2.5 Frontage Quality Analysis

Walkable streetscapes that encourage and support pedestrian activity are an essential element of all vibrant commercial districts. By evaluating the quality of street frontage in the Square study area, we gain an understanding of the many barriers that are currently impeding pedestrians and, consequently, economic activity. In addition to identifying those areas in need of improvement, such a study can also assist in determining appropriate outlets for funneling non-pedestrian, or auto-related, activity.

In this analysis, streetscapes have been assigned an integrity status of Good, Fair, or Poor to describe the quality of pedestrian experience in this area. Areas of Good frontage quality typically have buildings close to the street, storefront windows and doors readily accessible to the passerby, and awnings, lighting and other amenities that help to create a positive pedestrian experience. Poor quality frontage is where buildings have deep setbacks, blank walls or boarded window and door openings, parking lots facing the street, and/or the presence of other barriers that work to discourage pedestrian activity. Fair quality frontage contained a mixture of good and poor quality frontage characteristics.

While this study indicates that the majority of frontage in the area is currently of Poor quality, it is useful to note that this fact can largely be attributed to the number of open lots in the area, rather than to situations of poor site design. Infill development with large setbacks is usually a more difficult development pattern to remedy.

The Existing Frontage Quality Analysis was valuable to the development of the Square Land Use Plan, and also influenced specific recommendations pertaining to traffic circulation and streetscape enhancement priorities.
2.6 Current Use Analysis

An analysis of current land and building use in the study area assists in evaluating how well current uses are working to generate, and sustain, valuable pedestrian activity in and around the Independence Square. In order for a particular land use to contribute measurably to the economic and social vitality of a downtown, it must either 1) provide a venue that draws a regular and high volume of pedestrian traffic, 2) provide a service that generates substantial pedestrian activity from the area’s employee and resident population, or 3) house/employ a substantial customer base that can and will support other area uses.

In addition to evaluating existing types of use, it is equally as important to determine whether certain uses are appropriately located so as to maximize the amount of pedestrian activity generated. For example, a customer service-based office that operates 8:00 a.m.-5:00 p.m. Monday through Friday is probably not the best use of prime frontage in terms of generating and sustaining pedestrian activity, especially during evening hours and on weekends. Similarly, a restricted surface parking lot that fronts a primary pedestrian pathway, yet produces no measurable tax base, is also not an effective use of prime frontage in a downtown commercial center. Within the Square study area, the current prime first floor frontage space, where pedestrian activity is crucial, can be generally defined as the Courthouse Square proper, and 1-1 1/2 blocks in each direction.

Figure 12
Independence Square Current Ground Floor Uses
c. 2001
Current Upper Floor Use Analysis

An analysis of upper floor building space usage demonstrates that currently the multi-story building stock within the prime frontage area is substantially underutilized. Space that could be providing additional customer and tax base for the Square as housing, office or retail uses, is currently functioning for storage, or is otherwise vacant. Successful revitalization will demand that existing building stock is utilized to its full capacity and that uses appropriately support this strategy for redevelopment of the Square.
2.7 Access & Entry Analysis

Figure 14 identifies the primary gateways and current points of pedestrian access into the Independence Courthouse Square Study Area. An analysis of these existing conditions is useful in identifying additional, and/or more effective, opportunities for directing visitor traffic to the Square area; and in determining where physical and perceptual barriers to pedestrian accessibility are impacting utilization of existing resources. For example, the Access and Entryways Analysis figure shows that the south side of the Square study area is currently not generating as much pedestrian traffic as the north, and that City-owned public parking lots north of Truman Road and on Kansas are not being utilized on a regular basis. When used in combination with the Existing Frontage Quality Analysis this information will assist in prioritization of future streetscape enhancement efforts, plans for improving pedestrian and automobile circulation at gateways and along primary pedestrian pathways within the Square area.

The Access and Entryways Analysis figure also demonstrates how past alterations and developments have worked to sever the physical linkages, and consequently the pedestrian connections, between the Square and its surrounding residential neighborhoods. Reestablishing pedestrian connections to this substantial customer base through infill development and streetscape enhancements will be an integral component of the Square Revitalization Strategy.
A complete analysis of the existing gateways to the Square was conducted by the Design Subcommittee during the Visioning Meeting in May 2001.

Based on national planning standards, the average pedestrian is willing to walk a distance of 1/4-mile (5 minutes) from their home or parking space to their destination, where a continuous high quality pedestrian environment exists. Figure 15 identifies the surrounding neighborhood areas that are located within a five minute walk to the Square’s center. Also identified are tourist sites and community resources that have the potential to provide pedestrian traffic to the Square business district. By enhancing the pedestrian experience for resident and tourist customers, additional visitor-ship and vitality is leveraged for the Square. Consequently, demand for parking should also be relieved by those who will choose to walk to the Square instead of drive.

Additional analysis of these “pedestrian sheds” also provides valuable insight as to how infill housing development can be strategically located to expand the resident customer base in, and around, the Square Study Area. By stabilizing, expanding and then supporting the underlying neighborhood structure around the historic core, revitalization of the Courthouse Square as commercial center will be improved substantially. The success of such development will depend on the introduction of amenities, services, and businesses that contribute to the walkability of the area including green spaces, security mechanisms, sidewalks, convenient access to groceries and general goods and necessities, and eventually a limited public transit system.

This analysis has directly impacted the specific recommendations related to streetscape enhancements, parking strategies and character district development.

Figure 15
Independence Square & Neighborhood Council
Districts within a 5 Minute Pedestrian Shed
2.8 Traffic Circulation Analysis

The existing pattern of traffic circulation within the Square study area is illustrated in Figure 16. The analysis of traffic circulation primarily focuses on identification of existing conditions that discourage visitation and impede a positive traffic flow within the Square study area. Additionally, this analysis is useful for targeting opportunities to enhance the pedestrian experience through traffic calming measures and to create new entryways to the Courthouse Square.

During the Urban Renewal Program of the early 1970’s, plans to establish the Square as a pedestrian mall called for redirecting unwanted traffic around the core by way of a business loop. Although never fully realized for its intended purpose, the loop was constructed and remains intact today. Plans to revitalize the Square as a pedestrian friendly environment should evaluate the possibility of utilizing portions of this loop system to distribute traffic appropriately and enhance pedestrian circulation in the Square area.

Recommendations for further traffic analysis and suggested improvement to traffic circulation patterns are detailed in the General Plan Recommendations section of this document.
2.9 Parking Analysis
A parking study was conducted during the spring of 2002 to inventory parking resources and needs within the Independence Square Study Area. The study included the following components:

1) an inventory of all existing on-street and off-street parking spaces in the Square Study Area;
2) a survey of parking occupancies on two typical weekdays and one Saturday, and
3) an estimate of future demand based on building floor area

The study began with a field survey involving data collection and analysis of background material. The study was based on standards developed by the Institute of Transportation Engineers and the Urban Land Institute, which were modified to suit the unique circumstances present in the Square Study Area. Additional, provisions in this study allowed for examination of the development pressure present in the Square Study Area and the needs and concerns of special interest groups and citizenry.

Parking Supply in the Square District

<table>
<thead>
<tr>
<th>Total Spaces Available</th>
<th>2769</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Off-street</td>
<td>2133 (77%)</td>
</tr>
<tr>
<td>Total On-street</td>
<td>636 (23%)</td>
</tr>
</tbody>
</table>

Parking Occupancy in the Square District

To determine the average and peak occupancies on typical weekdays and Saturdays, the parking survey was conducted on two weekdays and one Saturday in August 2002. The results of these surveys indicate that on average, 46% of the on-street parking and 55% of the off-street parking is occupied during the weekday peak period. On Saturday, 23% of the on-street parking and 15% of the off-street parking is occupied during the peak period.

Off Street Parking Supply

| County Lots | 132 |
| Pay Lots    | 34  |
| Private Lots| 913 |
| Public Lots | 833 |
| Reserved    | 221 |

Parking Demand and Zone Analysis

Analyses were performed to determine the source of current and future parking demands for the study area. The methodology used involved computer modeling of parking demand based on land-use. Specifically, an inventory of buildings and their uses is compiled and a parking generation rate is assigned to each use category.

The land uses in the Square study area were classified as: Art, Cultural & Education; Church & Civic; Government and Community Services; Hotel; Limited Day Time Use; Museum; Office; Professional Services; Repair; Residential; Restaurant; Retail & General Service; Vacant.

While the results of the study seem to indicate parking supply within the Square study area is adequate to serve the current demand, the utilization of available parking spaces varies within the Square District. On-street parking occupancy is highest along Main St. (95% peak hour occupancy rate from Truman Rd. to Kansas Ave.), Maple Ave. (90% peak hour occupancy rate from Main St. to Liberty St.), Lexington St. (96% peak hour occupancy rate from Main St. to Liberty St.), and the streets which surround the County Court (81% peak hour occupancy rate on Osage St., 84% peak hour occupancy rate on Kansas St., 93% peak hour occupancy rate on Spring St., 70% peak hour occupancy rate on Lexington Av.). The off-street public parking occupancy is high in the City Hall north parking lot (89% peak hour occupancy rate), Hickok parking lot (95% peak hour occupancy rate) and the public parking lot south of Truman Rd. and east of Osage St. (80% peak hour occupancy rate).
The parking generation factors are based on research by the Institute of Transportation Engineers and the Urban Land Institute. Modifications to the parking generation rates were made after considering the experience with past projects of similar scope and scale to the Square District and the unique characteristics and situations associated with the Square District. Table 3 lists the land use types and the parking generation rates.

An additional parking generation ratio adjustment was made based on research done by Urban Land Institute (ULI) which indicates that mixed use projects can produce reduced parking demands because of the "market synergy" effects within walking distance of each land use. Accordingly, the parking requirement was reduced by 15%, which is the same rate used in the example explanation of the shared parking application used in the ULI report.

### CURRENT AND SHORT-TERM FUTURE PARKING DEMAND

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Parking Generation Rate</th>
<th>Land Use Type</th>
<th>Parking Generation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art, Cultural &amp; Education</td>
<td>36</td>
<td>Church &amp; Civic</td>
<td>42</td>
</tr>
<tr>
<td>Government &amp; Community Service</td>
<td>930</td>
<td>Hotel</td>
<td>39</td>
</tr>
<tr>
<td>Hotel</td>
<td>21</td>
<td>Limited Day-Time Use</td>
<td>21</td>
</tr>
<tr>
<td>Museum</td>
<td>16</td>
<td>Office</td>
<td>402</td>
</tr>
<tr>
<td>Office</td>
<td>317</td>
<td>Professional Services</td>
<td>575</td>
</tr>
<tr>
<td>Professional Services</td>
<td>64</td>
<td>Repair</td>
<td>64</td>
</tr>
<tr>
<td>Repair</td>
<td>22</td>
<td>Residential</td>
<td>35</td>
</tr>
<tr>
<td>Residential</td>
<td>135</td>
<td>Restaurant</td>
<td>264</td>
</tr>
<tr>
<td>Restaurant</td>
<td>262</td>
<td>Retail &amp; General Services</td>
<td>331</td>
</tr>
<tr>
<td>Total</td>
<td>2,419</td>
<td>Total</td>
<td>3,623</td>
</tr>
</tbody>
</table>

*Data based on 2002 land uses. Short-term parking demand was based on potential short-term development projects.

### LAND USE TYPES AND DAY-TIME PARKING GENERATION RATES

- **Art Cultural & Education**: 1.6
- **Government & Community Service**: 3.84
- **Hotel**: 0.52/room
- **Limited Day-time Use**: 0.7
- **Museum**: 1.0
- **Office**: 2.64
- **Church & Civic**: 0.04
- **Repair**: 3.0
- **Residential**: 22
- **Retail & General Services**: 2.75
- **Vacant**: 0

### Future Parking Demand in the Square Study Area

The Square Study Area needs 2,419 parking spaces to meet the peak hour parking demand for the existing land uses. Parking supply (2,492 parking spaces) was determined by the effective supply ration, or 90% of the actual supply (2,769), to account for turnover delay. For the Square Study Area as a whole, there is a net balance of approximately 73 spaces in the calculation of parking supply and demand. Parking supply fairly meets the demand based on the current land uses.

However, full occupancy of all remaining vacant floor space in the Square District will require some 287 parking spaces in addition to those parking spaces which are currently in use. In the long term, new development projects will increase the total parking demand to 3,623 parking spaces. A variety of techniques will be necessary to accommodate this need. The table to the left shows the projected parking demand within the Square Study Area based on anticipated short-term infill development and full occupancy.
2.9 Parking Analysis

Figure 19
Independence Square Parking c. 1950

The current surplus of parking is primarily attributed to the number of surface parking lots that currently occupy prime infill development areas. In order for revitalization of the Square to be successful, these areas need to be developed into healthy, vibrant commercial, residential, and public spaces. As new buildings are constructed, parking will be lost and as new businesses move into existing vacant buildings parking needs will increase. It is estimated that if infill development occurred in areas where buildings have been removed to create parking, and these buildings were of similar size and use, there would be a parking shortage of approximately 287 spaces during peak hours.

Figure 20
Independence Square Urban Renewal Surface Parking

Taken in the 1950’s, this aerial photo of the Courthouse Square illustrates the viability of on-street parking, as compared surface parking lots, during one of the most vibrant periods of Square commercial and social history. Urban Renewal, and a perceived need for parking, brought dramatic changes to the Courthouse Square during the 1960’s and 1970’s. The altered photo (to the right) illustrates areas where on-street parking has been eliminated and building fabric has been demolished to make way for surface lots.
Prior to Urban Renewal, on-street parking was a characteristic feature of the Independence Square commercial district. The adjacent aerial illustrates the degree and type of on-street parking available in the Square study area during the 1950’s.

Figure 19
Independence Square
On-Street Parking c. 1950
Urban Renewal efforts of the 1960’s and 1970’s resulted in the elimination of a substantial amount of on-street parking to make way for the construction of an off-street parking traffic loop and a pedestrian mall around the Courthouse Square.