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Pedestrian patterns in selected downtown San Jose public spaces: An opportunities and constraints analysis leading to recommended enhancements

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Article Information

ABSTRACT

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Research question:

This report aims to answer the following research question: What are the qualities of public spaces in downtown San Jose, California that entice pedestrians, and what deficiencies can be remedied through context-specific design enhancements?

Abstract:

Since ancient Greek's Agora to early 20 th century, public spaces are the focal points in a city where people come together and share common interests. In order to enhance pedestrian friendly environment in a city, lively, attractive, safe, and well-designed public spaces play a vital role. Downtown San Jose, also known as the Central Business District, is a compact urban place where one can easily walk to the destinations, since there are no hills in the area. It is a cultural and creative urban place in Silicon Valley, California where one can live, work, and experience art and entertainment In my research project, I plan to conduct a literature study of successful public spaces, as well as pedestrian activities, with special emphasis on the design of public spaces by Jan Gehl. After analyzing the various concepts of pedestrian activities, a mixed-use core study area in Downtown San Jose will be examined in terms of spatial and functional analysis. The study area for this research proposal includes five parallel streets in the downtown area. Furthermore, various key issues, opportunities, and resources are identified in the study area. Based on the various issues identified, the research study endeavors to provide a set of recommendations to the City of San Jose.

KEYWORDS: Downtown, Public space, walkable, pedestrian life and mixed-use development

1. INTRODUCTION TO THE RESEARCH AND THE IMPORTANCE OF PUBLIC URBAN OPEN SPACES

"The creation of attractively-designed and well-used public spaces" is one of the goals for downtown

development.¹ Downtown San José includes public areas such as parks, plazas, paseos, and sidewalks.

¹[1] <u>Kent A.</u> Robertson, "Pedestrianization strategies for downtown planners," <u>Journal of the American Planning Association</u> 59, no. 3 (Summer 93): 361.

²These public areas play an important role in creating and enhancing pedestrian friendliness of the city. ³

However, the design and use of these public spaces need improvements in a number of key areas, which will be the focus of this research project.

This chapter includes the research overview, followed by the research question, and identification of the intended audience. It will then shift to identify the research methodology adopted for this study. Further, this chapter will discuss background information about the City of San Jose and the study area and state the relevance of the topic to the field of urban planning.

• 1.1. RESEARCH OVERVIEW

It has been observed by this researcher that some of the public spaces in the downtown area do not encourage different types of pedestrian activities in the categories presented by Danish urban theorist Jan Gehl such as *necessary*, *optional*, *and social*. ⁴ The City of San José should create strategies that will focus on these essential characteristics of public space.⁵

This report provides background information about downtown San José and also explains the importance of this topic for study. It also provides information about the existing goals and policies implemented by the City of San José and the role of public space in urban design. Further, this report discusses observations of pedestrian activities conducted by the researcher on different streets in downtown San José. All the information collected during field study observation and during interviews and surveys is presented in the form of tables and graphics. Finally, the report presents recommended streetscape improvements and concludes with the discussion of opportunities for further research and improvement.

- ²[2] City of San Jose, "Strategy 2000: San Jose Greater Downtown Strategy for Development," February 2001, http://www.sjredevelopment.org/PublicationsPlans/Strategy2000.pdf [accessed 15 July, 2009].
- ³[3] Liu Xiaohang, "Pedestrian Volume Modeling: A Case Study of San Francisco," *Yearbook of the Association of Pacific Coast Geographers* 71, (January 2009): 164-181.
- ⁴[4] Jan Gehl, *Life Between Buildings: Using Public Spaces* (New York: Van Nostrand Reinhold Company, 1987), 11-17.
- ⁵[5] American Planning Association, "Characteristics and Guidelines for Great Public Spaces," *Great Public Spaces* in America: Public Spaces, http://www.planning.org/greatplaces/spaces/characteristic s.htm [accessed July 20, 2009].

1.2. RESEARCH QUESTION

This report aims to answer the following research question:

What are the qualities of public spaces in downtown San José that entice pedestrians and disabled persons, and what deficiencies can be remedied through context-specific design enhancements?

• 1.3. BACKGROUND: CITY OF SAN JOSE AND THE STUDY AREA

Downtown San José, also known as the Central Business District, is a compact urban place where one can easily walk to destinations since there are no hills in the area. The selected study area, shown in Figure 1, is approximately 230 acres in size, is located to the north of Interstate 280 and east of Guadalupe Parkway, which is approximately parallel to Guadalupe River. It is bounded by important locations such as San José State University towards the east and St. James Park towards the north.⁶ There are civic/public buildings, commercial buildings, open parking areas, parking garages, open spaces, semi-public plazas, and paseos in the area.



Fig. 1. Location map showing study area in larger context⁷

⁶[6] "Downtown San Jose," *Google*, http://en.wikipedia.org/wiki/Downtown_San_Jose (accessed July 18, 2009)

⁷[7] Result of search on "Downtown San José, CA" in Google Earth (August 1, 2009). Photo manipulation by author in Photoshop.

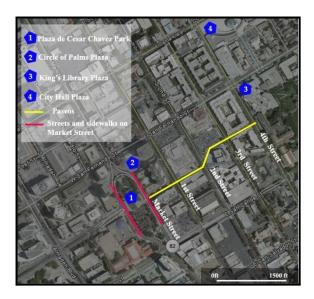


Fig. 2. Location map of public spaces in Downtown San José⁸

2. REVIEW OF EXISTING GOALS AND POLICY DOCUMENTS IMPLEMENTED BY THE CITY OF SAN JOSÉ

The intent of this chapter is to review existing planning documents implemented by the City of San José related to the design of public spaces such as parks, plazas, paseos, and sidewalks in the downtown area. The purpose behind conducting this review is to determine whether or not existing goals and policies set forth by the City of San José incorporate strategies to facilitate and encourage pedestrian activities in public spaces within the downtown area. Another purpose of this review is to examine if the existing goals and policies set forth by the city are adequate for creation of successful public spaces.

In collecting the data for this work, the following planning documents were identified for reviewing existing goals and policies:

- City of San José 2020 General Plan (1994)
- City of San José 2040 Draft General Plan Update (ongoing)
- Strategy 2000 San José Greater Downtown Strategy for Development
- City of San José Downtown Design Guidelines (2004)
- San José Downtown Streetscape Master Plan (2003)

• 3. METHODOLOGY OF DATA COLLECTION

To understand the current policies and guidelines being implemented or considered by the City of San José and qualities of successful public spaces that encourage pedestrian activities, data sources such as a review of relevant published literature, design guidelines from other US cities, referring to on-line databases, and the City of San José website were used. In addition to this, non-participant observation methods, interviews, and surveys were also conducted to obtain background information related to the current design guidelines adopted by the city and to obtain useful information about the concerns related to the current city's goals and policies.

The following experts were interviewed to seek information about possible improvements to be recommended in the study area:

- Laurel Prevetti, Assistant Director, Planning, Building and Code Enforcement, City of San José
- Walter Rask, Principal Architect for the City of San José Redevelopment Agency
- Scott Knies, Executive Director, San José
 Downtown Association
- Michael Brilliot, Senior Planner, City of San José

The interviewees were asked questions about the following topics:

- Strategies for encouraging pedestrian activities in downtown San José.
- Strategies for creating more vibrant and functional public spaces in the city's plazas, paseos, parks, and sidewalks.
- Strategies for designing attractive retail development in downtown San José.
- Strategies for streetscape improvements in the downtown area (signage, landscaping, benches, other street furniture, transit access, etc.)
- Strategies for incorporating public space needs for disabled people.

Approximately 30 adults were surveyed at public areas in downtown San José. Surveys were conducted during weekday and weekends. The reason for conducting surveys is to obtain detailed, accurate, and useful information about the issues that impact the pedestrian environment. The issues identified by the survey respondents were helpful for further analysis of pedestrian activities for creating vibrant and functional public areas. This process is vital because it is essential

⁸[8] Result of search on "Plaza de Cesar Chavez in downtown San José, CA" in Google Earth (August 1, 2009). Photo manipulation by author in Photoshop.

to take into consideration public opinion before suggesting any improvements in the study area. In addition to interviews and surveys, field study observations were also conducted to identify issues that impact the pedestrian environment of downtown San José. This information was helpful for the analysis of pedestrian activities with the goal of fostering vibrant and functional public spaces in downtown San Jose.

4. STUDY OF PEDESTRIAN ACTIVITIES ON DIFFERENT STREETS

This chapter presents findings from field study observations conducted for various pedestrian activities in public areas of downtown San José. Field study observations will highlight various types of activities that take place in public areas of downtown San José.

All the observations are provided using a standardized categorization scheme (introduced by Jan Gehl in his book Life between buildings) of three different types of activities such as necessary, optional, and social.⁹ Additionally, the study of pedestrian environments on different streets includes relevant site photographs taken during the field study observations.

Necessary activities include everyday tasks and pastimes and are more or less mandatory. Necessary activities are mostly walking related. Optional activities take place only when there is a desire and time to perform them. These include most of the outdoor recreational activities and are dependent on whether or not the exterior environment is favorable. Finally, social activities take place when necessary and optional activities are optimal and hence, are termed as resultant activities. ¹⁰ There could be a natural degree of overlap in some instances between necessary and optional activities. For example, jogging and exercising could be necessary activities as well as optional activities because they could be recreational for some while necessary for others.

4.1. STUDY OF PEDESTRIAN ENVIRONMENT ON MARKET STREET





Fig. 3. Observations at the Plaza de Cesar Chavez Park Source: Photographs taken by author, February 2010

Necessary Activities

- People going to work, school, or maybe for some other reason, walking and bicycling on the paved surfaces in the park
- Homeless people moving around

Optional Activities

- People taking pictures of the fountain area in the park
- People sitting on benches, relaxing and enjoying outdoor atmosphere.
- People walking, standing, jogging and exercising in the park and observing the surrounding

Social Activities

- Students in groups visiting the park
- People standing and interacting with each other
- People sitting on benches and having conversation/enjoying lunch
- Children playing around the fountain area People greeting each other



Fig. 3. Observation at the Circle of Palms Plaza Source: Photograph taken by author, February 2010

Necessary Activities

- People passing by to go to the other side of street
- People going to San José Museum of Arts

Optional and Social Activities

Non observed



Fig. 4. Traffic flow on Market Street Source: Photograph taken by author, February 2010

⁹[9] Jan Gehl, Life Between Buildings: Using Public Spaces (New York: Van Nostrand Reinhold Company , 1987)



Fig. 5. Observation at the sidewalk on Market Street Source: Photograph taken by author, February 2010



Fig. 6. Pedestrian activities in the paseo between Market Street and 1st Street

Source: Photograph taken by author, February 2010

Necessary Activities

- People walking from Market Street to 1st Street and vice versa
- Homeless people moving around
- People walking to take public transit on 1st and 2nd street

Optional Activities

- People bicycling, skateboarding, and jogging
- People reading newspaper
- People visiting retail stores
- People taking a walk to enjoy outdoors
- People standing and smoking

Social Activities

- People socializing at outdoor cafés and restaurants
- People standing and interacting with each other
- People sitting on benches and talking



Fig.7. Pedestrian activities in the paseo between 1^{st} and 2^{Nd} Street

Source: Photograph taken by author, February 2010

Necessary Activities

- People walking alone or with their baby strollers
- People going to gym
- People walking to take public transit on 1st and 2nd street

Optional Activities

- People playing bicycling and skateboarding tricks
- People jogging
- People visiting retail stores
- People taking a walk to enjoy outdoors
- People going to Camera 12 theatre

Social Activities

- People sitting and socializing at the outdoor cafés and restaurants
- People standing and interacting with each other outside the Camera 12 theatre

4.2. STUDY OF PEDESTRIAN ENVIRONMENT BETWEEN 2ND STREET AND 3RD STREET



Fig.8. Pedestrian activities in paseo between 2nd Street and 3rd Street

Source: Photograph taken by author, February 2010

Necessary Activities

- People walking to San José State University
- People walking (alone, with their with dogs, talking on their cell phones, or listening to earphones)
- Person cleaning the floor

Optional Activities

- People bicycling and skateboarding
- People visiting San José Repertory theatre
- Person standing and smoking

Social Activities

People standing and interacting with each other

- People greeting each other and asking for directions to reach to a particular destination
 - directions

4.3. STUDY OF PEDESTRIAN ENVIRONMENT ON 4TH STREET



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Fig.9. Plaza outside Dr. Martin Luther King, Jr. Library and the café area

Source: Photographs taken by author, February 2010

Necessary Activities

- People walking (alone, with their with dogs, talking on their cell phones, or listening to earphones) to library and San José State University
- People waiting at the signal to cross streets on either sides
- Students parking their bikes
- Homeless people moving around

Optional Activities

- People bicycling, jogging, and skateboarding
- People buying hot dogs from the hot dog stand
- Person standing and smoking

Social Activities

- People standing and interacting with each other
- People sitting and socializing at the café area
- People greeting each other



Fig.10. Photograph showing pedestrian activities at the paseo between 3rd street and 4th street Source: Photographs taken by author, February 2010

Necessary Activities

People going to San José State University

Optional Activities

- People bicycling, jogging, and skateboarding
- People talking on cell phones
- People visiting retail stores such as hair studio

Social Activities

- People socializing, relaxing, and enjoying at the café and restaurants
- People sitting on the benches and interacting with each other

5. TOWARDS CREATING VIBRANT AND FUNCTIONAL PUBLIC AREAS

The intent of this chapter is to summarize the results of an opportunities and constraint-based analysis regarding the quality of pedestrian environment in the studied public spaces of downtown San José using field study observations, interviews, and surveys. The findings from each method will be described in turn.

• 5.1. FINDINGS FROM NON-PARTICIPANT OBSERVATION METHOD

Non-participant observations were conducted during weekdays and weekends at different times of the day. Findings from this method will vary considerably according to seasonal variations. It is important to note that field study observations conducted for this research project occurred in the month of February during a non-holiday season when events were not planned.

While conducting field study observations at Plaza de Cesar Chavez Park, it was observed that it is a small gathering place that is used by people to perform different types of activities such as walking, jogging, bicycling, relaxing, and interacting with each other.

The most important factor that was noted about this park was that it is used by people of all age groups. Additionally, this park attracts a large number of tourists and residents, thereby contributing foot-traffic to nearby businesses in the area. However, certain site-specific improvements such as colorful vegetation, landscaping, or different seating arrangements should be incorporates that could make it more lively and attractive for visitors. While observing the sidewalks adjacent to Market Street as well as adjacent to the park, it was observed that there were exposed tree planting pits that might be hazardous for pedestrians or disabled people.

The Circle of Palms Plaza was almost vacant because there was no attraction that would encourage foot-traffic in the area.

All the paseos between Market Street and 4th street were very vibrant as well as functional because of the density of pedestrians and due to different types of activities that were taking place in the area.

However, it was noted that due to street parking issues on 1st and 2nd street, there is no space for loading and unloading of service and therefore, all vehicles are lined up on one of the traffic lane vehicles as shown in figure 18, which lead to traffic congestion in the area.



Fig.11. Vehicles waiting on the streets to unload as there is no on street parking facility

Source: Photographs taken by author, February 2010

• 5.2. FINDINGS FROM INTERVIEW

Conducting face-to-face interviews with the San José city planners and other professionals working in non-profit organizations gave an opportunity to obtain background information related to current city design guidelines.

Further, it also helped to gain other relevant information such as opportunities and concerns in various public areas of downtown San José

Summarizing Key Findings from Interviews:

Overall, it was observed that the discussions with the city planners and professionals from non-profit organizations generated some common themes.

- Plaza de Cesar Chavez Park and the Plaza outside Dr. Martin Luther King, Jr. Library are successful because of their unique location and hence, are attracted by pedestrians.
- Circle of Palms Plaza and City Hall Plaza need improvements in various aspects for generating foot-traffic.

- Paseos in the downtown area are vibrant and functional because of the outdoor restaurants and cafés.
- The major issue observed is the density in the downtown area:
 - a. There are not many people in the downtown area; therefore retail businesses are not in demand.
 - b. People like to go to suburban malls for shopping because there are multipurpose activities such as shopping, eating, and entertainment.
 - c. People mostly think of visiting the downtown area for cultural activities like visiting concerts, museums, Christmas in the park and for work purpose.

5.3. FINDINGS FROM SURVEY

Conducting surveys is a very crucial task for creating vibrant and functional public areas. A total of 30 people between the ages of 18 and 75 were surveyed, including students from San José State University, residents of San José, and visitors.

Following are the survey results that noted the favorite thing people like to do in downtown San José with specific reasons. Some of the participants noted multiple reasons and hence, the number of responses is more than the total number of participants.

Table 1. Positive critiques from the survey participants

Public areas / No. of responses	Reasons. Why?
Attend concerts / 6	Feels livelyVery engagingIt is fun
Enjoy walking on the sidewalks and paseos / 9	 Feels pedestrian-friendly Like window shopping Feels nice Good exercise when walking and jogging It is fun and relaxing
Christmas in the park / 7	 Festive atmosphere Feeling of community togetherness Beautiful with all the decorations

Enjoy the	 Good food
outdoor	 Like different cuisines
restaurants	 Like outdoor seating
and café / 9	
Sit and	 Good place for enjoying
relax on the	outdoors
benches / 5	
People	 It is interesting
watching	
Visit the	 Looks nice
park - Plaza	 It is fun and relaxing
de Cesar	
Chavez / 8	

Table 2: Negative critiques from the survey participants

Public areas	Suggested improvements by survey participants
Plaza de Cesar Chavez Park	 Less benches in the park Need more landscaping, trees, and attractive flowers Need more security and lighting Need information center that will display maps and upcoming events Need more parking facility Need more shade especially during summer Need more better restaurants around the park Eliminate homeless, vagrants, and crime to make it feel safer Provide buffer from the surrounding traffic
City Hall Plaza	 Need more trees, greenery, attractive landscaping Need attractive artwork Need more seating arrangement Arrangements for food joints such as coffee shop and fast food Need more water features and display area Should facilitate more public events
Other public areas of downtown San José	 Need more retail, restaurants and whole foods market Need more clean environment Need more security in the downtown area

- Need more lighting and public parking public parking area within walking distance
- Need more trash bins
- Need less vagrants
- Need more police presence
- Need more distinguished highlighted walkways along light rail
- Need more public toilet facility

Negative critiques from the participants indicated that several improvements are required in public areas of downtown San Jose in order to create a safe, livable, and walkable environment that will enhance and support opportunities for social interactions.

6. RECOMMENDATIONS TO THE CITY OF SAN JOSE AND OPPORTUNITIES FOR FURTHER RESEARCH

The overall findings from field study observations, interviews, and surveys played a vital role in determining strategies for improvements in the public areas of downtown San José.

Therefore, taking into consideration all the above findings recommendations to design vibrant, functional, and successful public spaces in downtown San José are provided below.

1. Incorporate additional lighting arrangements in the Plaza de Cesar Chavez park to provide a safe environment

Survey results and field study observations indicated that additional lighting is required because the park is not adequately illuminated at night.

Therefore, the City of San José should incorporate additional lighting facilities in the Plaza de Cesar Chavez Park to create a safer environment for pedestrians and bicyclists.

2. Provide sign board that is easily identified by users

Sign board is an important element of a streetscape because it adds visual interest and provides information for pedestrians. Appropriate location of signage is important, since most visitors coming to the downtown area for the first time are looking for correct directions.

3. Incorporate public toilet facilities in public areas of downtown San José

Surveys and field study observations highlighted that the number of public toilet facilities is not and hence, the City of San José should provide adequate toilet facilities for visitors and residents in different public areas of downtown San José.

4. Provide tree grates on sidewalks of Market Street

According to field study observations, the sidewalks on Market Street have exposed tree planting pits, which are hazardous for pedestrians and especially for disabled people. Therefore, the City of San José should incorporate tree grates, colorful landscaping, and textured pathways that are safe, comfortable, and aesthetically pleasing for pedestrians and disabled people.





Fig.12. Sidewalk on Market Street before and after improvement

Source: Photograph by author, February 2010 and photo manipulation by author in photoshop

5. Create pedestrian-friendly sidewalks along Plaza de Cesar Chavez Park.

Field study observation revealed that the sidewalks adjacent to Plaza de Cesar Chavez are exposed at certain locations, which is not safe for pedestrians. People use this sidewalk for multiple activities, such as walking, jogging, standing, and bicycling. Therefore, the City of

San José should design safe, comfortable and aesthetically pleasing pedestrian-friendly sidewalks.





Fig.13. Sidewalk adjacent to Plaza de Cesar Chavez before and after improvement

Source: Photograph by author, February 2010 and photo manipulation by author in Photoshop

6. Incorporate colorful vegetation/landscaping and event display board at the Plaza de Cesar Chavez park

In order to attract more pedestrians and look aesthetically pleasing, the park should incorporate colorful landscaping. Additionally, the park should include a display board for residents and visitors to keep track of upcoming events.





Fig.14. Plaza de Cesar Chavez Park before and after improvement

Source: Photograph by author, February 2010 and Photo manipulation by author in Photoshop

7. Encourage more activities such as holiday market, art shows, and job fairs and provide more amenities at the Circle of Palms plaza

The Circle of Palms Plaza is not used to its full potential. During interviews, planners expressed concerns that this plaza is vacant and not functional most of the time.

Therefore, in order to make this plaza vibrant and functional, flexible activities that are suitable according to various seasonal strategies such as holiday markets, art shows, and job fairs should be encouraged.





Fig.15. Circle of Palms Plaza before and after improvement

Source: Photograph by author, February 2010 and Photo manipulation by author in Photoshop

8. Incorporate landscaping and interesting visual features to the City Hall plaza and its sidewalk.

The sidewalk adjacent to the City Hall was mostly vacant and underutilized. In order to encourage walkability and livability in the area, it is vital to incorporate textured pathways to help the visually impaired people, add green elements to minimize the empty effects of the sidewalks, provide seating areas along sidewalks for relaxing, and tree grates to offer safety for pedestrians while walking.





Fig.16. Sidewalk adjacent to City Hall Plaza before and after improvement

Source: Photograph by author, February 2010 and Photo manipulation by author in Photoshop



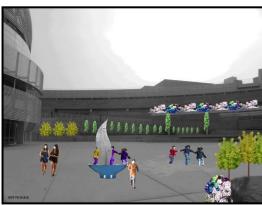


Fig.16. City Hall Plaza before and after improvement Source: Photograph by author, February 2010 and Photomanipulation by author in Photoshop





Fig.17. City Hall Plaza before and after improvement Source: Photograph by author, February 2010 and Photomanipulation by author in Photoshop

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