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June 18, 2007

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Steve Stamos  
Fairfield Residential LLC  
2045 N. Hwy 360, Suite 250  
Grand Prairie, Texas 75050

**Re: Supplemental Information to Traffic Impact Study  
The Exchange at Lawrence  
Lawrence, Kansas**

Dear Mr. Stamos:

In response to your request and authorization, we prepared information to supplement a traffic impact study prepared by Professional Engineering Consultants and dated November 2006. Specifically, you asked that we address three issues:

1. Calculate daily, A.M. peak hour and P.M. peak hour trips for the project assuming apartments in one scenario and office in another.
2. Research and offer an opinion as the peak period trip-making characteristics of apartments where residents are predominately college students.
3. Assess the estimated distribution pattern of apartment traffic along 31st Street.

**Trip Generation**

Daily, A.M. peak hour and P.M. peak hour trips for the project site were estimated using Trip Generation, 7th Edition, published by the Institute of Transportation Engineers for both apartments, the currently proposed use, and for office development. The amount of office space that could potentially be developed was estimated by applying an FAR ratio of 0.15 to the developable land area. The trip generation estimates are provided in the following table.

Trip Generation										
Land Use	Intensity		ITE Code	Daily	A.M. Peak Hour			P.M. Peak Hour		
					Total	In	Out	Total	In	Out
Office	150,000	sf	710	1,825	259	228	31	247	42	205
Apartments	324	du	220	2,100	162	32	130	196	127	69
Difference				(275)	97	196	(99)	51	(85)	136

Office development on this site would generate somewhat less traffic over the course of a weekday (very little traffic on weekends) but would generate larger peak-hour traffic volumes.

**College Student Trip Generation**

An extensive review of available literature and a request to a traffic engineering discussion group (with over 500 registered participants) did not yield any definitive information about trip-generating characteristics of apartment complexes where residents are predominately college students. We even contacted KU on Wheels to learn of ridership information by time of day. Unfortunately no such data was available.

Comments from the discussion group and other anecdotal information suggest that peak-hour trip generation characteristics are generally different between college students and others. One key factor is proximity to campus and the potential for residents to walk to classes although that is not the case here. Another is the availability and use of transit. KU on Wheels provides extensive service in and around campus, including the 31st and Iowa route that currently terminates at The Reserve apartment complex on 31st Street west of Iowa Street. The KU bus system serves a number of apartment complexes and it would seem reasonable to expect it to serve The Exchange which could house several hundred students.

Lastly, while conducting a traffic study for a sorority house a short distance northwest of the KU campus a few years ago, traffic volume counts at intersections serving predominately student housing - other Greek houses, apartments, etc. - were extremely low during the traditional peak commuter travel times, particularly in the morning. Little pedestrian activity was observed during those times.

#### **Distribution Patterns Along 31st Street**

The traffic impact study assumed that 70 percent of the site traffic would use Ousdahl to and from 31st Street. Of that 70 percent, 40 percent would be oriented to/from the west and 30 percent to/from the east. Inasmuch as The Exchange is generally located in the center of Lawrence from an east/west perspective, that's not an unreasonable estimate of traffic distribution. Should the apartment complex house predominately KU students, that distribution could very well be skewed more towards the west as Iowa Street should provide more efficient opportunities to reach most student parking facilities both on and off campus. The higher speed limit and coordinated traffic signal operations are key factors to making Iowa Street a preferred route.

In closing, office development on this site would generate more traffic during the critical peak periods. It is reasonable to expect that peak-hour traffic volumes at the apartment complex would be less with a population comprised primarily of college students due to differences in daily schedules and the opportunity to use transit. Lastly, an apartment complex with primarily KU students might very well see a distribution of traffic along 31st Street skewed strongly towards Iowa Street which should provide more convenient service to most parking facilities on and off campus.

Sincerely,

**TranSystems**

By: Thomas G. Swenson

Thomas G. Swenson, PE, PTOE

TGS:ts:P101070302



**League of Women Voters of Lawrence-Douglas County**

P.O. Box 1072, Lawrence, Kansas 66044

June 24, 2007

Grant Eichhorn, Chairman  
Members  
Lawrence-Douglas County Planning Commission  
City Hall  
Lawrence, Kansas 66044

**RECEIVED**

JUN 25 2007

City County Planning Office  
Lawrence, Kansas

RE: ITEMS NO. 9B - 9D, REZONING AND PRELIMINARY PLAT FOR THE EXCHANGE, 31<sup>ST</sup> & OUSDAHL

Dear Chairman Eichhorn and Planning Commissioners:

We view the rezoning and preliminary plat applications for the Exchange as an example of land use practices that we had hoped would not be continued with the updating of the comprehensive plan and new Land Use Development Code. There are several planning issues that have not been considered here.

1. This is an application for rezoning to an RM District. There is much that is still not regulated in conventional RM districts.

The 24 acre tract proposed to be a student residential complex will be platted as a single lot without any commitment as to how it will develop. The requirements of the RM15 District in terms of site lay-out are for maximum building cover (50%), maximum impervious cover (75%), and minimum outdoor area per dwelling (50 square feet, which a balcony can supply). The lighting must conform to requirements and also the access must conform to access management standards. Landscaping required is for street trees (peripheral) and parking lots. The building height permitted is 45 feet.

This sounds as though everything is regulated and predictable, but there is much that is not. For example, the RM district allows any building type of any mass (within the buildable space). All internal access is to driveways and parking lots. No internal sidewalks are required. The minimum space between buildings is according to the Fire Code, which in the past has been three feet when buildings were detached. No recreational open space is required. The configuration and orientation of the buildings on the lot is not regulated. The pervious surface can all be on the periphery. No internal trees or landscaping outside of parking is required. If the project that planners think will be built is not, the RM District can be sold to someone else and the zoning still exists. The site plan is administratively approved and does not get reviewed either by the City Commission or by the Planning Commission.

2. The potential population concentration would be inordinately high in this location in the city.

The actual gross density of large lot development is almost the same as the net density because there are no public streets in large lots that reduce the buildable area. (All of the area within lot lines is privately owned, including easements. Dedicated streets are public land.) Driveways and parking lots, and the limits on lot cover and permeability do not affect the potential density in large-lot development. The 24.5-acre tract will allow 15 units an acre. This would be 367 units or 1470 adult students at maximum allowable density. This could mean with the requirement of one parking space per bedroom plus one per each ten units that the total number, at capacity, in this 24.5 acres could be 1506 cars.

3. This proposal was presented earlier and was rejected as being premature. The sewerage was inadequate, and the area planning was in process. This situation has not changed, and requires that the developer build a pump station.

4. The traffic study indicates that most of the traffic will use Iowa Street rather than Louisiana. We suggest that this burden on 31<sup>st</sup> Street, especially at the overloaded corner of 31<sup>st</sup> and Iowa, could have the same negative impact on the city as the potential problems for the neighborhoods bordering Louisiana.

5. Adding to the existing surplus of new apartments could cause the student population, where they now have access to the Downtown, to shift to the periphery of the city with potentially negative effects on the CBD.

In a previous letter, we suggested that this application for RM conventional zoning should be given better control and predictability by requiring concomitant zoning of a PD Overlay District. However, the other considerations leads us to believe that this proposal has not been given adequate planning consideration. We suggest that this use in this location is unwise, and that much more planning for the area and the community as a whole should be done before this type of project should be approved.

We hope that you will consider our suggestion and not approve this project at this time.

Sincerely yours,



Paula Schumacher  
President



Alan Black, Chairman  
Land Use Committee