The Department has also had to respond to more storm debris cleanup after powerful weather events such as hurricanes and ice storms. The encroaching forest has reduced the Department to examine alternate ways of maintaining the edgeline of the forested areas along the roadways of North Carolina.

The Clear Zone Improvement Program (CZIP) was developed to resolve the issues that develop when large over story canopy trees encroach on the roadway. The program utilizes well established forestry practices that will develop a transitional area between the large over story canopy trees and the clear zone needed to allow for a vehicle to recover from a lane departure incident.

CZIP utilizes native grasses, wildflowers, and low growing trees to provide shade to inhibit the migration of the larger tree species. The establishment of this zone has already been implemented on several projects across North Carolina.



Clear Zone Improvement Program

The implementation of CZIP would involve the removal of unwanted vegetation and the establishment of the native grasses, wildflowers and low growing tree species. The zone can be established along newly constructed projects as well as those routes that have recently had storm damaged trees removed. Over time, the Department could implement the program statewide with good success.

- The maintenance associated with this program would require a treatment once every three years to remove any unwanted vegetation that may have established itself in the CZIP zone.
- The native grass establishment would provide habitat for wildlife and provide an area to further continue establishing the Dogwoods and Redbuds across the State.
- It is the Departments goal to have a well established and aesthetically pleasing forest along the highways of North Carolina but also one that would not create safety hazards to the traveling public.

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The following is a timeline of the tree planting initiatives that the North Carolina Department of Transportation has been involved in over the past several decades.

1960's

500,000 Trees Planted (Est)

- ◆ The Department begins utilizing a portion of License Plate Funds to plant pine seedlings on DOT rights-of-ways.

1970's

700,000 Trees Planted (Est)

- ◆ The Department receives approval to begin using Federal Aid Funding to plant pines and hardwood tree species on interstate highway construction projects.

1980's

900,000 Trees Planted (Est)

- ◆ The Department begins the Dogwood and Redbud tree planting initiative across the State.
- ◆ Construction funds begin to be used to plant ornamental trees on construction projects for community gateways and corridor aesthetic improvements

1990's

1,500,000 Trees Planted (Est)

- ◆ The Department participates in the America's Treeways Initiative supported by AASHTO, the National Tree Trust, U.S. Forest Service, National Association of Foresters, Take Pride in America, and the Federal Highway Administration.
- ◆ The Department plants 58,000 pine seedlings along I-85 in memory of the Americans lost in the Vietnam War.
- ◆ The Green Roads Initiative was passed and the Department planted 700 acres of trees.
- ◆ Enhancement funds were used to expand the ornamental tree planting.
- ◆ Wetland Mitigation efforts began

2000's

1,200,000 Trees Planted (Est)

- ◆ The Department continues to utilize construction funding for reforestation on highway construction projects.
- ◆ Enhancement funds continue to be utilized to plant ornamental trees.

- ◆ The Department identifies issues with encroaching tree canopies and develops the CZIP concept.
- ◆ Wetland and Stream Mitigation projects continue to plant on thousands of acres for restoration efforts.