

VILLAGE OF LOMBARD  
REQUEST FOR BOARD OF TRUSTEES ACTION  
For Inclusion on Board Agenda

Resolution or Ordinance (Blue) \_\_\_\_\_  
Recommendations of Boards, Commissions & Committees (Green) \_\_\_\_\_  
Other Business (Pink) \_\_\_\_\_  
X \_\_\_\_\_  
*Waiver of First Requested*

TO: PRESIDENT AND BOARD OF TRUSTEES

FROM: William T. Lichter, Village Manager

DATE: August 8, 2006 (B of T) Date: August 17, 2006

TITLE: Regional Transportation Authority (Cook-DuPage Corridor Study)

SUBMITTED BY: Department of Community Development *WTL*

BACKGROUND/POLICY IMPLICATIONS:

The Department of Community Development transmits for your consideration a resolution in support of the Multiple Hub and Spoke Concept as presented in the Cook-DuPage Corridor Study. (DISTRICT #3)

Staff recommends the endorsement of this concept.

Please place this item on the August 17, 2006 Village Board of Trustees agenda.

Fiscal Impact/Funding Source:

Review (as necessary):

Village Attorney X

Finance Director X

Village Manager X *W.T. Lichter*

Date

Date

Date

*8/8/06*

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 noon, Wednesday, prior to the Agenda Distribution.



**MEMORANDUM**

**SUBJECT:** Regional Transportation Authority Cook-DuPage Corridor Study

**DATE:** August 17, 2006

**FROM:** David A. Hulseberg, AICP, Director of Community Development  
*DAH*

**TO:** William T. Lichter, Village Manager

**BACKGROUND**

The Cook-DuPage Corridor, as identified by the Regional Transportation Authority, covers a critical portion of the Chicago metropolitan area incorporating six counties. It is centered on the Eisenhower Expressway and the Ronald Regan Memorial Tollway and extends approximately 30 miles west from Cicero Avenue in the City of Chicago to the Kane-DuPage County line.

As the area comprising the Cook-DuPage Corridor continues to flourish, transportation congestion has created increased pressure on commuters, citizens, businesses, and the environment. In order to alleviate this pressure, the Regional Transportation Study (RTA), has partnered with other state, regional, and local transportation agencies, elected officials, and business and community leaders to conduct the Cook-DuPage Corridor Study.

The Cook-DuPage Corridor study aims to reach a consensus on the most effective and sustainable transportation solutions that can meet the needs of the Corridor. The study is comprised of three phases: Travel Market Analysis (completed December 2005), Options Feasibility Analysis (currently underway), and Alternatives Analysis.

Five different conceptual options have been developed, each of which is described in detail on the attached pages:

- Concept 1 – Hub and Spoke
- Concept 2 – Multiple Hub and Spoke
- Concept 3 – Grid Network
- Concept 4 – Point-to-Point Service
- Concept 5 – New Use of the Existing System

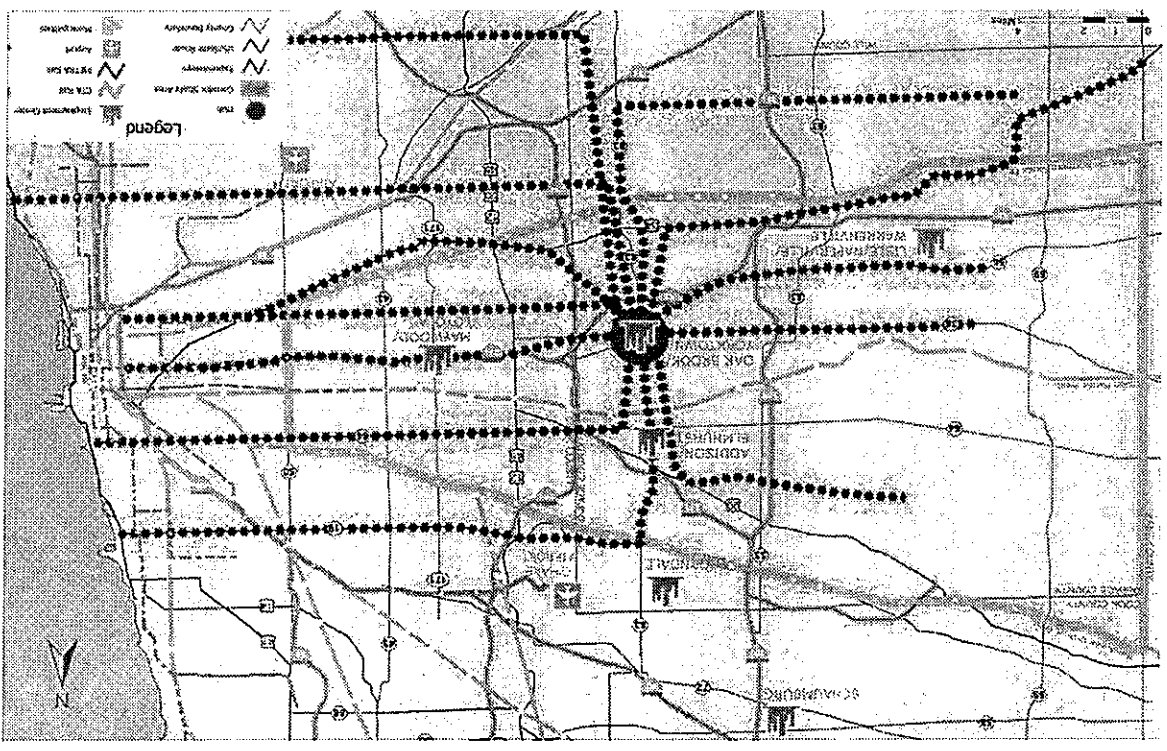
Of the five, Concept 2 – Multiple Hub and Spoke appears to be the most direct and efficient option for serving Lombard and the other major employment centers in and around the Corridor. This concept has two center points, the Yorktown area and the

Maywood/Loyola University Medical Center, that would serve as "hubs" to which new direct lines of service or "spokes" would converge. This system would offer nearly direct connections between many origins and two major destinations, addressing the high growth travel patterns to Corridor employment centers and in particular the reverse and inter-suburban travel markets.

**RECOMMENDATION**

Staff recommends that the Board of Trustees endorse Concept 2 – Multiple Hub and Spoke as proposed in the RTA Cook-DuPage Corridor Study.

Concept 1 - Hub and Spoke



Description

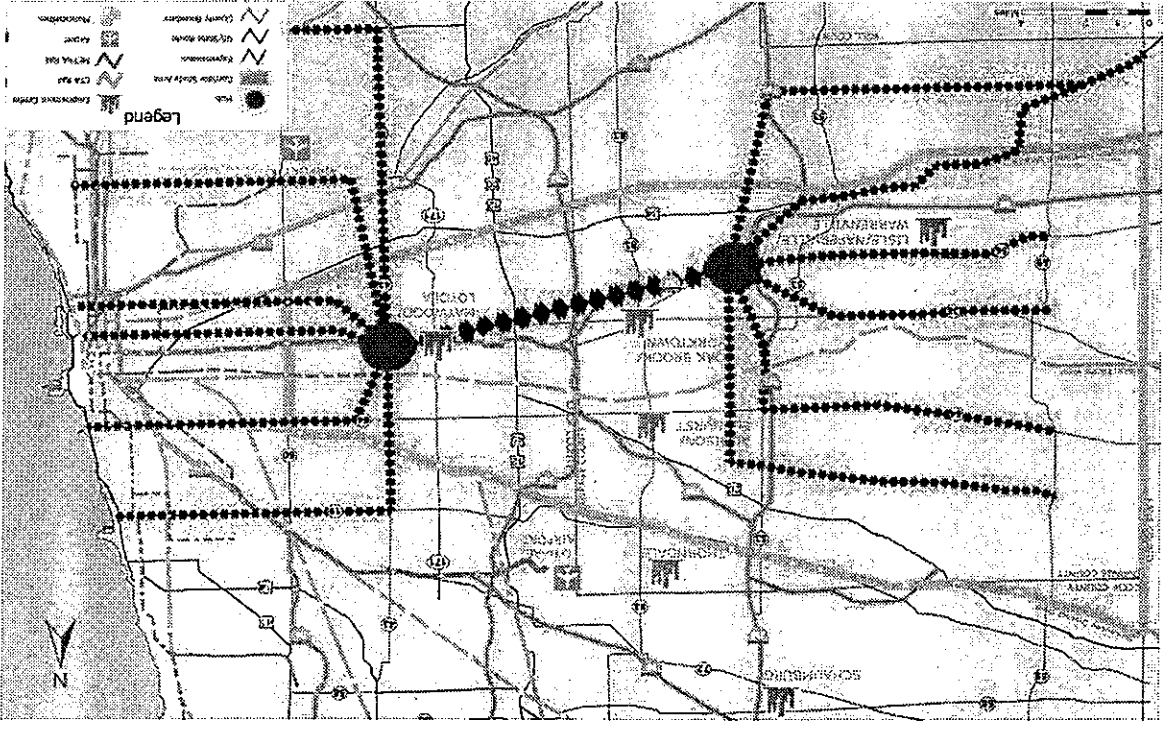
Concept 1 represents a "hub and spoke" system with the Oak Brook area serving as the center point or "hub" and to which new direct lines of service or "spokes" converge from the east and west. It serves the Oak Brook area similar to how the existing regional transportation system serves downtown Chicago. This concept relies primarily on new and enhanced transit services in the I-290 travel corridor and in a number of arterial corridors for east-west travel; and in the IL 83 corridor for north-south travel. The extensive network of bus service in Chicago and the near west suburbs is relied upon to access the spokes projecting east of Oak Brook. Enhanced bus service on key north-south routes would provide access to the spokes projecting west of Oak Brook in DuPage.

This hub and spoke concept is designed to directly serve the Oak Brook area which has the largest number of destinations of the six major employment centers in and around the corridor and has the highest destination densities - exceeding 7,000 trips per square mile. With additional spokes or lines of service and a well considered operational plan this concept could potentially serve most of the other major employment centers within the Corridor: Maywood/LUMC, Elmhurst/Addison, the Thorndale corridor, Yorktown (Lombard), and Lisle/Naperville/Warrenville.

Advantages and Limitations

The advantage of the hub and spoke system is that it provides a nearly direct connection between many origins to a major destination - in this case the Oak Brook area. The major limitation is that only one primary destination is served without requiring a transfer at the hub and potentially circuitous travel.

**Concept 2 - Multiple Hub and Spoke**



**Description**

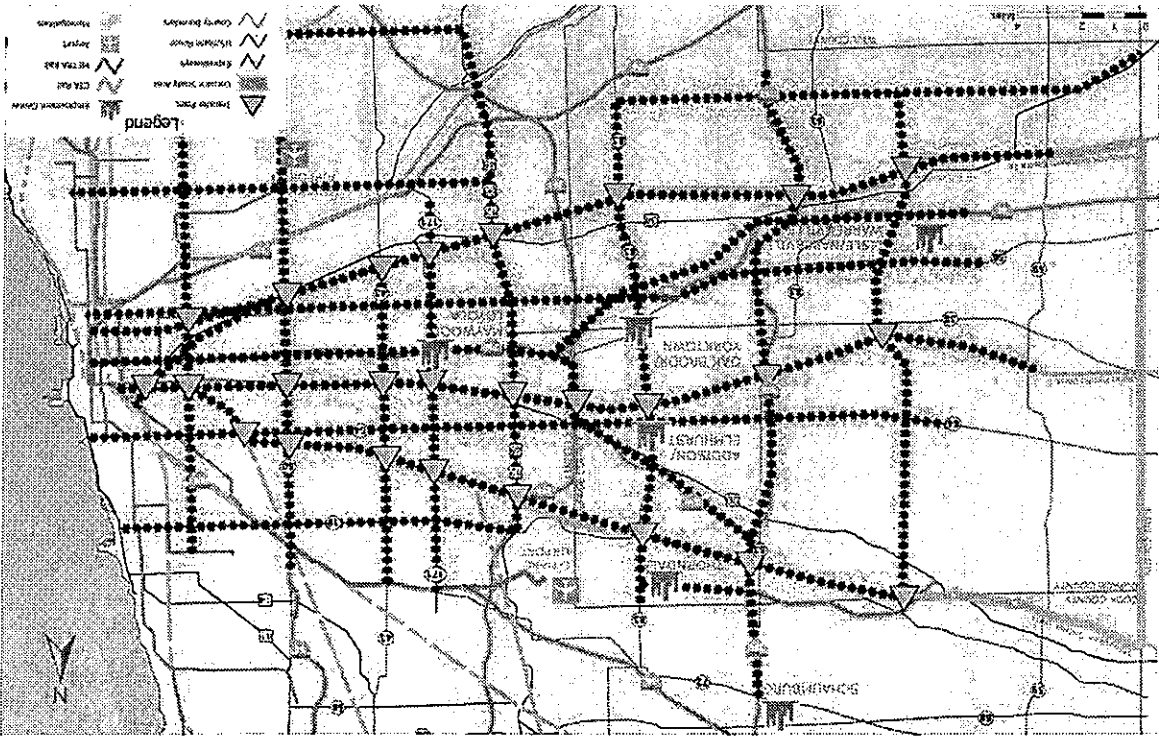
Concept 2 presents a "multiple hub and spoke" system with the Maywood/Loyola University Medical Center (LUMC) area and Yorktown (Lombard) area serving as the center points or "hubs" and to which new direct lines of service or "spokes" converge from the east near Maywood/LUMC and west to Yorktown. Direct service is provided to each hub from the spokes. However a required transfer is presumed for travel between the hubs or to the Oak Brook area. Main line service in the I-290/I-88 corridor between Harlem Avenue in Forest Park and Highland Avenue in Lombard provides a critical link between the two hubs. This concept relies extensively on new and enhanced transit services in the I-290/I-88 travel corridor as well as a number of arterial corridors for east-west travel to the hubs. The extensive network of bus service in Chicago and the near west suburbs is relied upon to access the spokes projecting east of the Maywood/LUMC area. Enhanced bus service on key north-south routes would provide access to spokes projecting west of Yorktown in DuPage.

This multiple hub and spoke concept is designed to directly serve the Maywood/LUMC area, Oak Brook, and the Yorktown area. With additional spokes or lines of service and a well considered operational plan, this concept could potentially serve most of the other major employment centers in and around the Corridor: Thorndale corridor, Elmhurst/Addison, Schaumburg and Lisle/Naperville/Warrenville.

**Advantages and Limitations**

The advantage of the multiple hub and spoke system is its nearly direct connections between many origins and two major destinations - in this case the Maywood/LUMC area and the Yorktown area. The major limitation is that access to the mainline between the hubs may be limited to maintain higher speed and adding spokes between and to the hubs has a smaller return for improving mobility.

Concept 3 - Grid Network



**Description**

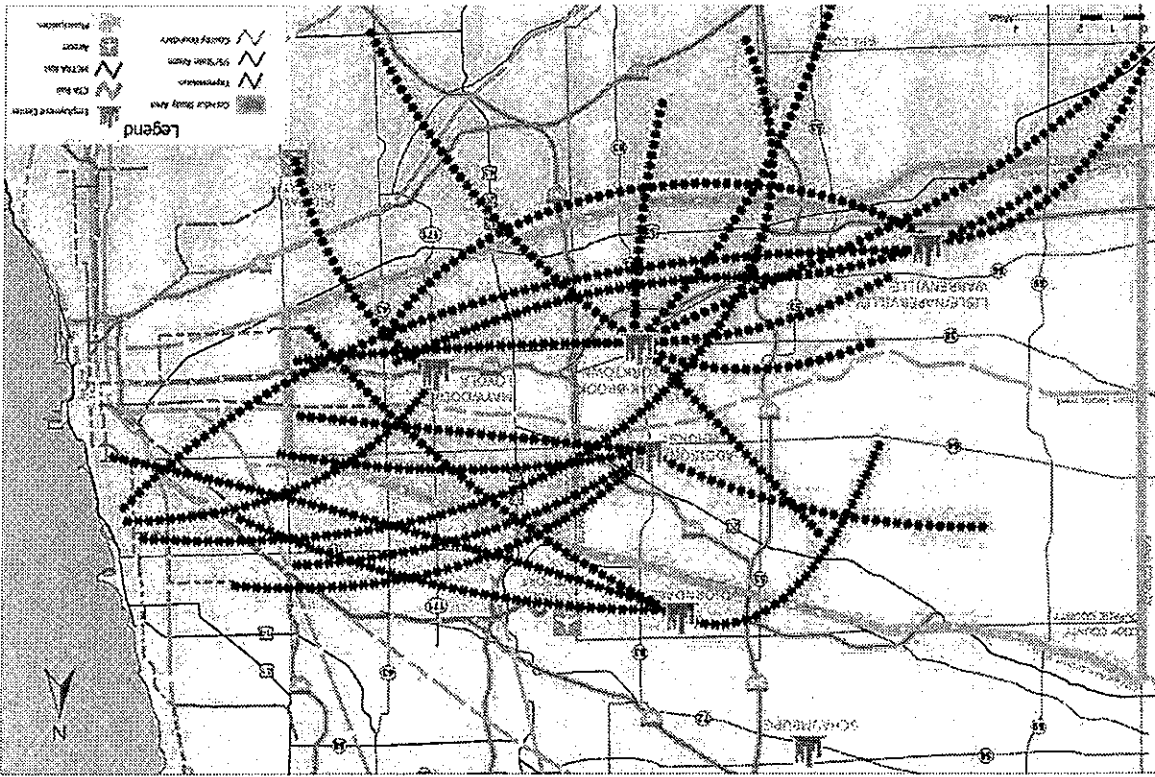
Concept 3 presents a grid network system comprised of intersecting east-west and north-south lines of service. It serves the corridor similar to how the existing grid network of arterials and bus routes functions in Chicago and the near west suburbs. The grid network concept relies on new and enhanced transit services on key arterial routes, expressways and tollways; and new local service on Metra commuter rail lines. Transit station park and ride facilities, the extensive network of existing bus service in Chicago and the near west suburbs, and bike and pedestrian travel are relied upon to access this grid network.

All major employment centers of the corridor, except for the Schaumburg area, are served by both east-west and north-south enhanced transit services on major arterials or highways. The Schaumburg employment center is served only by a north-south service. All the employment centers distribution sheds would be served by direct transit service, circulation service, and/or bicycle/pedestrian pathways.

**Advantages and Limitations**

The advantage of the grid network is its high degree of flexibility and connections between many origins and many major suburban employment destinations typically requiring only one transfer to change direction along the grid. A grid network system can also provide direct point-to-point transit service between some origins and major destinations which are located in the same east-west or north-south axis. The major disadvantage of this option is that its local service and maximum access can lead to long travel times relative to the distance traveled.

**Concept 4 - Point-to-Point Service**



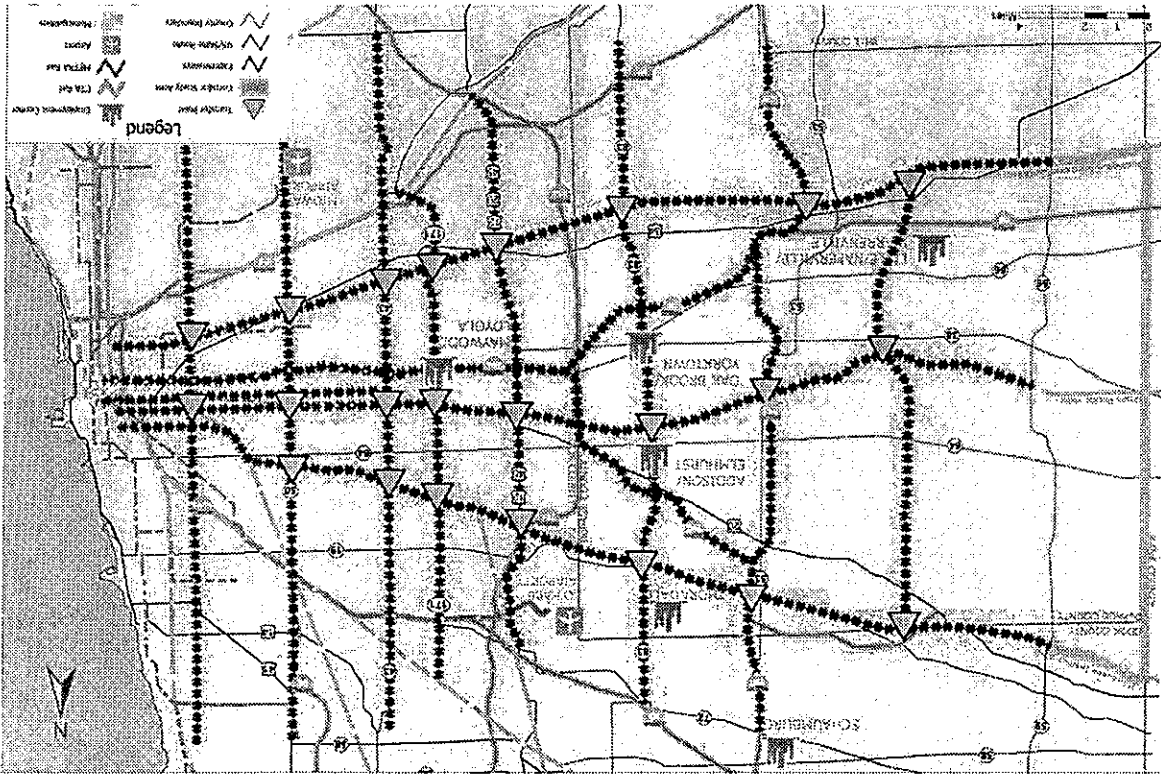
**Description**

Concept 4 represents potential new direct point-to-point transit service between key areas of high density origins and five major employment centers in and around the corridor. No transfers are required between the origin and destination. This concept relies on arterial corridor upgrades and considerable new transit service since the existing transit network – particularly the commuter rail system does not match up well with the major employment centers. The I-290/I-88 travel corridor in combination with several east-west arterial corridors such as North Avenue, Roosevelt Road and Ogden Avenue are relied upon to serve multiple travel markets and origin-destination combinations. This option serves five of the six major employment centers in and around the corridor in a limited fashion.

**Advantages and Limitations**

The advantage of this point-to-point concept is its direct lines of service (no transfers required) between high density origins (residential zones) and high density destinations (employment centers). The major disadvantage to the user is the limited number of destinations that can be reached from any particular origin.

**Concept 5 - New Use of the Existing System**



**Description**

Concept 5 presents potential new uses of the existing transportation system to provide access to nearly all corridor employment centers for reverse and intersuburban commuters. Rather than new lines, this option relies primarily on operational improvements to all three Metra commuter rail lines (Milwaukee District West, Union Pacific West, and Burlington Northern Santa Fe), and new and enhanced transit services on several north-south major arterials. The Metra lines are the primary corridors for east-west travel, while Cicero Avenue, Kingery Highway (IL 83) and I-355 primarily serve the north-south travel corridors. Metra commuter rail park-and-ride would provide network access and transfer opportunities to several enhanced transit services on the north-south major arterials. All major employment centers in and around the corridor are served by this existing system concept.

**Advantages and Limitations**

The advantage of this concept is that all of the major capital facilities are already in place and it is unlikely to have major environmental and community impacts. The major disadvantage is that it may require tradeoffs between new users and existing users of the transit system, and a change in operational philosophy for the arterial system. The existing system is designed to primarily serve the traditional travel market and it may not be operationally feasible within the existing infrastructure to effectively serve reverse and intersuburban travel markets. The major employment centers are not proximate to commuter rail lines and this option would have to rely on considerable distribution at greater distances from rail stations.



**R E S O L U T I O N**  

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**07**

**A RESOLUTION IN SUPPORT OF THE MULTIPLE  
HUB AND SPOKE CONCEPT AS PRESENTED IN THE  
COOK-DUPAGE CORRIDOR STUDY**

WHEREAS, the Village of Lombard recognizes the impact of traffic congestion as it relates to the economic health and quality of life of the community; and

WHEREAS, encouraging the continuation and expansion of public transportation in the Village is a policy identified in the 1998 Village of Lombard Comprehensive Plan; and

WHEREAS, alleviating traffic congestion is a strategic direction identified in the 2006 Village of Lombard Strategic Plan; and

WHEREAS, the Regional Transportation Authority is conducting a Cook-DuPage Corridor Study to develop new conceptual transit and highway options to address the purpose and need for mobility improvements in the Cook-DuPage Corridor; and

WHEREAS, five conceptual options have been created as part of the Cook-DuPage Corridor Study; and

WHEREAS, "Concept 2 - Multiple Hub and Spoke" proposes the Yorktown area and the Maywood/Loyola University Medical Center area to serve as center points or "hubs" to which new direct lines of service or "spokes" would converge; and

WHEREAS, the Multiple Hub and Spoke concept will provide the most direct and efficient regional bus transportation network to serve residents and employees in Lombard and other major employment centers in and around the Corridor; and

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF LOMBARD, DU PAGE COUNTY, ILLINOIS, as follows:

SECTION 1: That the Board of Trustees of the Village of Lombard does hereby endorse "Concept 2 - Multiple Hub and Spoke" as presented in the Cook DuPage Corridor Study with Yorktown (Lombard) serving as a center point or "hub."

Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Absent: \_\_\_\_\_

Approved this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
William J. Mueller  
Village President

ATTEST:

\_\_\_\_\_  
Briette O'Brien  
Village Clerk