


DEPARTMENT OF PLANNING AND DEVELOPMENT  
MEMORANDUM

Date: June 16, 2009  
To: Mayor and Members of City Council  
From: Ralph Rognstad Jr., Director   
Subject: Transitioning to a Grid Transit System

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At the Council lunch on June 9, there was discussion about converting the current spoke-and-hub transit system to a grid system. Planning staff has been working with City Utilities Transit and the Ozarks Transportation Organization to develop a plan for making that transition. The current spoke-and-hub system provides fairly cost-effective service to most City residents with one-half to one-hour headways (time between buses). The initial analysis is considering various grid system alternatives that will generally require more buses, but the alternatives do not greatly expand the number of residents that are served or the headways.

The primary issues in providing more cost-effective and timely transit service (10 to 15 minute headways) are our lack of residential densities and employment and commercial intensities. Springfield is basically a suburban community with an overall density of only 1.5 dwelling units per acre. The current rule of thumb for providing cost-effective and timely transit service is a density of 12 to 15 dwelling units per acre within one-quarter mile of transit routes. There also need to be high-intensity nodes of employment and commercial/service establishments along the transit routes. I believe these rule-of-thumb densities will decrease as energy costs rise because a higher percentage of residents will be forced to use transit. Perhaps only eight to ten dwelling units per acre will generate sufficient ridership, but there are no corridors in Springfield that even begin to approach the intensities required. A major action step that will probably be recommended is that Springfield should develop strategies to encourage higher-intensity, mixed-use development along existing and proposed transit corridors. There are serious obstacles to overcome to achieve this type of development. These include objections from current residents who do not want to live near higher-intensity development; lack of developers in the community who do mixed-use, transit-oriented development; and lack of financing for this type of development. To a lesser extent, our current development regulations are also an obstacle to encouraging this type of development.

While there are challenges to creating a more transit-oriented community, there are also considerable benefits. Serving more residents within the existing boundaries can be achieved at lower cost than expanding City services (police, fire, etc.) over a greater area. A transit-oriented community will also be more walkable and bikeable, so residents will have more transportation choices and hopefully healthier lifestyles. Finally, an adequate transit system will be critical for economic development. Rising energy costs will likely

bring manufacturing jobs back to America, but the manufacturing jobs will not necessarily be high paying because there will still be global competition to maintain the lowest total cost of production and delivery of product. While there will still be personal cars, one likely scenario is that there will be fewer cars per household. Some households will not be able to afford a car and many will have only one car, forcing some workers to use transit and other means of transportation. Manufacturers looking for locations to open new facilities will want to locate in communities with transit systems that are cost-effective and timely for their employees to get to work. We have the core transit system to be competitive, but we need to continue to improve the transit system while we encourage a land development pattern that helps make transit an efficient means of travel throughout the community. As we prepare the next Springfield Strategic Plan, the relationships between transit, land development patterns and economic development need to be discussed and effective strategies need to be developed.

If you have any question, please contact me at 864-1035.

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