

## **Urban AnalTical approach**

### **The Case of East 23<sup>rd</sup> St. Lawrence, Ks, USA**

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#### **ABSTRACT:**

The image of the city, familiar as it may be, may not be appropriate to most urban America. Paying a careful look at city structure, one can easily notice some parts, though organically important, are less poetic, weakly integrated, and lack identity. As an example of such urban areas, this paper shed a light on East 23rd Street, a main street located in the southern part of Lawrence, Kansas in the USA. After the analyses of its urban, social, and visual components, the research ended up with seven issues of concern to the area such as: East 23<sup>rd</sup> St. as it is, does not provide any sense of entrance to the city of Lawrence, it shows conflict among some uses such as harmful factory, residential and blight condition for some area. On the light of these concerns, objectives are developed followed with a number of strategies to promote the area synthetically, socially, functionally, and esthetically.

#### **INTRODUCTION**

What makes a good city entrance? City entrance, just like the case of the house, is the front yard, the main facade, and the access to the heart. The notion of front is best introduced by Tuan in 1977 as a human face that forms one part out of four that are presented in the spatial relation of human body with the surroundings; the other three are: the back, the right, and the left sides. Therefore, according to him, frontal space is primarily visual, and it is “illuminated” because it can be seen. “The city entrance, or front, is the part of the city that signifies dignity; therefore, it commands respect [1]. The notion of front is applied to urban city on different scales and notions: such as symbolic, prestigious, visual, front yard, and the first impression of the city identity [2]. Whereas, identity is “the extent to which a person can recognize or recall a place as being distinct from other places – as having a vivid, or unique or at least a particular, character of its own [3]. Moreover, looking from a semiotic angle, “street [especially the city entrance] speaks a universal language. Its signals are part of everyday learning; its rules of

movement are among the most widely understood of all public codes of conduct; and even its most bizarre variations offers, upon close examination, familiar goings-on in the School of the Street . [4]

Now, to what extent do City front yard/entrance compiles the previous descriptions? Like most American urban areas, the city entrance goes through several problems which are responsible for the lack of identity, such as the sense of alienation, ambiguities, confusions, and discontinuities [5], and even the felling of placelessness [6]. When an urban area is so important to illuminate and focus on as the case of the city entrance, it is essential to analyze its components on three levels: the physical, the social, and the visual. (See Figure 1). At the time while the physical aspect is the responsible for the quality of the visual aspect, the social aspect also has pragmatic effects on the semiotic dimension of the visual urban and architecture visual aspects [7]. Both the physical and the social aspects link one aspect with the other through the process of the feedback [8]. We shape our city, and afterward, our city shapes us [9]. In few words, the built environment reflects the social aspect whereas the physical product has qualitative values that are responsible for the overall appearance of the city's entrance [10].

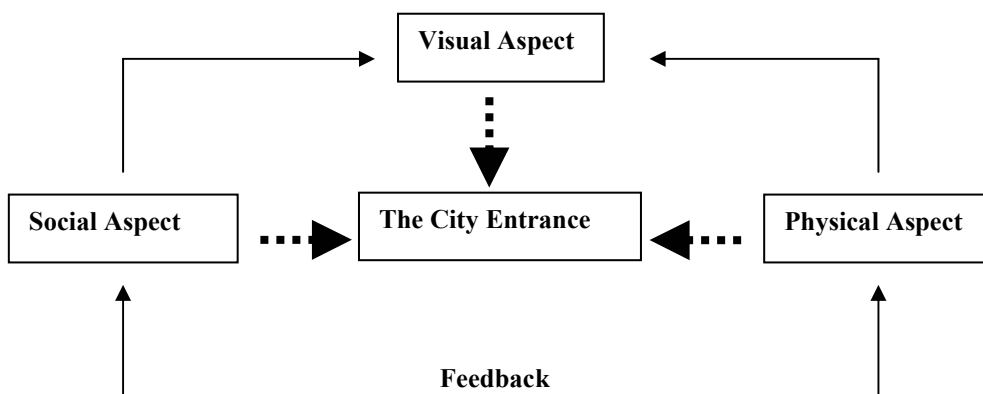


Figure 1: Three Aspects contribute to the overall appearance of the city entrance (front yard). By the author

The introductory question “what makes a good city entrance? should be reciprocated for a number of questions:

- 1- when visiting an urban site how does one feel toward it?
- 2- what type of problems causes those feelings?
- 3- what can be done to make the city’s entrance a good one?

The first question proposes the need to understand the city entrance (or front yard) and getting familiar with it partially and entirely, while the second question proposes the necessity to analyze its components (social, physical, and visual) and underline its problems. Kevin Lynch stated four major problems in the urban American cities that compile with the city entrance’s significant problems [1]. These problems are:

- 1- Environmental stress: The permanent presence of noise and pollution.
- 2- A lack of visible identity: Its parts do not have distinctive identifiable character.
- 3- Illegibility: The urban components lack coherence.
- 4- Rigidity /Constraints: The lack of openness or the disability to interact with the environment.

The third question suggests the need for the formation of strategies to solve the city front yard’s major problems. Such strategies should help meet the goal of the city’s front yard that is to bring to the user a sense of satisfaction and well being [1].

#### **The purpose of the study:**

When studying the urban physical form and pattern, one cannot ignore the esthetical values beside the social embodiment of its users. Since the cognitive idea about a city is affected by the first and last perceptions of the city’s entries, the study intends to build a better understanding of the activities and the effective elements, which consequently determine the appearance of the city entrance. The idea of front should be perceived in order to achieve good perception of the city by commuters going to or coming from the city.

The purpose of this paper is to examine the applicability of some of the theoretical concepts related to the appearance of city entrances. As a case study, East 23<sup>rd</sup> Street is selected to be studied as it forms the main entrance for the city of Lawrence, Kansas, especially for those who are coming from

Kansas City. This research looks at an example of public streets built to fulfill three functions: 1) to form a natural expansion of the city, 2) to provide a commercial strip away from the CBD traffic conjunction, and 3) to connect Lawrence City with Kansas City through a fast thoroughfare. Therefore, the importance of 23<sup>rd</sup> St. is a result of its urban location. It was constructed according to the major artery standards. The 23<sup>rd</sup> St. stretches from Iowa Street to the eastern-city-limit. Map 1 shows the Base Map of Lawrence.

#### **Site description:**

**1- Douglas County:** Lawrence is located in Douglas County in the Northeastern part of Kansas State. It has a total area of about 474 square Miles or 303,360 acres. Seventy eight percent of the people live in Lawrence the county seat, which is in the north-central part of the county on the Kansas River.

Farming is one of the most important parts of the economy in Douglas County; about 47 percent of the acreage is cultivated. Corn, grain sorghum, soybeans, wheat, and alfalfa are the principal crops. Livestock production and dairy operations are also important. Various educational institutes, such as the University of Kansas, Haskell Indian Junior College, and Baker University, are also important to the economy of Douglas County.

**2- The 23<sup>rd</sup> Street:** It is located in the southern part of Lawrence. It can be divided into three main parts. The first part extends from Iowa St. to Massachusetts; it is mostly a commercial strip on both sides along the road. Most of the commerce is fast food establishments, restaurants, and shopping centers. This part of the street is in a good condition and appearance. The second part, from Mass. St. to Learned Ave., separates the west part of 23<sup>rd</sup> from the east part, because of the residential area, Haskell College, the bridge, and the railway. Finally, the third part is the eastside of 23<sup>rd</sup> St.; it is one of the main entries to the city of Lawrence. This part is mostly commercial, workshops, and farm supplies.

**3- East 23<sup>rd</sup> Street:** The focus area of the study is the eastern part of 23<sup>rd</sup> Street, which is located in the southern part of Lawrence (See Map 1 for the Study Area). It is one of the main entries to the city as it forms the continuation of Highway 10 which links it with Kansas City. The



boundaries of the study area are between 19<sup>th</sup> St. and 21<sup>st</sup> Terrace north, and 27<sup>th</sup> St. to the south. The city limit is on the eastern side of the street and Larnard Avenue and Haskell College on the Western side.

Different land uses and activities surround the area: residential subdivisions, Haskell Indian Junior College, vacant land and intensive industries. Within the area one can find different land uses and activities such as distinctive residential subdivisions, light industry, heavy industry, recreation, offices, public buildings, and public facilities. The important elements of the existing land uses of the area are the intensive industrial use, the A.T. and S.F. railway and the commercial areas around 23<sup>rd</sup> Street. About 40% of the studied area is vacant. The growth of the city of Lawrence is mainly directed toward the southeast. That gives east 23<sup>rd</sup> Street a good opportunity in the future because it is one of the main entrances of Lawrence and is proposed to have more commercial activities in the future.

### **Methodology:**

Various methods and techniques have been followed through out the data collection stages:

#### **I. Understanding the area through the following activities:**

- 1- Conducting several visits to the site to get familiar with the area.
- 2- Reviewing the 1995 Comprehensive Plan to understand the expected future of the area.
- 3- Interviewing city planning staff and public officials to gain an understanding of the project site, its problems and future growth pattern.

#### **II. Searching for a proper base map through:**

- 1- collecting available maps and reports from public agencies (City Hall, Public Works, Soil Conservation Service). The available base map for the area is the 1974 Edition.
- 2- updating the old base maps by the author according to the aerial topographic survey, 1984 Edition.



### III. Defining the issues and problems related to the study area through:

- 1- Collecting Demographic data from the Census Tract of 1980 as well as a site survey. The Census publication was available at the public library of Lawrence. [13]
- 2- Conducting photographic and physical survey for the whole area of 23<sup>rd</sup> St. It included existing land use, building conditions, number of floors, structural methods and materials, and ownership.
- 3- Collecting traffic data from secondary sources (e.g. The Traffic Engineering Plan, November 1983 The City Hall, and the Engineering Department), in addition to direct observations of the site and its traffic problems. [14]
- 4- Conducting questionnaire to get specific information concerning the characteristics of residents, employees, and land uses. Residents had the opportunity to express their concerns and needs. Two kinds of questionnaires were designed: one for residential areas and the other for commercial areas.

### Data analysis :

#### I- Social Analyses:

**1- Demographic Analysis:** The 1980 Census of Population and Housing contains data on an area larger than the study area. Updated data had to be developed using ratios technique. The total number of households was counted by a foot survey. A number of 371 households with 2.64 average of household members in the area was found; the estimated population of the study area was 1054 persons .

#### A- Household Type and Relation:

Table 1 shows the type and relation of households in the city of Lawrence and East 23<sup>rd</sup> St. area. It is observed that the average household size in the area (2.64) is slightly larger than the average household size in Lawrence (2.37). Besides, the average family size is larger than the one of Lawrence (3.06 to 2.99 respectively ).

**Table ( 1 )**  
Household Type and Relation

	Lawrence	East 23 <sup>rd</sup> St
Total Persons	49832	1054
Total households	18773	371
Total Persons in households	44492	979
Living alone	5340	74
Persons per household	2.37	2.64
Persons per family	2.99	3.06

**B- Age and Sex Breakdown:**

Table 2 contains information on the age and sex breakdown for the City of Lawrence and East 23<sup>rd</sup> ST. The ages up to 25 are identified on five -year bases; ages from 25 -75 are classified by ten -year-period. At city wide bases the highest percentage of people are those whose ages range between 15 to 34 while in East 23<sup>rd</sup> Street the dominating ages are those of 25 to 34 year old and those of 45 to 64 of age. This means that residents of the study area are more mature and, thus, require quieter and different living standards from their counterpart of Lawrence.

**Table ( 2 )**  
Age and Sex Breakdown

Age	Lawrence			%	East 23 <sup>rd</sup> St.			%
	Male	Female	Total		Male	Female	Total	
under 5	1598	1498	3096	7	42	36	78	8
10 to 14	1341	1305	2646	6	26	23	49	5
15 to 19	3521	3761	7282	16	31	28	59	6
20 to 24	3037	6179	9216	20	41	37	78	8
25 to 34	5512	4815	10327	22	91	85	176	17
35 to 44	2087	2099	4186	9	28	60	88	9
45 to 54	1573	1657	3230	7	63	75	138	14
55 to 64	1288	1501	2789	6	82	94	176	17
65 to 74	743	1067	1810	4	38	60	98	10
75 and over	509	1080	1589	3	27	42	69	7
Total	21209	24962	46171	100	469	540	1009	100

**C- Race:**

Table 3 has data on the race of the inhabitants of Lawrence and east 23<sup>rd</sup> St. It is noticed that the study area has a higher percentage of American Indians and lower percentages in both white and black categories.

**Table ( 3 )**  
**Race**

	Total	%	Total	%
white	45895	87	886	81
black	2919	6	34	3
American Indian, Eskimo & Aluet	1588	3	151	14
Asian & Pacific Islander	1006	2	11	1
Other	1330	3	15	1
Total	52738		1097	

**4<sup>th</sup> : Marital Status:**

Table 4 contains the marital status figures. The percentage of divorced cases is higher in the study area than that of the city. On the other hand, the area has a greater percentage of married couples and a lower percentage of singles when compared with the city of Lawrence.

**Table ( 4 )**  
**Marital Status**

	Lawrence				East 23rd St.			
	Male	Female	Total	%	Male	Fsmale	Total	%
Ttl persons 25 yrs & over	22270	22159	44429		401	481	882	
Single	11748	9720	21468	48.3	148	130	278	31.5
Married	9031	8997	18028	40.6	227	265	492	55.8
Separated	204	296	500	1.13	3	6	9	1.02
Widowed	238	1580	1818	4.09	5	43	48	5.44
Divorced	1049	1566	2615	5.9	18	38	56	6.35

**E- Education:**

Table 5 shows information on school enrollment and school type. With percentages of persons who are 3 years old and over and enrolled in school, it can be noted that the percentages of students in kindergarten, elementary,

and high schools are greater in the study area than in Lawrence. Whereas, the percentage of college students is less than that of Lawrence as a whole.

**Table ( 5 )**  
School Enrollment and Type of School

	Lawrence		East 23rd St.	
	Students	%	Students	%
Ttl Number	26458		436	
Nursery School	713	2.7	11	2.5
Private	387	1.5	6	1.3
Kindergarten	504	1.9	15	3.4
Private	21	0.07	-	-
Elementary 1-8 yrs	4117	15.6	118	27
Private	218	0.81	6	1.4
High school 1-4 yrs	1816	6.86	41	9.4
Private	8	0.02	-	-
College	19309	72.3	243	55.7

Table 6 has figures on completed education of people 25 years and over. The percentages of persons who completed elementary and high school in the area are greater than in the city as a whole.

**Table ( 6 )**  
Years of School Complete

	Lawrence		East 23 rd St.	
	Persons	%	Persons	%
Ttl persons 25 yrs & over	23841		745	
Elementary				
Level 1 to 4	217	0.91	-	-
Level 5 to 7	501	0.03	10	1.3
Level 8	920	0.04	26	3.5
High School				
Level 1 to 3	1939	8.2	80	10.7
Level 4	5974	25	248	33.3
College				
Level 1 to 3	4450	18.7	165	22.2
Level 4 & more	9867	14.6	215	28.9

**F- Transportation:**

Table 7 shows means of transportation used in commuting to work. The percentages of Lawrence and the study area were calculated on workers 16 years and over. It is noticed that there is more use of cars in the area than in the whole of Lawrence.

**Table ( 7 )**  
Journey to Work

	Lawrence		East 2 rd St.	
	Persons	%	Persons	%
Ttl Worker 16yr old & over	2		630	
Private vehicle drive alone	14319	56.7	406	64.4
Carpool	462	18.3	148	2
Public transportation	772	3.06	8	1.2
Bus or street car	719	2	1	-
Subway/elevated train or rail/road	11	0.04	1	-
Walked only	3967	14.7	38	6.03
Other means	876	3.47	19	3.02
Worked at home	674	2	10	1.59
Travel time to work minutes	17.6		16.5	

**G- Labor Force Status:**

Table 8 contains figures on the labor force (persons 16 years and over ). The figures of the area generally match the ones of Lawrence with slight discrepancy in private wage and government workers.

**Table ( 8 )**  
Labor Force Status

	Lawrence		East 2 rd St.	
	Persons	%	Persons	%
Ttl Persons 16 yr & over	43953		889	
Labor force	2	61.4	551	62
Civilian labor force	2	61.1	551	62
Employed	2	58.1	532	59.9
Unemployment	1336	3.04	19	3.4
Private wage & salary workers	14599	33.2	351	39.5
Government workers	9602	2	144	16.2
Local government workers	1975	4.49	39	4.4
Self employed workers	12	2	35	3.9

**I- Income:**

Table 9 shows household incomes in Lawrence and East 23<sup>rd</sup> St. There are \$15,000 to \$34,000 respectively. The area has a lower percentage of households earning between \$5,000 and \$9,999 than Lawrence does.

**Table ( 9 )**  
Income

	Lawrence		East 23 rd St.	
	Total	%	Total	%
Total Households	18818		371	
Less Than \$ 5000	3456	18.4	38	10.2
\$ 5000 to 7499	2065	11	35	9.4
\$ 7500 to 9999	1892	10.1	36	9.7
\$ 10000 to 14999	3050	16.2	62	16.7
\$ 15000 to 19999	2516	13.4	72	19.4
\$ 20000 to 24999	1814	9.6	50	13.5
\$ 25000 to 34999	2156	11.5	47	12.7
\$ 35000 to 49999	1248	6.6	22	5.9
\$ 50000 or more	621	3.3	9	2.4
Median	\$ 13180		\$ 16086	
Mean	\$ 16882		\$ 17878	

**II-THE PHYSICAL SURVEY:****Documenting the data:**

Several maps and photographs were produced for the study area concerning:<sup>1</sup> (See Maps 2 to 5)

- 1- Zoning
- 2- Land use
- 3- Building Condition
- 4- Built environment and vacancy map
- 5- Traffic

For the sake of comparison, Map 8, presented in section III, shows both building condition and building appearance.

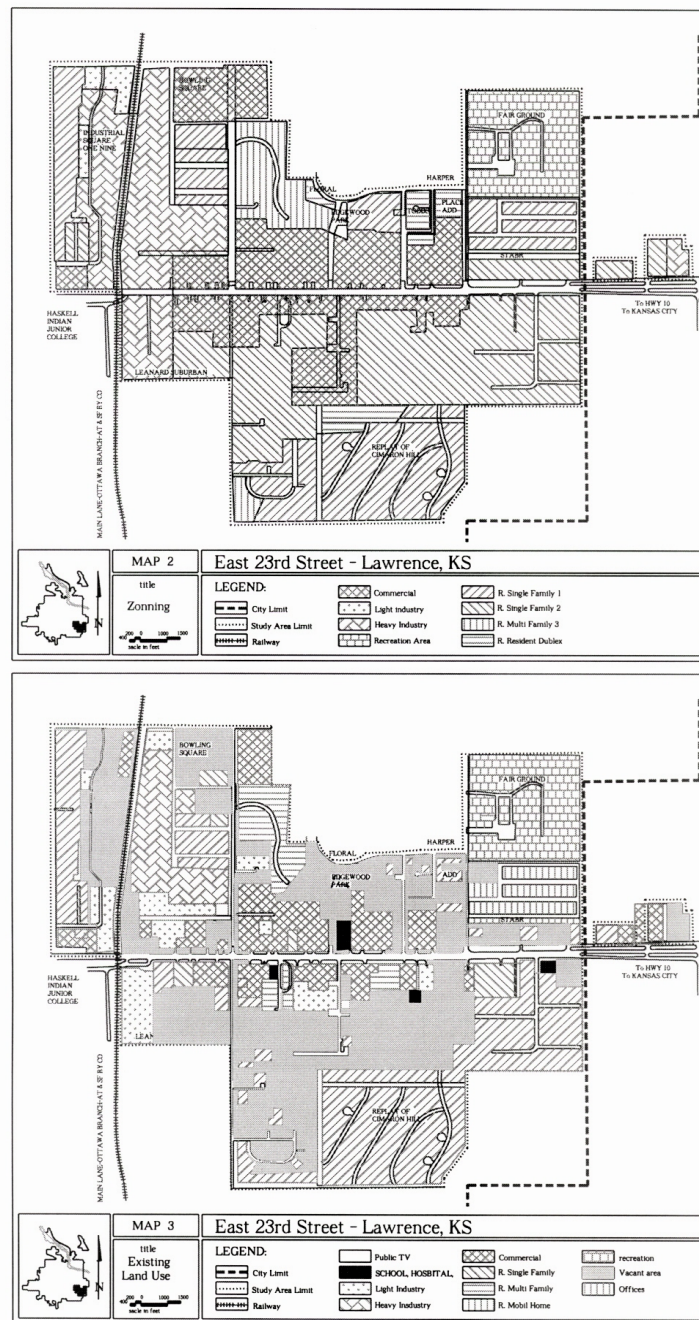
The eastern part of the 2<sup>nd</sup> Street area has conflicting ingredients mixed together resulting in a state of confusion. The existing land use may be classified into five categories: commercial, residential, industrial,

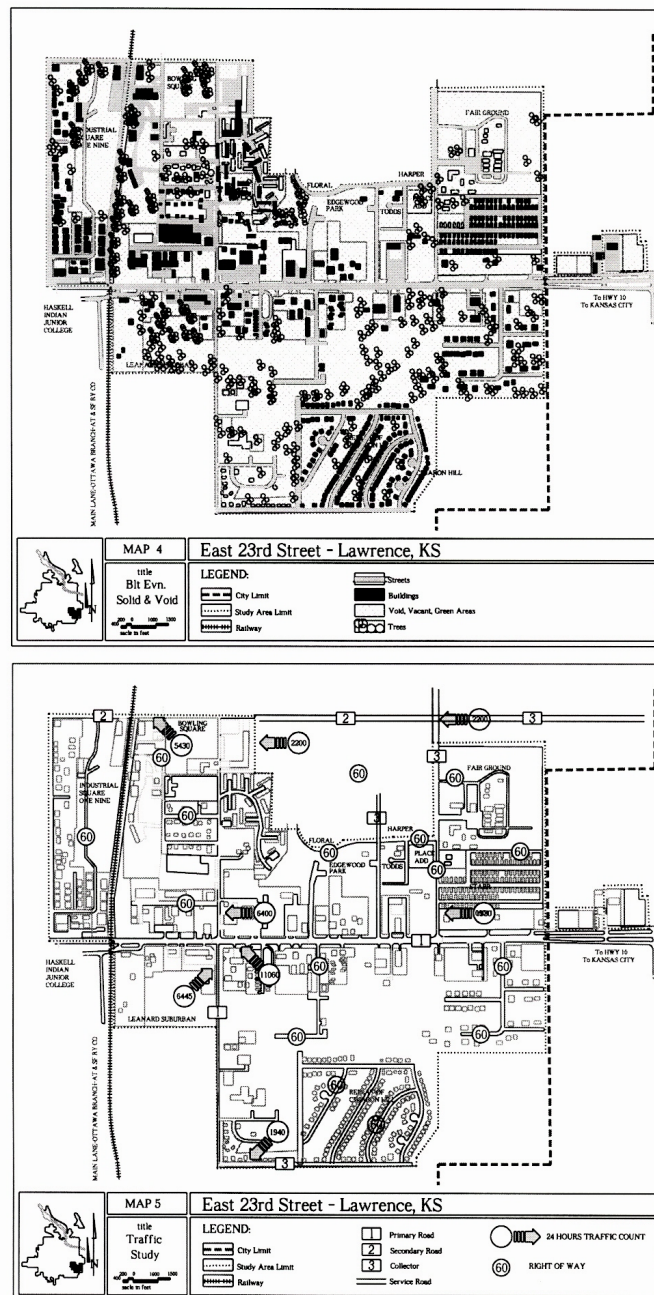


public/semi public, and recreation. Under each category there are three elements considered in the analysis: use, building condition, and materials.

**Element one, the use:**

Type of use of each building and number of existence and percentage are arranged. From each category, a clear line was drawn to indicate whether the existing stage in any category has a direct impact on the land use and in which way that is happening. For example, percentage of heavy industries was very high, consequently, strategy toward industrializing the area would be modified.





**Element two, Building Condition:**

This includes the process of measuring the physical condition of facilities, using specific, clearly defined indicator. It is based, to the greatest extent possible, on observable and measurable indicators to limit judgment and insure consistency.

**Table (10)**  
Numeric Code for the structural deficiency rate

Numeric Code	Probable Renewal Treatment	Total Penalty Points
1	Good	0 – 3
2	Rair	3 ½ - 7 ½
3	Poor	8 & over

Facility conditions must implicate the safety of the structural integrity. The analytical method used is the Deficiencies Rating Scale.

Utilization of this Structural Deficiencies Rating Scale is based on assigning penalty points for deficiency in each major component of a structure, which is visible in an exterior survey. Only one item under each category may be selected for penalty points. In other words, under "Foundation", one could not assign 3 points for "settling" and 4 points for "insufficient clearance". This would produce a total of 7 penalty points when only 5 are allowed for no foundation. A maximum of 5 points is scored under the category "foundation".

After rating each category, penalty points are totaled for the individual structure. Based upon that total, probable renewal action is indicated by the following tables. (Table 10 and Table 11) indicate the numeric code, which denotes building condition as contained in the master data file as well as the structural deficiencies rating scale for structural elements.

**Table (1) : The structural deficiencies rating scale**

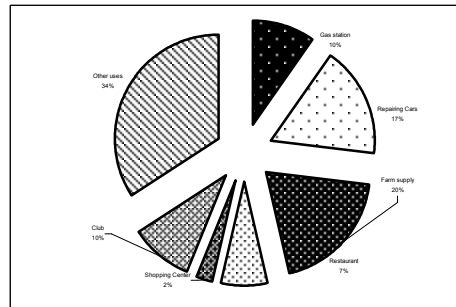
<b>Foundation:</b>	points
No foundation	5
Insufficient clearance	4
Setting or exposed footing	3
Cracks and / or holes	2 -----
<b>Walls:</b>	
Wall leaning, bowed, etc.	5
Settling and /or cracked	4
Loose, lacking or damaged siding	3
Lacking paint	2 -----
<b>Roof:</b>	
Sagging	5
Roofing missing, aged, or loose	4
Rotted or deteriorated eaves	3
Lack of ventilation	2 -----
<b>Staircases / steps:</b>	
Sagging, broken, missing	1
Rails and / or balusters missing	1
Inadequate foundation	1
Pulling away from house	1 -----
<b>Windows / Doors:</b>	
Rotted or missing sills or frames	1
Broken and / or missing panes	1
Missing or torn screens	1
Lack of windows	1 -----
<b>Porches:</b>	
Sagging or deteriorated roof	1
Sagging or deteriorated floor	1
Inadequate foundation	1
Deteriorated roof supports, steps, railings	1 -----
<b>Chimney:</b>	
Cracked	½
Improper height	½
UngROUTED	½
Partially destroyed	½ -----
<b>Gutters:</b>	
No splashplates	½
Chipped or peeling paint	½
Sagging	½
Downspout or gutter missing	½ -----
Total points	

**Element 3, Materials**

The kind of material used suggests the age of the building and its duration. Also the unity in using one material generates a sense of harmony. Therefore, it is considered important to conduct a material data.

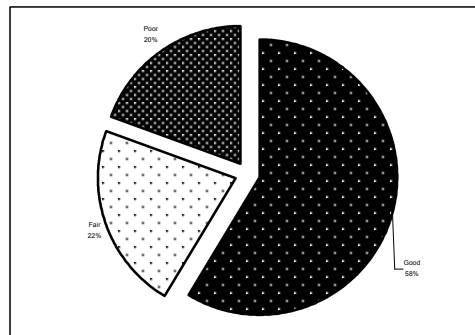
**Table (12)**  
Kind and Percentages of Commercial Use.

Kind	# of Units	%
Gas station	4	9.76
Repairing Cars	7	17.06
Farm supply	8	19.51
Restaurant	3	7.32
Shopping Center	1	2.44
Club	4	9.76
Other uses	14	34.15
Total	41	100



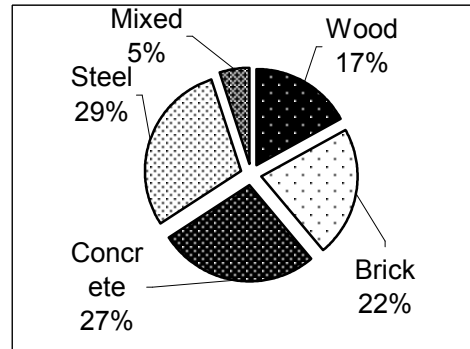
**Table (13)**  
Commercial Building Condition

	# of Units	%
Good	24	58.54
Fair	9	21.95
Poor	8	19.51
Total	41	100



**Table (14)**  
Materials of Commercial Buildings

Material	Number	%
Wood	7	17.07
Brick	9	21.95
Concrete	11	26.83
Steel	12	29.27
Mixed	2	4.88
Total	41	100

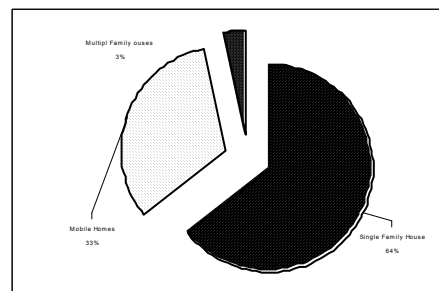


### B-Residential:

Three residential types are found in the study area: multi-family units, mobile homes, and single-family houses. (See Tables 15, 16 and 17 for House Types, Condition, and Material comparison)

**Table (15)**  
House type

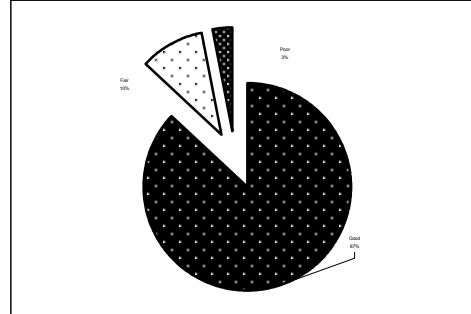
House type	Number	%
Single Family House	300	64
Mobile Homes	153	33
Multiple Family Houses	15	3
Total	468	100



**(a) Multi-Family units:** "Pine Tree" is the only subdivision of this type in the area. It forms 3 % of the total residential units; and has 15 units only. Each unit has two floors, and most of the residents are students at the University of Kansas.

**Table (16)**  
Building Residential Condition

	# of Units	%
Good	408	87
Fair	47	10
Poor	14	3
Total	469	100

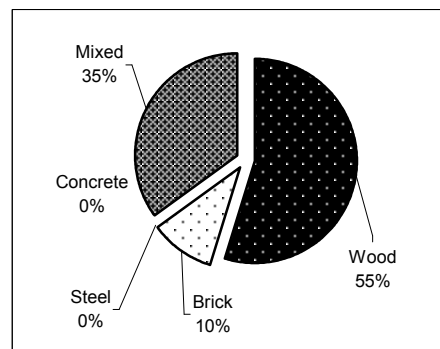


**(b) Mobile Homes:** There are three mobile-home developments, one of which is located to the north of 23<sup>rd</sup> St. It is well organized. There are enough parking spaces and it has clean streets. The other two developments form 33% of the total residential units. They are located on both sides of E 23<sup>rd</sup> St. They are in poor condition and have dirty streets. All their inhabitants are of the lower class. The condition of those two areas is affecting the appearance of E 23<sup>rd</sup> St. negatively.

**(c) Single Family Houses:** They comprise the majority of residential units that is 64% of the total. Mostly the inhabitants, who are of the middle class, own their houses. Those units are in good condition, and their subdivisions are well organized with a private garage for each house.

**Table (17)**  
House Building Materials

Material	Number	%
Wood	257	54.80
Brick	48	10.23
Concrete	0	0.00
Steel	0	0.00
Mixed	164	34.97
Total	469	100.00





### C- Industrials:

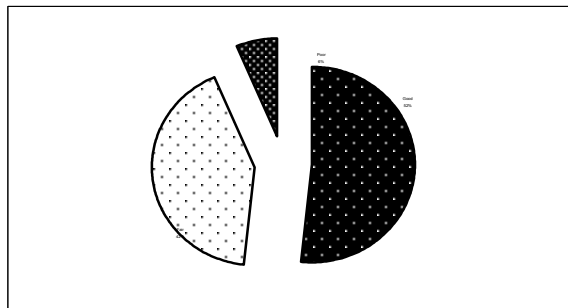
There are no clear definitions for heavy or light industry in the literature. However; light industries are viewed here to be those which do not require large machinery, and can be operated with normal utilities, such as warehouses and storage areas. They also do not have a heavy impact on the environment. Heavy industries, on the other hand, require special utilities, such as certain water flow or high electrical voltage, and may require treatment plants. So, they are more likely to have a negative impact on the environment.

**Table (18)**  
Industrial Types

	Number	%
Light Industry	20	65
Heavy Industry	11	35
Total	31	100

**Table (19)**  
Industry Building Condition

	# of Units	%
Good	16	52
Fair	13	42
Poor	2	6
Total	31	100

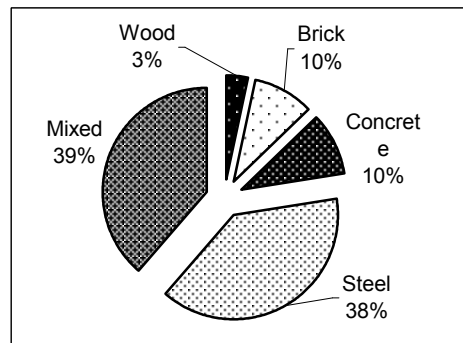


There are 1 heavy industries (that is 33%) and 20 light industries (that is 65%). Most of both types, as shown on Map 2, are located around the railway on the western side of the area, and at the beginning of highway 10. Heavy industries are located on the eastern side of the railway (COOP, and Lehigh Kansas Color) close to the residential area. Light industries are scattered around in conflict with other uses. Another small heavy industrial area is shown in Map 3, the Existing Land Use. Most of the light and heavy

industries are fair in appearance. Tables 18,19 and 20 show the resulted analyses of this category:

Table (20)  
Industry Building Materials

Material	Number	%
Wood	1	3.23
Brick	3	9.68
Concrete	3	9.68
Steel	12	38.71
Mixed	12	38.71
Total	31	100.00



#### D- Public and Semi-public Buildings:

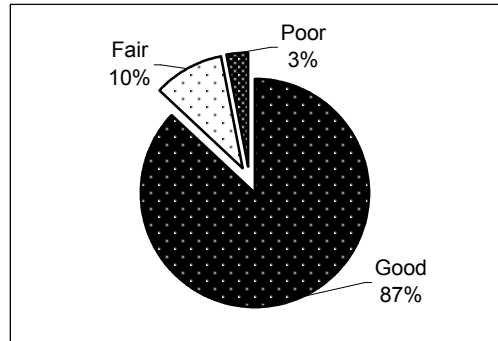
The only public building in the study area is an office for Douglas County. It is used for public service. This building is located on the fairground area. The semi-public buildings consist of a fire station, India Kaw Valley School, a church, Bradley veterinary Hospital, and 3 clinics. All the public and semi public buildings are in a good condition with enough parking spaces. This category is analyzed as shown in Tables 21 and 22.

Table (21)  
Types of Public Buildings

	#
Douglas County	1
Church	1
School	2
Veterinary Hospital	1
Clinic	3
Fire Station	1
Total	9

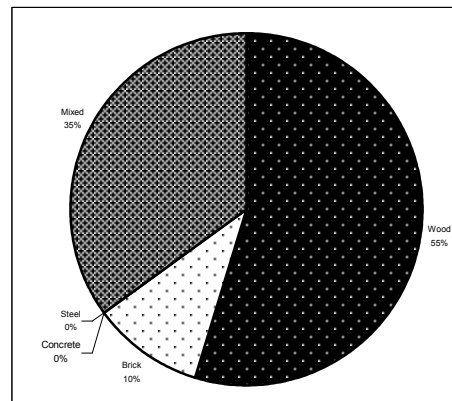
**Table (22)**  
Public Building Condition

	# of Units	%
Good	408	87
Fair	47	10
Poor	14	3
Total	469	100



**Table (23)**  
Public Building Materials

Material	Number	%
Wood	257	54.80
Brick	48	10.23
Concrete	0	0.00
Steel	0	0.00
Mixed	164	34.97
Total	469	100.00



### E-Recreation:

One of the important recreation elements in Lawrence is the "Fair Ground" which has been used for frequent activities. The main use is cattle and dairy shows. The study indicated that : (1) the condition is good and so is the appearance, and (2) the construction material is steel for 17 units and concrete for the remaining 6 units.

### 3 -Traffic study of the main streets in the area:

One cannot build a street without morphogenetical evaluation of its continuity and discontinuity in the urban landscape [15]. The importance of any street, whether public, semi-public, or semi-private, should be determined by its integration with the rest of the urban tissue. There are four main streets to consider in this section:

**A- 23rd St .** forms the main focus of the study. As an entry to the city of Lawrence, it forms the beginning of high way 10 which links Lawrence with Kansas City. 23<sup>rd</sup> ST. is two-way, 22meter wide major arterial with no on- street parking on either side. The main problem is the too many curb-cuts on both sides to serve the activities along the street. These curb-cuts conflict with the main traffic, decrease the speed, and increase accidents.

**B- Haskell** avenue is a two-way, 18meter wide (minor arterial northern 23rd St . and major arterial northern 23rd St .), with no parking on either side. The 1982 average daily entering traffic for the 23rd St . and Haskell Avenue was 17,483 vehicles .

**C- Harper** is two-way with 20meter right of way . It is the main access from 23rd St .to the Fairground .

**D- Lehnard** is a two-way, local road with no parking on either side.

In conclusion traffic survey resulted in two findings:

- (a) The traffic network is not efficient to give good service for the community.
- (b) (b) A new development plan for 23<sup>rd</sup> St. should be done to improve the traffic speed, to avoid the too many curb cuts, and to decrease the accident rate.

### III- VISUAL SURVEY:

There are three elements in the visual survey, these are: (see Maps 6,7 and Photos)

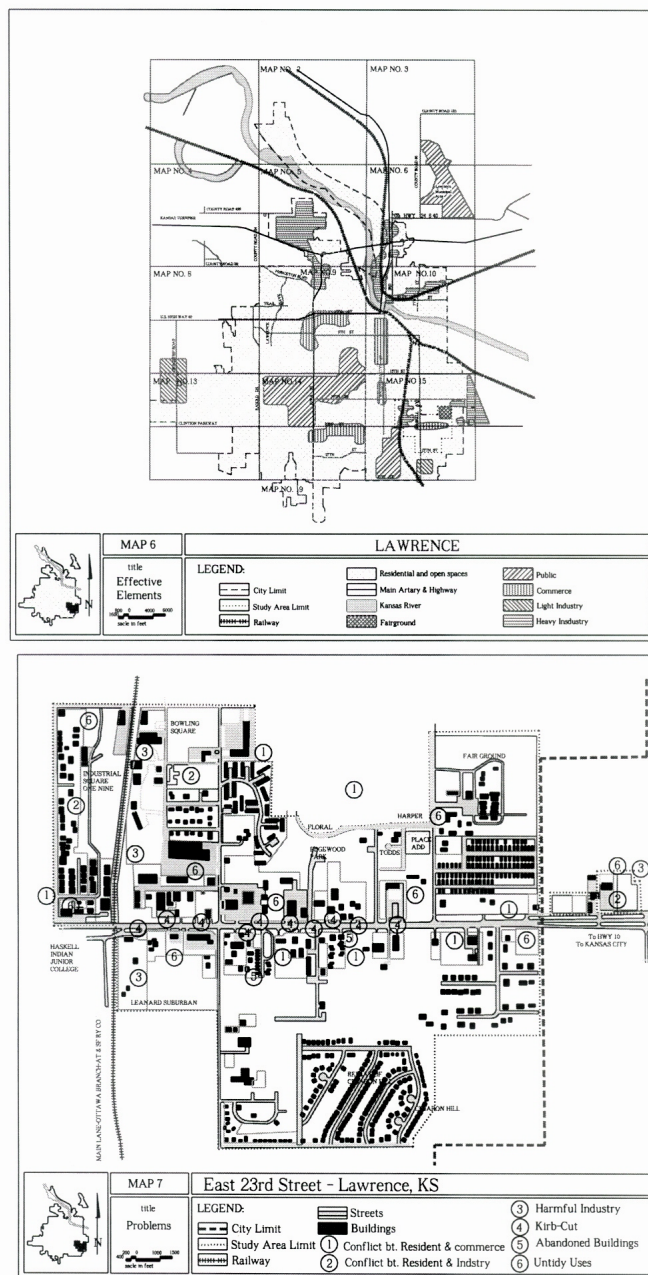
- 1- Effective physical elements
- 2- Photographic survey and Problems
- 3- Building appearance

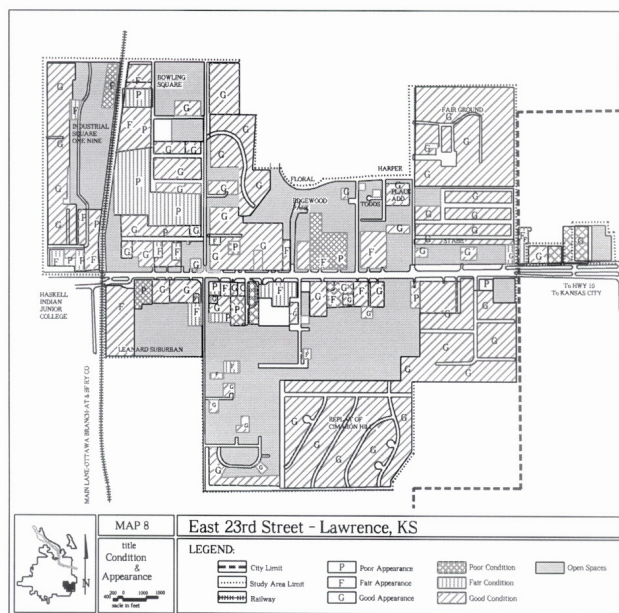
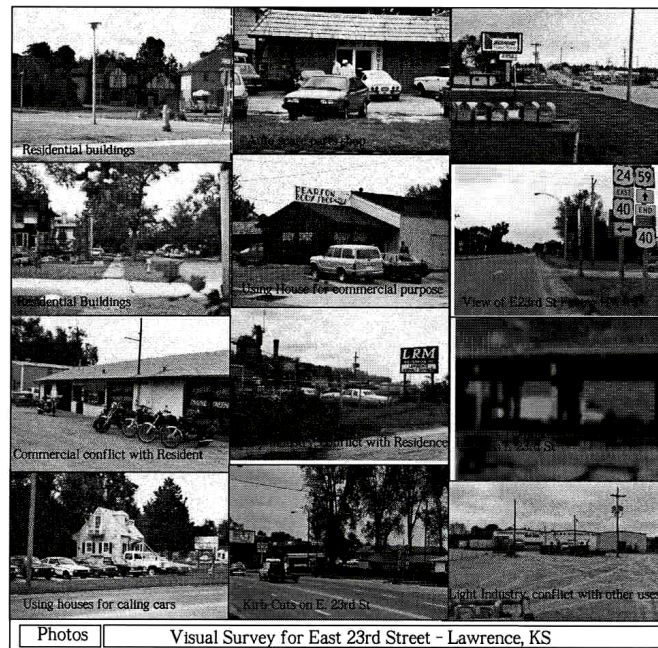
### 1 - Effective Physical Elements:

This study is done on the entire city of Lawrence. It intends to focus on the most imageable features of the city; these are: landmarks, edges, path, districts, and node, the well-known-Kevin Lynch's classification of the image of the city [16]. Map 4 indicates these important imageable features, which contribute to the city distinctiveness. The citywide landmarks are: the fairground, public buildings (University of Kansas and Haskell Indian Junior College), and industry (light and heavy) as distinctive structures. Regarding the edge there are both the railway and Kansas River. Some districts can be clearly noticed. These are the commercial areas (CDB and 23<sup>rd</sup> commercial strip commercial ) and University of Kansas. Regarding the paths, the 23<sup>rd</sup> St., Iowa Street on the western side, and 9<sup>th</sup> St. on the northern Part of the city and parallel to 23<sup>rd</sup> St. On the city scale the nodes becomes the district as they form the crowded areas.

### 2 - Photographic Survey and Problems:

This survey shows the effective elements found in the 23<sup>rd</sup> St. area. As imageable elements, it is worthwhile to indicate the most noticeable and striking features. Map 6 indicates that 23<sup>rd</sup> St. as well as other main collector streets and secondary roads form the main paths in the study area. Moreover, Map 8 points out the conflicts among different uses, which are the commercial, residential and industrial. These conflicts synthesis the dominating landmarks and sometimes create edges as a result of the incompatibility among different uses, such as areas (1) and (2) indicated on the same Map. Wondering through the area, one can notice some cases where houses are rehabilitated. As shown in photos, one case of a house has been converted into a commercial purpose and, in another, a house is being used as an office for selling cars. As there is no single style dominating the residential building types, one can distinguish between multi family units, mobiles and single-family houses, see above page 16. Each type forms a distinct area. There are some landmarks some of it represents an edge such as the railway and the turnpike as shown in the photoset. Finally, two other imageable features of the 23<sup>rd</sup> St. is the frequent curb cut as a result of car moving in and out the commercial activities located on 23<sup>rd</sup> St .





**Table (24)**  
Deficiencies Rating Scale

Shape of the building "As architect point of view"	Points -3 -----
2-Color: Does not match very much	-1 -----
Does not match at all	-2 -----
3-The surrounding:	
Trees	-2 -----
Sign	-2 -----
Maintained	-1 -----

**Table (25)**  
Numeric Code for the structural deficiency rate

Numeric Code	Total Penalty Points	Appearance
1	0 to -3	Good
2	-4 to -6	Fair
3	-7 to -12	Poor

### 3 - Physical Appearance Survey Bases of the survey:

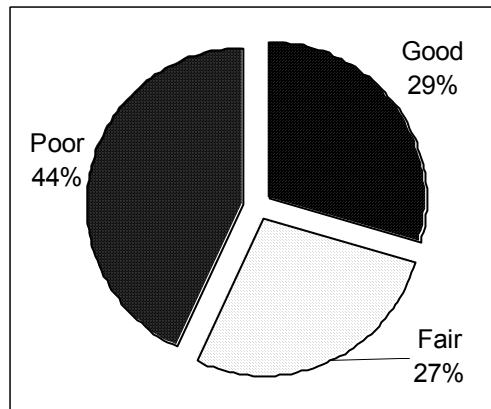
Judging the overall view of 23rd street, the conflict of the land use, which caused confusion in the appearance becomes clear. This appearance does not tell anything about the reality of the visual quality of Lawrence. So it is essential in this analysis to judge the appearance of the buildings. This element does not relate to the condition as it sounds. Thus, a building in a good condition does not mean it has a good appearance. A schedule was prepared to judge the appearance rating scale as shown in Table 24 and 25, while the results are shown in Tables 26 and 28

With reference to the buildings' conditions indicated above, the probable renewal treatment here relates to the decision made about conditions. The condition of the buildings takes priority over the appearance. In the sense that if a building is in poor appearance and condition, clearance is suggested<sup>2</sup>; if a building is fair or in a good condition, it should be preserved regardless of its appearance.



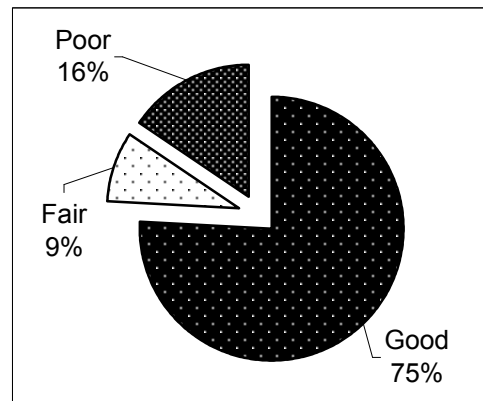
**Table (26)**  
Commercial Building Appearance

	# of Units	%
Good	15	29.41
Fair	14	27.45
Poor	22	43.14
Total	51	100



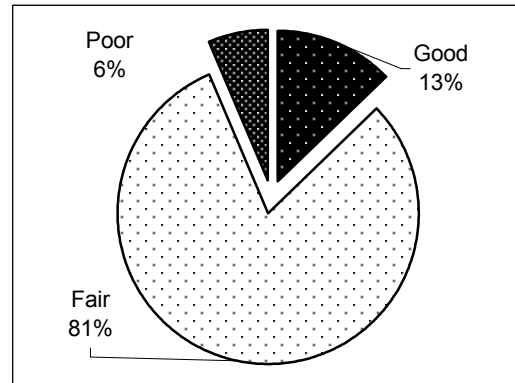
**Table (27)**  
Residential Building Appearance

	# of Units	%
Good	356	75.00
Fair	40	9.00
Poor	73	16.00
Total	469	100



**Table (28)**  
Industrial Building Appearance

	# of Units	%
Good	4	13
Fair	25	81
Poor	2	6
Total	31	100



One of the important recreation elements in Lawrence is the "Fair Ground", the study indicated that it has a good appearance.

**Issues of concern :**

- 1- The conflict of adjacent land uses is prevalent. There is a residential unit next to a chemical factory producing flammable substances and warehouse surrounded with piles of boxes and junk next to a club or a single-family house. This situation raises an important question of how transitional zones should be treated.

In addition, under the title commercial use one can find a conflict between uses, like a bank and a garage repair, or a clinic and auto-parts store. Banks or clinics concern with the shape and the form of the surrounding area. They build their business on prestige, which partially comes from the appearance and the location of their buildings. They demand a clean and tidy environment, whereas, mechanics do not care about how their garages look. They concern mainly about how to get things fixed, and they do not mind if they leave old neglected cars scattered around.

- 2- Other issues of a prime concern is the location of commercial activities on both sides of the street, which accordingly require parking lot entrances. This was done randomly by erecting many entrances, most of which are not necessary. It is possible to find a small store with two kerb-cuts on the road that is considered a major arterial with a relatively high speed limit. They create a lot of confusion and disturbance to the flow of traffic going toward highway 10
- 3- The condition survey shows that there are a number of vacant, deteriorated buildings scattered throughout the area. Also, there are some areas has the potentiality to be physically blighted.
- 4- 2<sup>nd</sup> ST . from Iowa to Mass is predominantly commercial strip. However, the area from Mass to Leonard is considered to be a transition area with different uses (residential, Haskell College bridge, railway) and different right-of-ways. This transition area separates East 2<sup>nd</sup> ST . from West 2<sup>nd</sup> ST. The separation creates a strong edge for the study area.
- 5- Some areas are in a blighted condition. They have major deterioration in their structures and they are maintained very poorly.
- 6- East 2<sup>nd</sup> , as it is, does not provide any sense of entrance to the city of Lawrence. It lacks the image which gives commuters the feeling of entering or leaving the city.
- 7- In a broader context, 2<sup>nd</sup> is a part of the main commercial area in Lawrence. This commercial strip is interrupted by the railway and the differing land use between Mass. and Leonard St. In this division, west 2<sup>nd</sup> is successful in creating its own identity and image; whereas, its counterpart is a great example of failure to create identity or image. Consequently, it can not be considered as part of 2<sup>nd</sup> ; nor is it an independent area in itself.

**Objectives :**

A number of objectives are drawn in order to upgrade the urban site and integrate it with the rest of the city.

- 1- Resolve conflicting land uses between different zoning areas.
- 2- Provide a plan for orderly and appropriate development.

- 3- Identify specific redevelopment sites.
- 4- Redevelop blighted areas and raw area.
- 5- Solve the curb-cuts problems.
- 6- Solving the unpleasant view of some activities.

**Strategy :**

- 1- Solve the conflicting land uses: For the area where the conflict between uses is not hazardous to people and their health, there is an option to plan a buffer zone. The buffer zone might consist of trees, bushes, or well-erected fences that will block the unpleasant view of a factory and its surroundings. The buffer zone can be enforced by development ordinances.
- 2- Provide a plan for orderly and appropriate development: For areas where the industrial uses directly conflict with residential areas, and where it seems dangerous and unpleasant for people's welfare, the use can be removed by using the depreciation factor. This could consist of setting up an age for the structure and not allowing the existing industrial activity to expand or do any major remodeling.
- 3- Identify specific redevelopment sites: To achieve this objective, different strategies can be used. First of all, attracting certain activities that are somewhat related to entrances of cities in general. Hotels, motels, and restaurants, are good options. The fairground within the area can be seen as an attractive point that can generate a flow of visitors; thus, accommodation services as well as restaurants could be feasible. Secondly, the image can be built by doing some major work on the street furniture to enhance it and give the area a better sense of place. Well designed streetlights, improved sign ordinance, and a statue or sculpture as a landmark for the city would improve this image. To implement these adaptations, a statement can be submitted to the city hall, asking for priority to encourage these activities in the area.
- 4- Redevelop blighted and raw areas: The appropriate strategy here can be what has been called tax increment. That will allow developers to take hold of the land at a fair market price. Also, they will benefit from the tax increase on properties.

- 5- Solve the curb-cuts problems: The street should be redesigned. The aim of the new design is to reduce the number of the curb-cuts and enhance the street structure and aesthetics. The implementation of the plan might be done by public development, Or owners of the concerned buildings might erect their curb-cuts and pavements according to the plan. This would be counted as a tax credit for them.
- 6- Solving the unpleasant view of some activities: Some activities in the area cause a lot of disorder to the site. It is very irritating to see the junk of old boxes or cars left carelessly around. The enforcement of the ordinances that control maintenance and cleanliness of the site will bring about a great deal of improvement, and it will eliminate the unpleasant views.

**Conclusion:**

This paper looked at East 23<sup>rd</sup> Street. The research approach proved to be functional. The selected urban area experiences loss of identity and uniqueness as a result of conflict and misplace of urban land uses and appearance. Whereas a successful outcome of urban compositions of different uses and elements as a form of urban language, in an area has to be readable, enjoyable, provide the sense of place, and encourage people to visit that area and be part of its street activities. William Whyte confirms this fact in his study of the American city centers; stating that, "what makes a set of steps good for sitting is not the comfort of the bench as much as what you see from it. [17] The overall strategies indicated in this research dealt with the small elements (i.e. street-curb-cuts) as well as larger ones (i.e. a heavy industry beside residential buildings) to ensure to a certain degree a well designed urban street and its compatibility with the immediate surrounding areas.

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**Reference:**

- 1 ) Tuan, Yi-Fu (1977). Space and Place. Minnesota, University of Minnesota Press.
- 2 ) Rapoport, Amos (1980). Human Aspects of Urban Form. New York, Pergamon Press.
- 3 ) Lynch, Kevin (1991). Good City Form. Cambridge, Massachusetts, The MIT Press. Seventh printing .P. 131
- 4 ) Clay, Grady (1987)“ Why don't we do It in the Road? , Planning, May, (American Planning Association). P19
- 5 ) Lynch, Kevin (1991). “The City as Environment . City Sense and City Design. Massachusetts, The MIT Press .pp87 95
- 6 ) Relph, E( 1976). Place and Placelessness. London, Pion .
- 7 ) Ferwati, M. Salim (1993). Geographical Analysis of Damascene Neighborhood, Unpublished Dissertation, University of Western Ontario, London, Ontario, Canada.
- 8 ) Bjorklund, E.M. (1983). “Behavior as a Spatial Search , in Ontario Geography, Dept.of Geography at U .W.O., No. 2, pp .85 100
- 9 ) Dubos, Rene (1968). So Human an Animal. New York, Scribner, P .171
- 10 ) Hillier, B. and Hanson, J. (1984 ). The Social Logic of Space. London, Cambridge University Press.
- 11 ) Lynch, Kevin (1991). “The City as Environment . City Sense and City Design. Massachusetts, The MIT Press .pp87 95
- 12 ) Moughtin Cliff (1999). Urban Design: Method and Techniques. Great Britain, Architectural Press.
- 13 ) “CENSUS OF POPULATION AND HOUSING 1980 Census Tracts, Lawrence, Kansas.
- 14 ) “ TRAFFIC ENGINEERING SAFETY PLAN November, 1983
- 15 ) Hitehand, J.W.R,. (1998). “Continuity and Discontinuity in the Urban Landscape: a geographer's view . In Rethinking XIXth Century City. By Attilio Petruccioli (editor). Aga Khan Program for Islamic Architecture at HU and MIT. pp121 -129
- 16 ) Lynch, Kevin (1960). The Image of the City. Mass, : Mit Press.
- 17 ) Whyte, William H. (1988). City: Rediscovering the Center. New York, Publisher: Doubleday. pp 189

**Endnotes:**

1. The soil and topographic analyses are not of much concern for the site development in this particular study since the site is flat and soil has no relation to the issue of the study. Therefore, they were neglected. Anyway, the collected data in that regard is that: The soil type is Pawnee Clay Loam. There is a slope toward the northsouthern-central-axil of 3 to 7 percent. The site has the size of 600 acres. Included with this soil small areas of Morrill, Martin, and Oska. Run off is medium to rapid, and the erosion hazard is moderate to high. The main concern of management is controlling erosion. About 70 percent of the acreage of this soil is cultivated. The rest is used for paster. This soil is suited to all crops commonly grown in this county.
2. We have to keep in mind that the studied area is newly developed and, thus, it does not have any historically significant buildings; otherwise, the decision in this case should be the restoration of such buildings regardless of their bad condition or appearance

## **تحليل حضري منهجي**

### **حالة دراسية للشارع الثالث والعشرون شرقاً، مدينة سانت لورانس**

### **ولاية كنساس - الولايات المتحدة الأمريكية**

**محمد سليم الفرواتي**

كلية العمارة والتخطيط - جامعة الملك فيصل

الدمام - المملكة العربية السعودية

#### **الملخص :**

الصورة البصرية قد لا تنطبق على المناطق الحضرية الأمريكية، وبمنظرة فاحصة لتركيباتها، يمكن ملاحظة ما يخص التكامل الحضري والعمراني من نقاط الضعف برغم أهميتها العضوية. كمثال لذلك المناطق الحضرية. يسلط البحث الضوء على الشارع الثالث والعشرون شرقاً كشارع رئيسي في المنطقة الجنوبية من مدينة لورانس، ولاية كنساس في الولايات المتحدة الأمريكية. بعد تحليل العناصر الحضرية والاجتماعية والمكونات البصرية، يطرح البحث سبعة مؤشرات أساسية لمنطقة الشارع المذكور، والتي توصي بإحساس مظهري لمدخل مدينة سانت لورانس، وتظهر هذه المؤشرات تناقض سلبي في استخدامات الأراضي علي سبيل المثال تداخل الاستخدامات الصناعية والسكنية وانعكاساتها الغير مفيدة في بعض المناطق.

وبناء عليه طورت غيابات واستراتيجيات تهدف للعناية بهذه المنطقة نسيجاً واجتماعياً ووظيفياً وجمالياً.