

# BOARD OF ALDERMEN

ITEM NO. (2)

## AGENDA ITEM ABSTRACT

MEETING DATE: JUNE 14, 2005

**TITLE: Report on Connector Roads Policy – Brewer Lane Area**

<b>DEPARTMENT: PLANNING</b>	<b>PUBLIC HEARING: YES ___NO__X__</b>
<b>ATTACHMENTS:</b> <b>A. Resolution</b> <b>B. Carrboro Connector Roads Policy</b> <b>C. Possible Connection</b> <b>D. Street Connectivity Timeline – 1970 to Present</b>	<b>FOR INFORMATION CONTACT:</b> <b>Dale McKeel – 918-7329</b> <b>Patricia McGuire – 918-7329</b>

### PURPOSE

At its meeting on March 18, 2005, the Board of Aldermen discussed access issues around the Brewer Lane area and requested that town staff prepare a report on public streets in the Brewer Lane area. A report has been prepared. A resolution receiving the report is attached (Attachment A).

### INFORMATION

Since World War II, a low level of street connectivity has characterized the street network in many American communities. In recent years a number of towns and cities, including Carrboro, have adopted ordinances and policies that promote increased street connectivity. Carrboro's adopted Connector Roads Policy is Attachment C. The Overview of the Connector Roads Policy states the following:

In 1986, when the Connector Roads Policy was conceived, Carrboro was just beginning to develop toward the north. The Connector Roads Policy was adopted by the Board of Aldermen as a guide to aid in the construction and maintenance of a sound traffic plan for the town. As stated in the introduction of the plan, the success of Carrboro's growth as a town is "ultimately dependent upon the effectiveness and continued efficiency of its transportation system."

The Connector Roads Policy was designed to guide the Board of Aldermen as new projects and developments come before them for approval. The Policy's purpose was to ensure that old and new developments and businesses in the town would be connected to each other, both to disperse newly generated traffic and to give a sense of connectivity and unity to the town as it grows. The roads included on the Connector Roads Plan were intended to provide a backbone for a more intricate grid of smaller connector roads.

Carrboro began planning for street connectivity in the 1970s. In 1980, the Board of Aldermen adopted the original Collector Roads Plan. The Plan included northern connectors and southern connectors as well as cross-town streets. The northern connector roads linked Hillsborough Road, Estes Drive, and a planned future arterial between Seawell School Road and Homestead Road.

On March 18, 1986, the Town of Carrboro adopted the Northern Connector Roads Plan to aid in the construction and maintenance of a sound traffic plan for the town's future growth areas. In the late 1980s and early 1990s, additional revisions were made to the Connector Roads Policy. These included the addition of Lake Hogan Farm Road between Homestead Road and Eubanks Road, the Stratford and Cates Farm Road connection, and the connector between Homestead Road and Lake Hogan Farm Road. The arterial connecting Seawell School Road and Homestead Road was modified to avoid a crossing of Bolin Creek.

In the latter half of the 1990s, additional connectivity requirements were placed in the Land Use Ordinance. This language required that all roads be interconnected, to the extent practicable, and that cul-de-sacs shall not be used unless the topography of the land does not allow a design that would make an interconnecting road practicable. In addition, the ordinance was amended to require that collector and subcollector streets be designed with features to discourage speeding and cut-through traffic, and the Residential Traffic Management Policy was adopted to provide a means for calming traffic on residential streets.

*Carrboro Vision 2020*, adopted in December 2000, includes Policy 4.12, "The Town should continue to implement its connector roads policy."

Attachment C is a Street Connectivity Timeline from 1970 through the present. Note that the following subdivisions/developments approved since December 2000 include street connection designs in conjunction with the connector roads initiatives: Jones Ferry Park and Ride lot, Horne Hollow subdivision, Morgan Ridge (now Rose's Walk Townhomes at University Lake), Smith Middle School Athletic Fields, Tramore West subdivision, Winmore, and High School # 3. The conditional use permits for the Rose's Walk and Winmore projects include bridges over Tom's Creek and Bolin Creek, respectively.

The following observations can be made about Carrboro's Connector Roads Policy:

- There has been a high level of commitment to implementing the Connector Roads Policy as growth has occurred in Carrboro.
- The connector roads help to disperse traffic and promote the Town's policy of not widening existing roads to provide additional lanes for automobiles.
- The community has taken steps to promote alternative modes of transportation and mitigate the environmental and neighborhood impacts of connector roads.

## **RESEARCH ON STREET CONNECTIVITY**

The American Planning Association (APA) recently published a report entitled Planning for Street Connectivity: Getting from Here to There. The report discusses the history of street patterns and standards in the U.S., and profiles the street connectivity requirements in 14 communities, including the North Carolina municipalities of Cary, Huntersville, Cornelius, Conover, and Raleigh.

The report states that supporters of connectivity state that it will provide the following benefits:

- Decrease traffic on arterial streets.
- Provide for continuous and more direct routes that facilitate travel by non-motorized modes such as walking and bicycling and facilitate more efficient transit service.
- Provide greater emergency vehicle access and reduced response time, and conversely, provide multiple routes of evacuation in case of disasters such as wildfires.
- Improve the quality of utility connections, facilitate maintenance, and enable more efficient trash and recycling collection and other transport-based community services.

The report states that opponents of connectivity state it will have the following negative effects:

- Raise levels of through traffic on existing residential streets.
- Increase infrastructure costs and impervious cover.
- Require more land to develop the same number of units.
- Decrease the affordability of housing.
- Threaten the profitability of developments.

The APA report also reviews research on the potential benefits and costs of connectivity requirements, and states the following:

- Research on street connectivity tends to support the argument that greater connectivity will reduce traffic volumes on arterials due to two factors, the dispersal of vehicle trips throughout the network and a decrease in the total amount of vehicle travel. However, connectivity can increase the amount of traffic on residential streets, and communities often use traffic calming techniques to reduce these impacts.
- There is little available research on whether the shorter travel distances resulting from higher connectivity will encourage walking and bicycling. Some research has found that walking is likely to increase if there are destinations such as a retail center within walking distance, pointing to the importance of land-use planning in conjunction with connectivity.

- Greater connectivity can help to improve the quality and efficiency of emergency medical service, trash collection, police, other municipal service providers, and businesses.
- Communities often adopt narrower street requirements in conjunction with connectivity requirements to discourage through traffic by promoting lower speeds, reduce impervious surface, and help to minimize the expense to developers.

The City of Raleigh has conducted extensive research on the public benefits and costs of connectivity in four areas: (1) travel efficiency and mode choice, (2) fire response and service costs, (3) water and residential trash collection costs, and (4) environmental costs. Additional information about Raleigh's research findings is available.

### **POTENTIAL CONNECTOR ROADS IN THE BREWER LANE AREA**

Town staff has prepared an illustration of a possible connector road between Merritt Mill Road and Brewer Lane which could be added to the Connector Roads Plan (Attachment C). The illustration is schematic in nature and reflects a general corridor for a connecting road. However, the actual location could and most likely would vary based on a number of factors such as topography, soils, development layout, roadway engineering standards, and intersection design.

The illustration also includes a possible connection toward Crest Street in Chapel Hill. It is envisioned that this connection could accommodate vehicles or could be a bicycle and pedestrian only connection. This possible connection is shown extending to the Carrboro town limits.

Also note that a private road, Guthrie Avenue, is also accessed from Brewer Lane and provides access to other properties. With the development of a connector road between Merritt Mill Road and Brewer Lane, a connection to Guthrie Avenue would need to be maintained.

A connector road between Merritt Mill Road and Brewer Lane could have many of the potential benefits and negative effects discussed previously. Perhaps the biggest benefit would be the provision of an additional access for emergency vehicles to Brewer Lane, Wesley Street, Hargraves Street, and Eugene Street. Perhaps the biggest negative impact would be the possible reduction in development potential of properties due to the requirement that a connector road be built that would bisect the property.

If the connector road is added to the connector roads plan, the land use ordinance at Sections 15-220(h) and 15-221(b) would require that the connector road be built as part of future development or redevelopment. Unlike the location of most other future connector roads in Carrboro, there is existing development on the properties where the Merritt Mill-Brewer connecting road would be placed. Due to this existing development, it could be many years before the plan for a connecting road could be implemented, although portions of the connector could possibly be built as properties are developed or redeveloped.

**FISCAL IMPACT**

Acceptance of the report carries with it no known fiscal impacts.

**STAFF RECOMMENDATION**

The town staff recommends that the Board of Aldermen adopt the resolution receiving the report (Attachment A).