

**Century Corridor, Gateway to LA
Economic Revitalization and Design Improvement**



**PLUS 676L
CORE LABORATORY WORKSHOP
SPRING 1998**

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EXECUTIVE SUMMARY

Over the last several years, the area directly east of LAX International Airport along Century Boulevard (“Century Corridor”) has experienced low occupancy rates, declining property values, and a lack of identity. As a result, this has contributed to an unfavorable image that suggests visual and physical blight, a perception of crime, and economic stagnation in the Century Corridor.

Moreover, the LAX Master Plan proposes to significantly increase airport passenger and cargo capacity by 2015. The creation of a new airport terminal on the west side, additional and expanded runways, new cargo handling facilities, and improved access roads are likely to reduce the importance of the Century Corridor.

To counter this decline, a group of concerned property and business owners along the Century Corridor joined together and formed Gateway to LA. Officially incorporated as a Property-based Business Improvement District (PBID) in September of 1996, the PBID was established as a vehicle to bring physical and economic revitalization to the area. The main goals of Gateway to LA are:

- To improve property values
- To increase occupancy in properties within PBID areas
- To retain and attract businesses;
- To take advantage of the planned expansion of LAX from 50 to 100 million passengers annually.

Consistent with Gateway to LA’s goals of achieving physical and economic revitalization in the area, we have identified a number of objectives to guide our development concepts. Aimed at creating a sense of place and identity for the area, we envision reinventing the Gateway into a destination place at par with other such popular destinations in Southern California. Our objectives are:

- Promote economic revitalization of the Century Corridor.
- To create a safe, comfortable, and enjoyable pedestrian environment.
- To provide retail, entertainment and food services that are appealing to airport users, passengers, and residents of neighboring areas.
- To explore the inter-modal transportation opportunities of Century Boulevard as the “Gateway to LA”.

SUMMARY OF FINDINGS

It is our view that the Century Corridor can be substantially improved. There is a perception with many local residents that Century Blvd is not an ideal place to

go. Some perceptions are real while others are imaginary.

EFFECTS OF MASTERPLAN

Acquiring of PBID and nearby residential properties.
Decrease in automobile traffic.
Opportunity to create a pedestrian place
Unattractive cargo facilities and related increase in traffic.

TRAFFIC

Century Blvd is currently serving as major artery to LAX. All cargo movement takes place via Century Blvd. High speed and volume of traffic discourages pedestrian activities in the corridor.

CRIME

The crime level in the corridor has been decreasing at a lower rate than the rest of the area under L.A.P.D's jurisdiction.

Within the corridor the West and east segments have high amount of crime level than the central segment.

In general all three categories of crime vide auto-related crime, public place crime and severe crime are decreasing at slow rates in the corridor.

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LOCAL MARKET CONDITIONS

Hotel occupancy rates are maintained through lower prices than the rest of the region.

Office vacancy rates in the PBID are among the highest in Greater Los Angeles (approximately 38.1% in 1996, with an increase in vacancy of 30,000 square feet).

There are few retail amenities for employees in the Century Corridor.

RATIONALE AND OBJECTIVES

The Century Corridor represents an area not like any other in Los Angeles. Located directly adjacent to the region's largest airport, Gateway to LA is ideally situated to take advantage of the airports proposed plan to expand from 50 to 100 million passengers annually. Just a short distance from the beach, a rail line and two major freeways, it is in position to become an ideal destination for visitors to the Southland.

Currently, many visitors pass through the area on their way to such well know attractions as Disneyland, Universal Studios, the Getty Center, Magic Mountain and a host of many others. It is our goal to reinvent the

Century Corridor into a destination place rivaling all others in Southern California.

The Century Corridor must take advantage of its proximity to the airport, planned hotels near Playa Del Rey, and the beach. A shuttle service transporting airport passengers, guests of PBID hotels and visitors to the street should be developed to provide access to nearby commercial and recreational facilities.

We are proposing a multi-pronged approach for the revitalization of the PBID. Focusing on bringing physical and economic change to the area, our aim is to create a sense of place and identity for the Gateway. We envision creating a destination place that will attract and retain local as well as foreign visitors. Our development concepts respond to our stated objectives in the following ways:

Objective: Promote Economic Revitalization of the Century Corridor.

Recommendation: Revitalizing the area economically requires developing amenities that will complement the corridor's existing offices and hotel rooms. Some components of our development concept includes construction of a new retail/entertainment complex, creating an "Avenue of Billboards", and introducing alternative uses into existing office buildings lining an outdoor plaza.

Objective: Create a Safe, Comfortable, and Enjoyable Pedestrian Environment.

Recommendation: Creating a safer and friendlier environment can be accomplished by a number of street improvements designed to promote pedestrian activities. These include creating a pedestrian pathway that connects the entire PBID, slowing the traffic along Century Boulevard, and implementing street improvements (for example, street lighting, and tree planting).

Objective: Promote the Intermodal Transportation Opportunities of Century Boulevard as the "Gateway to LA".

Recommendation: Lobbying for an extension of the MTA's Greenline and construction of the airport's proposed people mover will promote the intermodal transportation opportunities of Century Boulevard as the "Gateway to LA". Our development concept includes creating a transportation hub at the new retail/entertainment complex connecting both the MTA's Greenline and the airport's proposed people mover.

The primary components of our design concept to create Gateway to LA into mixed-use destination place are outlined below.

PROBLEM STATEMENT

Over the last several years, the area directly east of LAX International Airport along Century Boulevard ("Century Corridor") has experienced low occupancy rates, declining property values, and a lack of identity. As a result, this has contributed to an unfavorable image that suggests visual and physical blight, a perception of crime, and economic stagnation in the Century Corridor.

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- To improve property values
- To increase occupancy in properties within PBID areas
- To retain and attract businesses;
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OBJECTIVES OF STUDY

Consistent with Gateway to LA's goals of achieving physical and economic revitalization in the area, we have identified a number of objectives to guide our development concepts. Aimed at creating a sense of place and identity for the area, we envision reinventing the Gateway into a destination place at par with other such popular destinations in Southern California. Our objectives are:

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CENTURY CORRIDOR

Location and boundary



Fig. 1: Map showing the location of LAX in Los Angeles.



Fig. 2: Map showing parcels comprising Gateway to LA PBID.

History of the region

The area that today comprises Century Boulevard and Los Angeles International airport was once part of a large Mexican Rancho. It was used primarily for grazing. Later it was sold to a Scottish immigrant who used it for agricultural uses.

This area has been an important region for Southern California since the 1920's. When Los Angeles' primary regional and international airport moved from the San Fernando Valley to its current site it sparked a boom in all types of real estate development in this area. Mines Field, now LAX, was selected as Los Angeles' municipal airport in 1928. This increasingly important institution served as a catalyst for growth in the region. Aircraft manufacturers and oil refiners located near the airport. New blue-collar and middle class residential subdivisions also sprang up.

As air travel's popularity increased, especially with the introduction of jet planes, the area benefited from this transportation explosion. Businesses needed to serve all of the needs of this growing airport located in the region. Hotels, freight forwarders, rental car companies, restaurants, shops, support office space and the like located near the airport. The freeway network also brought easy accessibility to this location.

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Gateway to LA



Fig. 2-a: Map showing parcels comprising Gateway to LA PBID and its land uses.

The PBID consists of properties along the north side of Century Boulevard from La Cienega Boulevard on the east to Sepulveda Boulevard on the west. On the south side of Century Boulevard, properties included in the PBID stretch from La Cienega Boulevard on the east to Aviation Boulevard on the west. In addition, the district includes properties that have physical addresses on La Cienega Boulevard, 102nd Street, 98th Street, Aviation Boulevard, Sepulveda Boulevard, and Airport Boulevard. In all, there are a total of 55 businesses and properties in the PBID. These businesses include 13 major hotels, 18 office buildings, fast food eateries, car rental agencies, and cargo storage warehouses.

The current land use of each parcel in the Gateway to LA Property Business Improvement District is shown in the following map. The information was derived from the Index of parcels/Common Names list on 7B of the Gateway to LA Management District Service Plan.

Objectives

The Department of Airports has proposed a major expansion of LAX. The master plan proposed for this expansion has been drafted considering the forecasted demand of air passenger and cargo by the year 2015. The following are the Master Plan Objectives:

- Los Angeles International Airport should continue to primarily satisfy regional air transportation demands for passenger and air cargo service with an equitable redistribution of service among all commercial airport facilities in the Region.
- LAX facilities and operations should ensure safety of both general public and airport users.
- Los Angeles International Airport should operate efficiently with adequate facilities and services in order to have a continued major local, regional, and state economic benefit (including all direct and indirect benefits).
- Operation of Los Angeles International Airport should take place in an environmentally sensitive and responsible manner.
- The pattern of urban land use in the airport area should integrate Los Angeles International Airport as a major airport facility in a manner that maximizes mutual compatibility, and satisfies current and projected demand for housing.
- Ground access to and circulation within the Los Angeles International Airport should be capable of adequately serving surface transportation demands generated by current levels and future growth in air commerce.
- Optimized operations at Los Angeles International Airport are to be based on continued measurement and balance of the environmental, social, land use, ground access, economic effects, and air commerce impacts.

Alternative Concepts of Master plan

After evaluating more than 30 alternatives, the Los Angeles Department of Airports has narrowed the field to two concepts for modernization of LAX. These alternative concepts represent a diligent effort to prepare a well balanced comprehensive airport modernization plan that can be implemented over the next 20 years in a manner sensitive to local community and environmental interests. The following objectives are shared by both concepts:

- Provide improved arrival capacity by adding one or two new runways.
- Improve the runway taxiway system to accommodate new large aircrafts.
- Provide new terminal facilities west of the Tom Bradley International Terminal (TBIT) connected by an automated people mover system for improved on-airport circulation.
- Improve connections to the regional highway and transit network adding a new western access to the terminal area of Pershing Avenue via an extension of I-105 on the south and a limited access Westchester Parkway from I-405 on the north forming a ring road to mitigate neighborhood traffic impacts.
- Expand air cargo capacity to meet the demand forecast of 4.2 million annual cargo tons by redeveloping the existing Century and Imperial cargo complexes and adding new facilities to the southeast.
- Maximize the use of airport land for aviation purposes by downsizing and relocating non- critical land uses such as aircraft maintenance, fuel farm, etc.
- Consider community oriented land uses for portions of the north-side property instead of previously envisioned high-density commercial development. Where possible, the concepts have optimized land and existing facilities, maximized the useful life of recent improvements and redeveloped those facilities which are obsolete.

LAX authority wants to maintain the enormously rich and competitive level of air service now enjoyed by the region. This is because, LAX' plays a dominant role as the nation's premier international gateway to Asia and the Pacific Rim supported by the added synergy from

well-developed domestic hub air service and extensive air cargo network. Given Los Angeles' strategic position in the global economy, LAX will become one of the few global hubs with air service to all key markets.

Features Common to All Concepts

- New Terminal and Four New Concourses
- Automated People Mover System
- New Cargo Facilities on South Side of LAX
- Limited Access Circulation Road
- Redevelopment of Century Cargo Complex
- Community Amenities

Concept 1

- New runway added to the north.
- Two existing north runways relocated southward and inboard runway extended to the east.
- South outboard runway relocated to allow a new taxiway between the two south runways.
- Reconfigured north Central Terminal Area.

Concept 2

- Existing north outboard runway relocated to the east
- Existing north inboard runway extended to the east
- New runway added to the north
- South outboard runway extended
- New runway added to the south
- New concourse adjacent to Terminal 1

Some of the positive impacts of the above concepts include a decrease in automobile traffic along Century Corridor, and the subsequent opportunity to create a destination place. However, some negative externalities include unattractive cargo facilities and the related increase in truck traffic.

INCREASE IN AIR PASSENGER AND OPPORTUNITIES

The number of air passengers, volume of cargo handled, number of air carrier operations, and physical expansion of LAX etc all have definite effects on the way we envisage growth and activities in the Century Corridor. The kinds of opportunities and threats it present to the economic revitalization and physical development of Century Corridor are discussed below.

The following chart shows the number of domestic and international passengers who visit LAX either for starting/ ending their trip or as transit passengers in units of Million Annual Passengers (MAP).

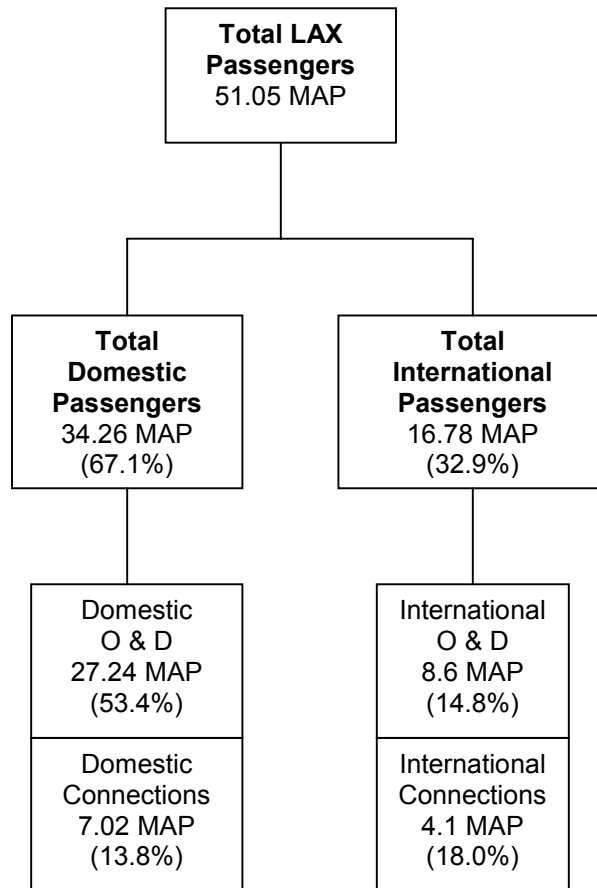


Fig. 3: Break-up of total LAX passengers in 1994
(Source: LA DoA, 1996, Chapter 3, LAX Master Plan)

LAX is one of eight airports serving domestic origin and destination (O & D) passengers in the region. Given this competitive situation, the domestic O & D demand in future will be partially met by improvements of regional airports. In case of domestic connecting passengers, LAX offers a large number of non-stop flights at higher frequencies and hence its share in regional demand is likely to increase. However in international scenario, LAX serves virtually all of the LA region's travel demand. International passenger demand consists of both O & D and connecting passengers on flights between LAX and foreign destinations. The international transit passengers require both international connections and domestic transfers.

The forecasts of air travel in each of these categories for the year 2015 are as follows.

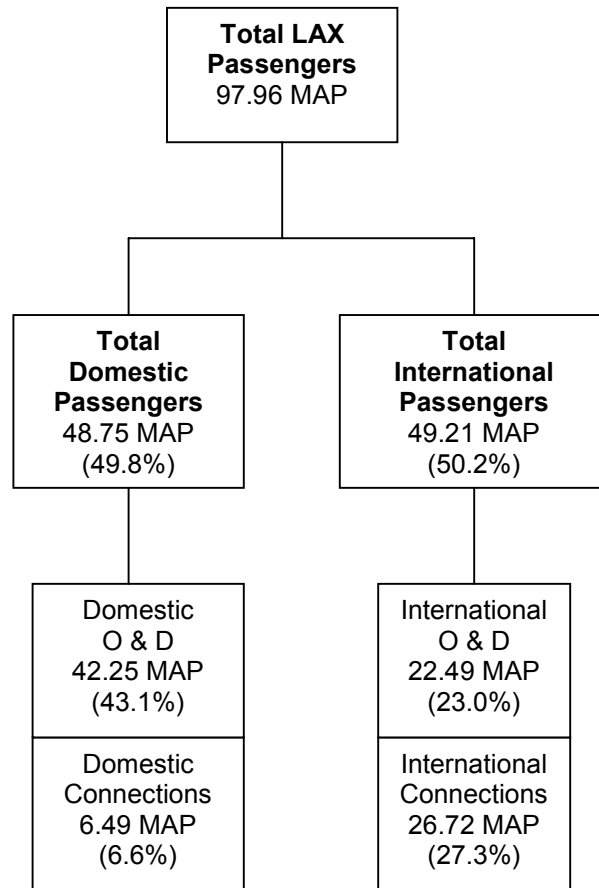


Fig. 4: Chart showing break-up of total LAX passengers in 2015 (forecasts)
 (Source: LA DoA, 1996, Chapter 3, LAX Master Plan)

The forecast shows an average annual growth rate of 5.2% in international transit passengers in contrast to a 0.4% average annual decline in domestic transit passengers. This amounts to a threefold increase in 16.78 MAP in 1994 to a projected 49.21 MAP in 2015. Furthermore half of all LAX passengers will be of international type. Typically the international flights tend to have longer connection time and hence the passengers will have more time to spend in the LAX neighborhood and more specifically in the Century Corridor area. Hence, they should be treated as the target for future entertainment-cum-retail-cum-recreational development along Century Corridor. With carefully designed plan, access, promotion and advertising this population could be tapped and retained within the Century Corridor as lucrative business clientele. To utilize this opportunity, streetscape improvements, in-fill developments along Century Corridor and theme based and entertainment developments along the 98th street are suggested. Further, a people mover to facilitate the movement of these passengers around century corridor and the 98th street is also proposed in the scheme.

INCREASE IN CARGO TONNAGE

Air cargo has become an increasingly important growth industry worldwide in response to the globalization of manufacturing and other business activity. High technology and media industries which export/ import perishable and time sensitive goods have made air shipment an essential good in modern days. Study shows a 7.4 %, 3.3% and 2.7% average annual growth in express, traditional and mail cargo between 1994 and 2015 respectively. The express cargo, which was 354,373 tons per annum in 1994, is expected to grow to 1,569,000 tons in 2015. This is expected to have significant implications for regional cargo movement pattern. Location of cargo facilities of the airport, taxiways of cargo flights, routing of cargo trucks etc are the immediate issues as far as this project is concerned. But on the other hand, this also offers an opportunity for proposing transportation-related improvements along Century Corridor.

TRANSPORTATION

The traffic in the area deters many potential customers and tenants. Any projects that will alleviate this problem will favorably impact the BID. An extension of the Green Line would keep more cars off Century Boulevard. There are a significant number of airport employees who travel to work on the Green Line. They are using surface transportation to travel from the airport to the Green Line station. Those vehicles would be eliminated with an extension. Lobbying for an extension of the Green Line is recommended.

Encouraging employees to utilize the Green Line would also strengthen the possibility of the extension. Perhaps the hotel shuttles could set up a bus connection as a joint project to the current station. Having statistics on ridership would enhance the position for expansion.

The recommendation for the preferred route of the Green Line extension is along Aviation, stopping at the long-term parking lot and ending just past Century Blvd. A people-mover traveling from the airport along 98th Street would meet the Green Line after stopping twice for hotel drop-off at Avion and Airport. An entertainment/retail center would be developed at this location to provide the customers with entertainment and shopping opportunities as they await their connection. Encouraging people to arrive early to take advantage of the opportunity to relax before their journey would be included in an advertising campaign. This location would also be advertised as a pleasant alternative meeting place when picking up relatives/friends at the airport. A chance to eat dinner in a nice restaurant while waiting for the traffic to die down.

A detailed analysis of transportation scenario, traffic volume and forecast are presented in appendix.

REGIONAL ANALYSIS: LOS ANGELES COUNTY

The annual population growth rate in Los Angeles County has hovered around .5% since 1993. According to SCAG forecasts that growth rate is expected to double after this year.

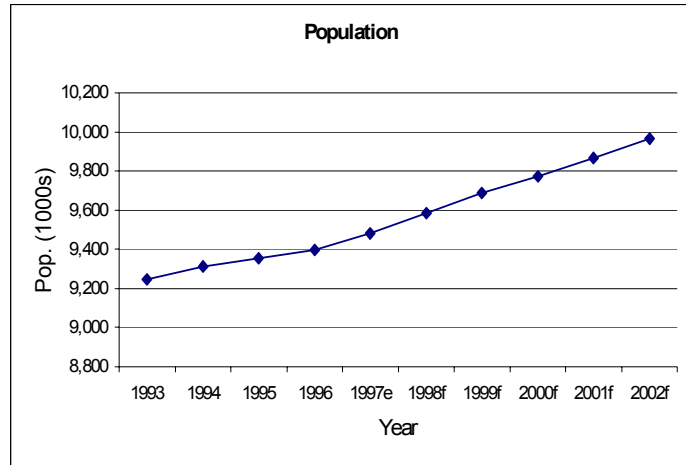


Fig. 5: Note: 1997e is estimated; 1998f is forecast
Source: SCAG 1988-89 Forecast

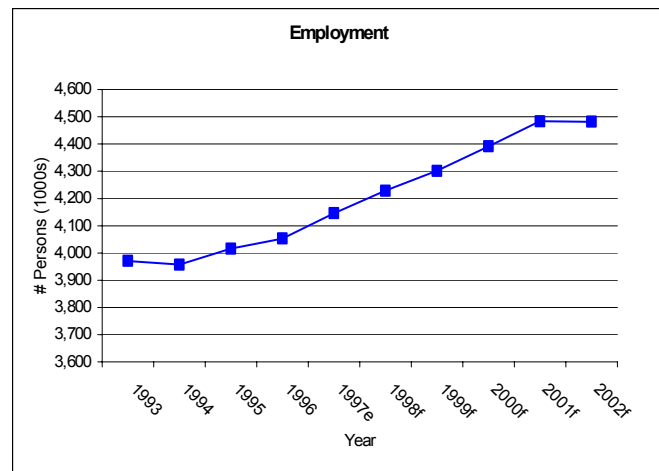


Fig. 6: Note: 1997e is estimated; 1998f is forecast
Source: SCAG 1988-89 Forecast

Employment is also forecast to continue growing although the unemployment rate is expected to increase

in 1999 due to the addition of former welfare recipients. Per capita income is also forecast to increase.

Because per capita income is rising while employment and population are growing, there is increasing wealth in the County. This is good news for retailers. It means a greater proportion of discretionary income. If inflation begins escalating at a greater rate than expected this trend will slow. Retail sales forecasts produced by Cal State Long Beach show quarterly increases from 4-5% through 1999. This growth is slightly lower than the growth seen in 1997, which ranged from 5-6%.

Commercial office space has decreasing vacancy rates and rising absorption throughout the county. As of March 1998, the median resale house price had increased 6.5% and the median resale condo price had increased 9.6% over 1997. The median price for new homes or condos was \$250,000 in March. These are indicators of a healthy economy and that the real estate market has been recovering from its earlier slump.

CITY ANALYSIS: LOS ANGELES

Population has grown in the city and it is expected to continue growing. The increase from 1994 to 2000 is greater in the city than the County indicating that Los Angeles is expected to have a larger population increase relative to other cities in the County this decade.

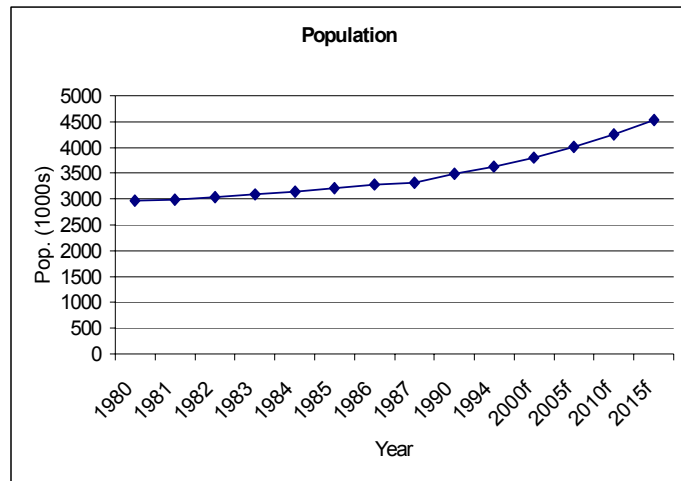


Fig. 7: Source: SCAG 1988-89 Forecast

As of the 1990 census, Los Angeles income had not caught up to the County as a whole as seen in the following table

1990 Census	Per Capita Income	Median Household Income
Los Angeles County	20,058	47,844
Los Angeles	16,188	30,925

Source: 1990 Census

NEIGHBORHOOD ANALYSIS

The P-BID neighborhood is defined as the 26 adjacent census tracts shown on the map on the following page. The P-BID is shown at the center of the area. All demographic data was obtained from the 1990 Census.

Census Tracts In Century Boulevard Demographic Analysis

- 2780, 2770, 2771, 2772, 2774, 2781, 2753.12, 2760, 2764, 2765, 2766.01, 2766.02, 6010.01, 6010.02, 6011, 6012.02, 6012.11, 6012.12, 6014.01, 6014.02, 6015, 6016, 6017, 6018, 6200, 6201

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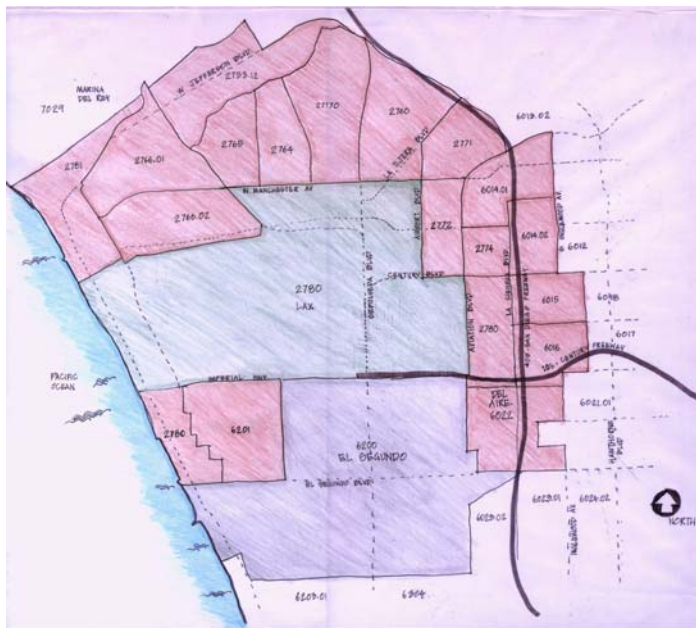


Fig. 8: Map showing census tracts comprising the study area.

123,794 people live in the area described. The ratio of women to men is 50:50. 39% of the population is Hispanic. 56% of the population is white, 24% is other, 15% is black, 5% is Asian, and less than 1% is American Indian or Pacific Islander.

RACE

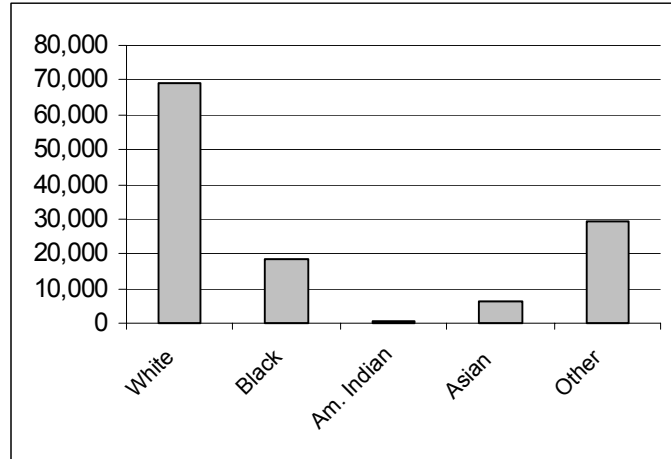


Fig. 9: Population by Race. Source: 1990 Census. (Note: 39% of the population is Hispanic).

EDUCATIONAL ATTAINMENT OF PEOPLE > 25

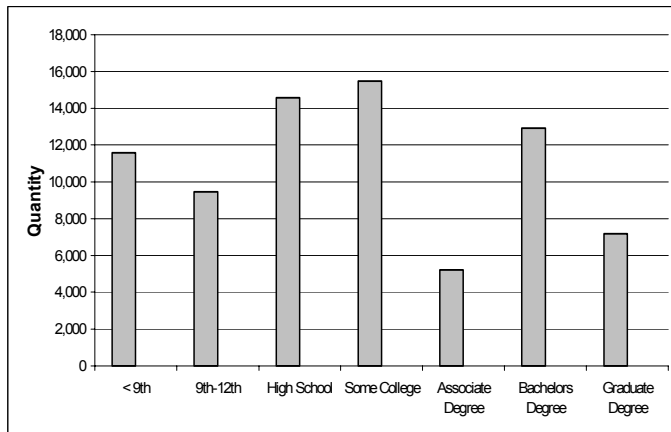


Fig. 10: Educational Attainment. Source: 1990 Census

The educational attainment of all residents over the age of 25 indicates that 27% of this group have less than a High School Diploma. 53% of this group have more than a High School Diploma having taken some college courses or completed a degree.

AGE DISTRIBUTION

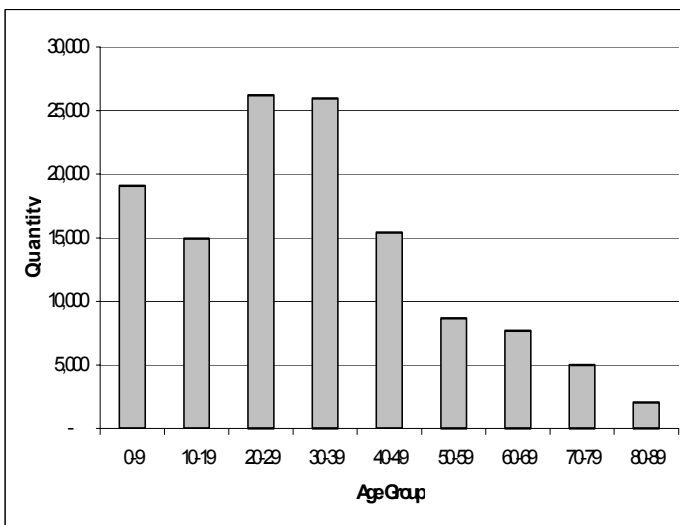


Fig. 11: Age Distribution. Source: 1990 Census.

Looking at the age distribution, the bulk of the population is made up of adults aged 20-39. 42% of the population falls within this age group of family formation. 26% of the population falls in the pre-school or school age category of 0-19. The number of families in this population is 27,424.

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HOUSEHOLD INCOME DISTRIBUTION

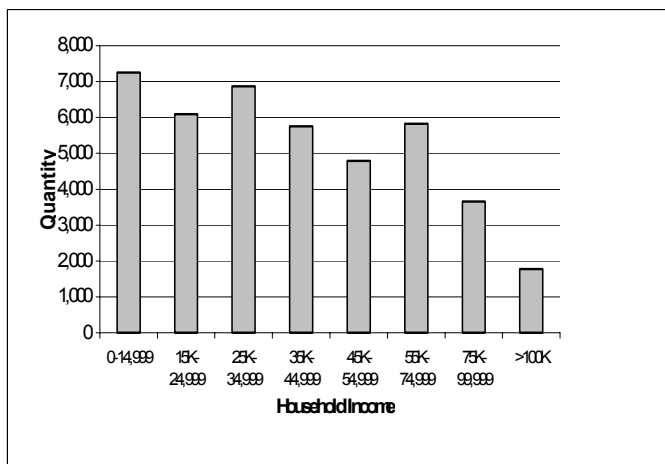


Fig. 12: Household Income Distribution. Source: 1990 Census

The shopping and entertainment development we are proposing has a target market of educated professionals and would cater to the local office worker as well as the local population. This profile of the local market base reveals that there are 40,751 people with more than a

high school education. There are 20,703 households with an income of \$40,000 or more. The proposed development will require establishments that draw residents from a larger area than the local population, as well as airport travelers and employees to succeed.

Because the local population is young and includes a large number of children indicating families some businesses targeting the family market may be advised.

HOTEL OCCUPANCY RATE

There are 13 hotels along Century Boulevard in the business improvement district, which provide roughly 7,200 hotel rooms for travelers. This area has the densest concentration of hotels in Los Angeles County. The hotels are:

- Continental Plaza Los Angeles Airport
- Crowne Plaza
- Embassy Suites
- Holiday Inn LAX
- Los Angeles Airport Hilton & Towers
- Los Angeles Airport Marriott
- Quality Hotel LAX
- The Regency Plaza Hotel
- Renaissance Hotel Los Angeles
- Sheraton Gateway Hotel
- Travelodge Hotel
- The Westin Los Angeles Airport
- Wyndham LAX

Under the impact of the recession that reduced the number and frequency of business travelers, the hotels in the Century Boulevard Corridor suffered soaring vacancy in the last several years. On the following table for hotel occupancy rates in 1995, LAX can be seen to be higher than only the Downtown and San Fernando Valley areas. However, this marked a large increase for LAX.

Hotel Occupancy Rates
(Compared to 1994)

Area	October 1995	Percent Change	Year to Date	Percent Change
LAX	72.9%	7.3%	72.1%	6.1%
Santa Monica	84.2%	8.2%	79.6%	9.0%
Marina del Rey/Culver City	79.3%	-6.2%	n/a	n/a
South Bay	78.5%	0.3%	78.6%	1.6%
Hollywood	77.8%	6.3%	75.4%	5.0%
Beverly Hills/Westside	75.8%	0.9%	74.8%	6.1%
Pasadena	72.9%	-8.6%	74.2%	-4.7%
San Fernando Valley	68.4%	-8.6%	73.1%	-9.8%
Downtown	65.5%	-11.9%	53.6%	-6.4%
Overall Average of all areas*	69.9%	-1.8%	68.5%	1.5%

Fig. 13: Hotel Occupancy Rates.

*All areas including Long Beach, I-5 Corridor, San Gabriel Valley, West Hollywood and Palmdale/Lancaster areas
 Source: Los Angeles Business Journal (1996) from PKF Consulting's monthly industry report for October 1995.

In late 1997, the occupancy rate had increased to 76.5%. In the same period the countywide rate increased to 74% decreasing the gap between the two rates. The occupancy rate at LAX is maintained through lower prices as indicated in the following table. Seemingly, guests are willing to pay more to stay in other locations in the county.

Average room rent comparison, 1997

	Room rent per night
LAX	\$75
Countywide	\$96
Marina del Rey	\$118
Santa Monica	\$155

Fig. 14: Average Room Rent Comparison.

At this time there is not enough demand for increased hotel capacity. However, with the airport expansion and resulting loss of hotels due to acquisition, there may be an opportunity to build a new hotel in the future.

The possibility of asking for marketing revenue from the transient occupancy tax that is collected by the hotels in the BID was explored. The result is tabulated in the following table.

1997	Total Transient Occupancy Tax	7.7% to Convention Center
City of Los Angeles	82,599,179	6,352,970
Century Corridor BID	3,434,124	264,428
BID as % of City	4.16%	-

Fig. 15: Source: City Clerk, Tax & Permit

Given the small proportion of transient occupancy tax generated by the BID it is not expected to be a source of marketing revenue.

OFFICE VACANCY RATE

There are 12 office Buildings in the business improvement district.

- 1st Nationwide
- 5220 Office Building
- 5260 Office Building
- 6171 Century Building
- Airport Center I
- Airport Center II
- Airport Center III
- Centroplex III
- Century Bl. Tower/Atrium
- Century West Plaza
- Royal Airport Center
- Skyview Center

The market for office space in the LAX area experienced negative absorption in the early 1990s. Office vacancy rates in the business improvement district are among the highest in greater Los Angeles. This reflects the fact that some “B” class office buildings are 50% to 80% vacant. However, the vacancy rates of the class “A” buildings present a completely different picture. The vacancy rate for the two Sky View buildings is only 5%.

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The following table shows comparative office vacancy rates in 1994 and 1995 in adjacent markets.

Office Vacancy Rates in the South Bay

Area	City	1994 Vacancy	1995 Vacancy
LAX/Century Blvd.	Los Angeles	36.4%	38.1%
El Segundo/ Manhattan Beach	El Segundo/ Manhattan Beach	17.3%	20.8%
Torrance freeway	Torrance	24.4%	32.5%
Torrance central	Torrance	21.6%	19.3%
Carson	Carson	23.2%	20.4%
South Bay total (also includes Long Beach)	n/a	23.3%	24.1%

Fig. 16: Office Vacancy Rates.
Source: Published in the Daily Breeze newspaper, 12/26/95

Statistics released by Grubb & Ellis indicate that the LAX/Century Blvd. Area experienced an approximate vacancy rate of 38.1% for 1996 with an increase in vacancy of 30,000 square feet. According to the Los Angeles Times, the vacancy rate of office buildings was 30.8% in 1997. From our conversation with Victor Cirrincione, we learned that he is completing renovations on one of the "B" class office buildings that is 80% vacant. He anticipates reversing those figures soon after the building is complete, which will impact the overall vacancy rate in the area.

Property values have fallen due to the real estate recession in the late 1980s and early 1990s. Due to the high vacancy rate, the value of office properties in the Century Corridor had declined almost 45%. This trend is beginning to shift as vacancy has begun to decline.

There is no demand for new office space in this market today. As the Westside office market fills up and the amenity level increases as a result of the work of the PBID there may be an opportunity to build more office space as we suggest in our recommendation.

LACK OF RETAIL AMENITIES

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There are few retail amenities for employees and visitors in Century Corridor, with the exception of a few fast food restaurants such as Carl's Jr., McDonald's, and Taco Bell. The hotels all have restaurants and there is a Denny's, however, there is interest in increased variety. Office employees' want a different style restaurant to take business clients. Even in nearby Westchester there are only seven locations for sit down or take out food.

Visitors take buses and taxis to shop and eat in nearby South Bay beach communities such as Manhattan Beach, or catch a horse race at Hollywood Park, which is 3 miles west in Inglewood.

LOCAL COMPETITION

WESTCHESTER

Howard Drollinger of H.B. Drollinger Co. took time to share the history of Westchester. From him it was learned that the stores selling daily goods are more successful than others that are selling largely planned purchases. He contributes this to the 50,000 employees of LAX who stop at the businesses along Sepulveda to and from work. The stores that sell planned purchase goods are more dependent on the local community and their purchasing power.

HOWARD HUGHES CENTER

This office development is adding a large cinema project and a 250,000 sq. ft. retail facility. The office tenants

and the residential communities of Westchester, Culver City, and Playa del Rey will be the customer base for these new businesses. Office tenants from Century Blvd. will likely frequent this development if given no convenient alternative.

EL SEGUNDO

Just south of the airport on Rosecrans in El Segundo lies a competing office/retail development. South Bay residents have been discovering it and are frequenting it's shops and restaurants on weekends.

This development boasts a 2% vacancy rate, a 16-screen cinema complex, restaurants like McCormick & Schmick's and Houston's, plus stores like Super Crown books, Noah's Bagels and Starbucks. The success of this development stems from the efforts of a 2-year-old marketing campaign from the city of El Segundo and the efforts of the corridor's biggest landowner to recruit retailers.

There are more office employees in this development than on Century Corridor and the nearby residential neighborhoods are more affluent which has contributed to the success of this development. It can, however, be looked at as a successful example to emulate, taking into consideration the differences.

LAX

The retail sales at the airport provide competition to any entertainment/retail center built on Aviation and Century Blvd. Retail sales for the airport in 1996 are contained in the following table.

Retail Type	Monthly Sales	Sales/Sq. Ft.	Size (Sq. Ft.)
Specialty – National	\$73,792	\$78.25	943
Specialty – Regional	\$69,602	\$98.43	745
Sit Down Food	\$196,597	\$68.55	2,868

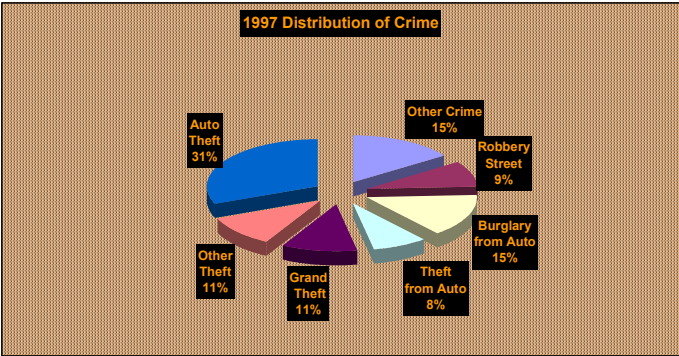
Fig. 17: Feasibility Study, USC Business Students, 1997, Courtesy of Howard Drollinger

ANALYSIS OF CRIME OCCURENCES

OVERVIEW

Among various categories of crime, the auto related crime tops the list in this area in the last six years (varying between 50 and 60% among total). This is explained by the fact that the corridor and its neighborhood has one of the highest concentration of parking facilities in the L.A County.

Fig. 18: Chart showing break up of total crimes in the corridor (study area districts)
(Source: LAPD quarterly crime report 1991 to 1997)



The Century Corridor is comprised of four L.A.P.D reporting districts in the Pacific Division (#1488, #1499, #1496, #1497). Other police departments that have jurisdiction in the vicinity are the LAX Airport Police, and police departments of City of Inglewood, El Segundo and Westchester in the west, south and north respectively.

Total crime in the corridor has declined overall in the last six years, however an increase is noted in 1997. The peak values in the year 1991 and 1992 can be ascribed to the riot and the overall trend suggests a decrease in the crime rate in the corridor from the peak values. However the rate of decline in the corridor is less than the rate of decline of crime in the Division and overall L.A.P.D jurisdiction area.

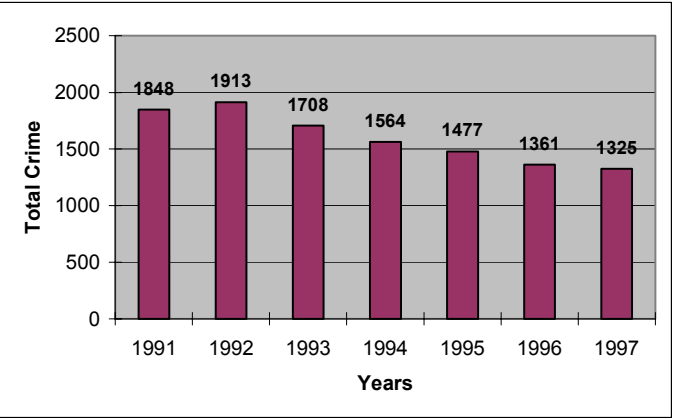


Fig. 19: Chart showing total crimes in the corridor (study area districts)
(Source: LAPD quarterly crime report 1991 to 1997)

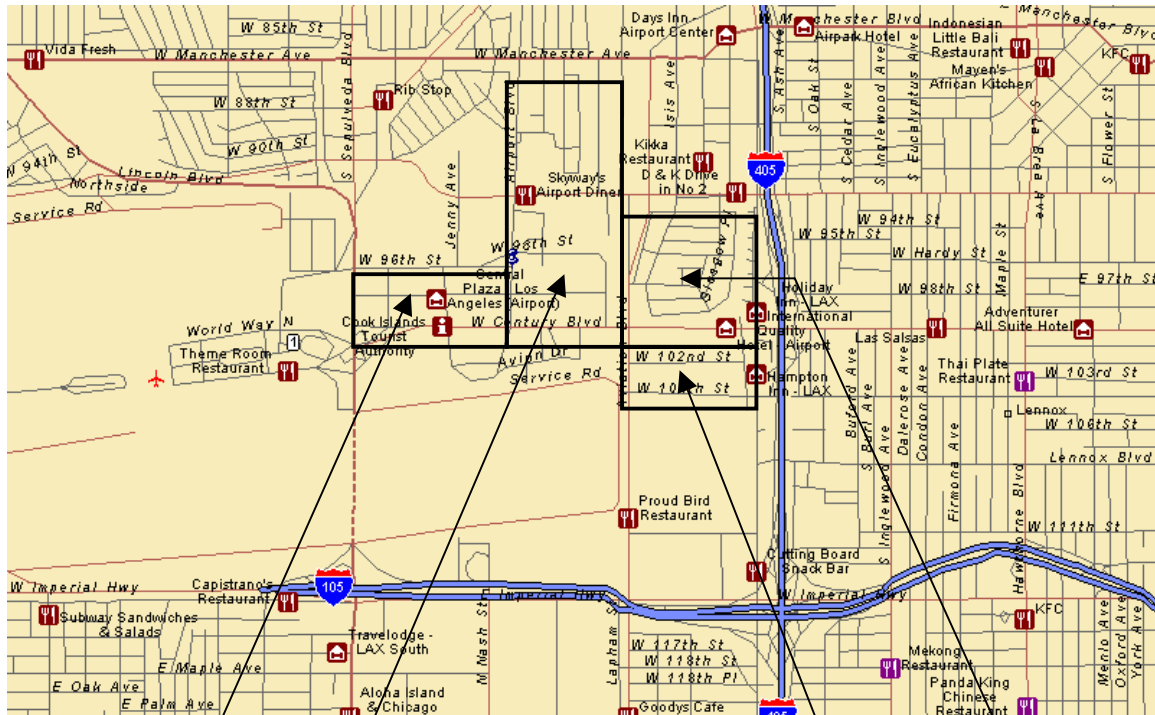


Fig. 20: Map showing the LAPD reporting districts in the corridor

Further analysis of crime within the corridor reveals a high spatial diversity in distribution. The central stretch (reporting district #1488), has the highest occurrence of crime and the south-west stretch (# reporting district #1497) has the lowest (data not normalized over population or area) in the corridor.

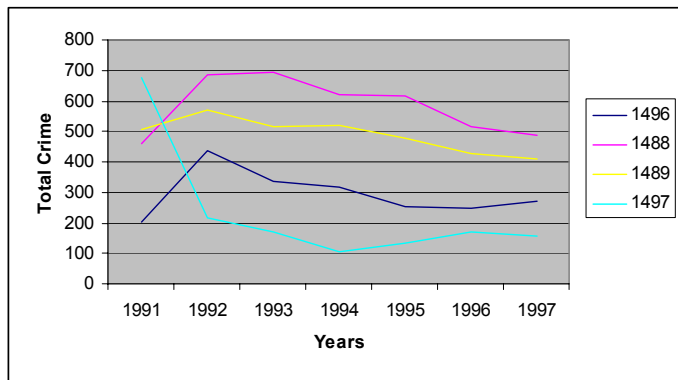


Fig. 21: Chart showing distributions of total crimes with in the corridor by districts (Source: LAPD quarterly crime report 1991 to 1997)

ANALYSIS

The categories of crime that are important for this study are the auto-related crime, crime against person and severe crimes.

Incidents of crime in street like purse snatching, street robbery etc directly affect the way the future of the corridor is envisaged. These are assault on single or group of person(s). The vision for the corridor as a promenade and catchment area of the international passengers would be seriously hampered by this category of the crime.

The success of the place certainly depends on the extent to which it acts as a community place and the presence of local clientele. Inadequate parking (dealt separately) and auto related crime etc would have an effect on shaping the place's image as a local destination center.

Finally, increase in severe crime incidents like murder, rape or aggravated assaults can severely damage the reputation of a place– a threat to all kinds of public activities.

Study shows that the auto crime is steadily decreasing in the corridor but for the recent increase in the last year. However within the corridor the decrease is not uniform. The central segment (comprised by reporting district #1488) tops the corridor in auto related crime, but the general trend shows a steady decrease in last six years. The east and west segments (reporting district #1489 and #1496 respectively) shows negligible decrease in the auto related crimes from the 1991 levels. The western end of the corridor (district #1496) has mainly privately owned parking lots and almost no on-street parking. This shows lack of vigilance and concern within these privately owned facilities.

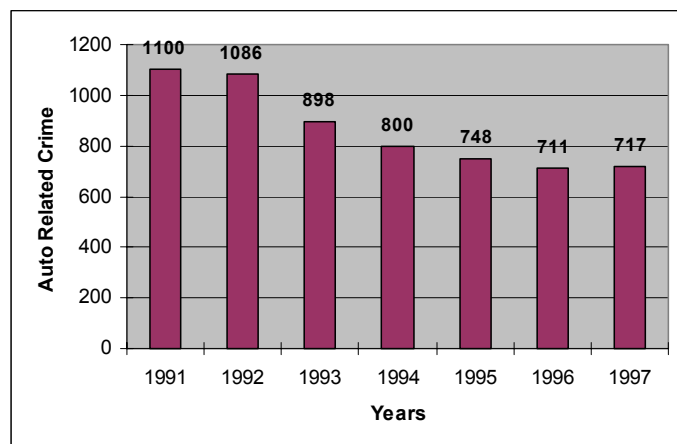


Fig. 22: Chart showing auto related crimes in the corridor (study area districts). Source: LAPD Quarterly Crime Report 1991-97.

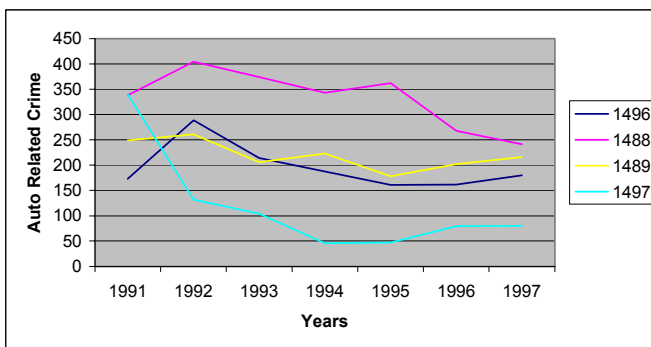


Fig. 23: Chart showing distributions of total crimes with in the corridor by reporting districts
(Source: LAPD quarterly crime report 1991 to 1997)

Crime against person has been decreasing significantly in the corridor in last six years. However the distribution within the corridor is again non-uniform. The western segment (reporting district #1496) shows an increase and eastern segment (#1489) shows no significant decrease in crime against person in last six years.

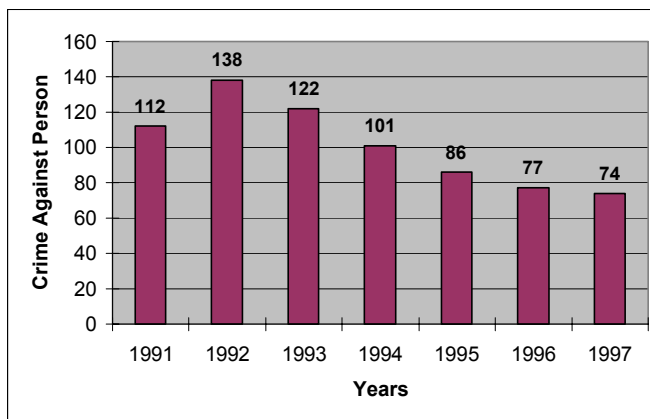


Fig. 24: Chart showing crimes against Person in the corridor (study area districts)
(Source: LAPD quarterly crime report 1991 to 1997)

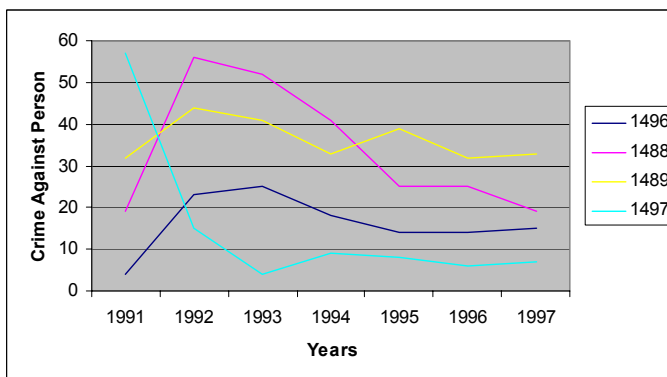


Fig. 25: Chart showing distributions of crime against person with in the corridor by reporting districts
(Source: LAPD quarterly crime report 1991 to 1997)

However, the fluctuations in the level of severe crimes seemingly was not affected by the 1992 LA riot.

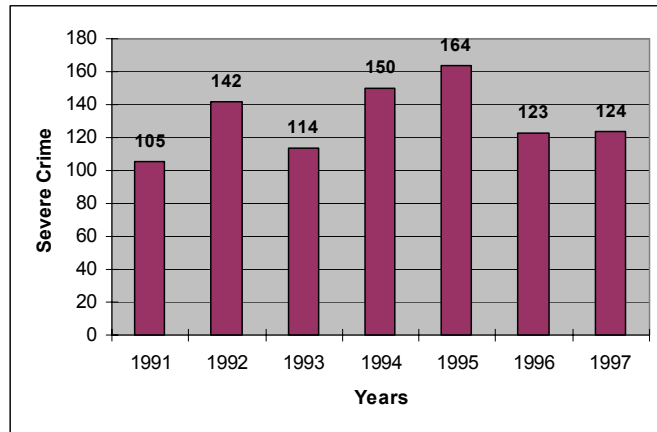


Fig. 26: Chart showing severe crime incidents in the corridor (study area districts) (Source: LAPD quarterly crime report 1991 to 1997)

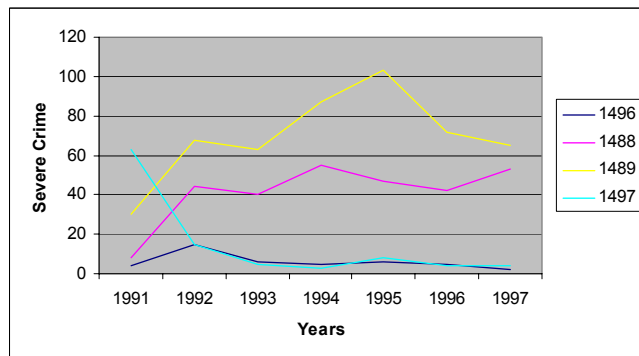


Fig. 27: Chart showing distributions of severe crime incidents with in the corridor by reporting districts (Source: LAPD quarterly crime report 1991 to 1997)

CONCLUSIONS

- Both the existing perceptions of crime and the actual count of occurrences are high in the LAPD jurisdiction area.
- Prevalent public-place crime could be reduced by increasing the private-stake in public open places. Introducing more/new outdoor-oriented activities and facilities managed/owned by private sector would help achieve this result. Outdoor cafeteria, public performance courts etc are the typical examples. These activities/facilities have latent potential to

catalyze further public activity forming a win-win situation.

- Auto-related crime has to be reduced for enhancing public activity in the corridor, and enhancing the place as destination center. Crime in the privately owned parking facilities could be reduced by adapting strict security measures, new methodology of operation and technological solutions. New minimum standards of security could be adopted and all the facilities in the corridor could advertise/publicize this standard identifying with the corridor.

SUMMARY OF FINDINGS

It is our view that the Century Corridor can be substantially improved. There is a perception with many local residents that Century Blvd is not an ideal place to go. Some perceptions are real while others are imaginary.

EFFECTS OF MASTERPLAN

- Acquiring of PBID and nearby residential properties.
- Decrease in automobile traffic.
- Opportunity to create a pedestrian place
- Unattractive cargo facilities and related increase in traffic.

TRAFFIC

- Century Blvd is currently serving as major artery to LAX.
- All cargo movement takes place via Century Blvd.
- High speed and volume of traffic discourages pedestrian activities in the corridor.

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CRIME

- The crime level in the corridor has been decreasing at a lower rate than the rest of the area under L.A.P.D's jurisdiction.
- Within the corridor the West and east segments have high amount of crime level than the central segment.
- In general all three categories of crime vide auto-related crime, public place crime and severe crime are decreasing at slow rates in the corridor.

LOCAL MARKET CONDITIONS

- Hotel occupancy rates are maintained through lower prices than the rest of the region.
- Office vacancy rates in the PBID are among the highest in Greater Los Angeles (approximately 38.1% in 1996, with an increase in vacancy of 30,000 square feet).
- There are few retail amenities for employees in the Century Corridor.

RECOMMENDATIONS

RATIONALE AND OBJECTIVES

The Century Corridor represents an area not like any other in Los Angeles. Located directly adjacent to the region's largest airport, Gateway to LA is ideally situated to take advantage of the airports proposed plan to expand from 50 to 100 million passengers annually. Just a short distance from the beach, a rail line and two major freeways, it is in position to become an ideal destination for visitors to the Southland.

Currently, many visitors pass through the area on their way to such well know attractions as Disneyland, Universal Studios, the Getty Center, Magic Mountain and a host of many others. It is our goal to reinvent the Century Corridor into a destination place rivaling all others in Southern California.

The Century Corridor must take advantage of its proximity to the airport, planned hotels near Playa Del Rey, and the beach. A shuttle service transporting airport passengers, guests of PBID hotels and visitors to the street should be developed to provide access to nearby commercial and recreational facilities.

We are proposing a multi-pronged approach for the revitalization of the PBID. Focusing on bringing physical and economic change to the area, our aim is to create a sense of place and identity for the Gateway. We envision creating a destination place that will attract and retain local as well as foreign visitors. Our development concepts respond to our stated objectives in the following ways:

Objective: Promote Economic Revitalization of the Century Corridor.

Recommendation: Revitalizing the area economically requires developing amenities that will complement the corridor's existing offices and hotel rooms. Some components of our development concept includes construction of a new retail/entertainment complex, creating an "Avenue of Billboards", and introducing alternative uses into existing office buildings lining an outdoor plaza.

Objective: Create a Safe, Comfortable, and Enjoyable Pedestrian Environment.

Recommendation: Creating a safer and friendlier environment can be accomplished by a number of street improvements designed to promote pedestrian activities. These include creating a pedestrian pathway that

connects the entire PBID, slowing the traffic along Century Boulevard, and implementing street improvements (for example, street lighting, and tree planting).

Objective: Promote the Intermodal Transportation Opportunities of Century Boulevard as the “Gateway to LA”.

Recommendation: Lobbying for an extension of the MTA’s Greenline and construction of the airport’s proposed people mover will promote the intermodal transportation opportunities of Century Boulevard as the “Gateway to LA”. Our development concept includes creating a transportation hub at the new retail/entertainment complex connecting both the MTA’s Greenline and the airport’s proposed people mover.

The primary components of our design concept to create Gateway to LA into mixed-use destination place are outlined below.

URBAN DESIGN PROPOSALS



Fig. 28: Sketch showing proposed streetscape of Century Blvd with wide medians and treeline

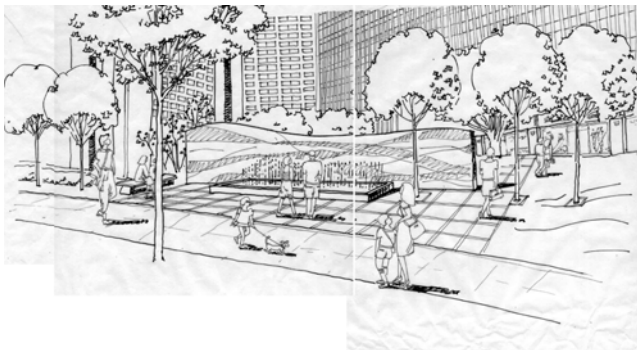


Fig. 29: Streetside development abutting Century Blvd

WEST END OF CORRIDOR

... bound by Sepulveda Blvd on the West and Airport Blvd on the East.

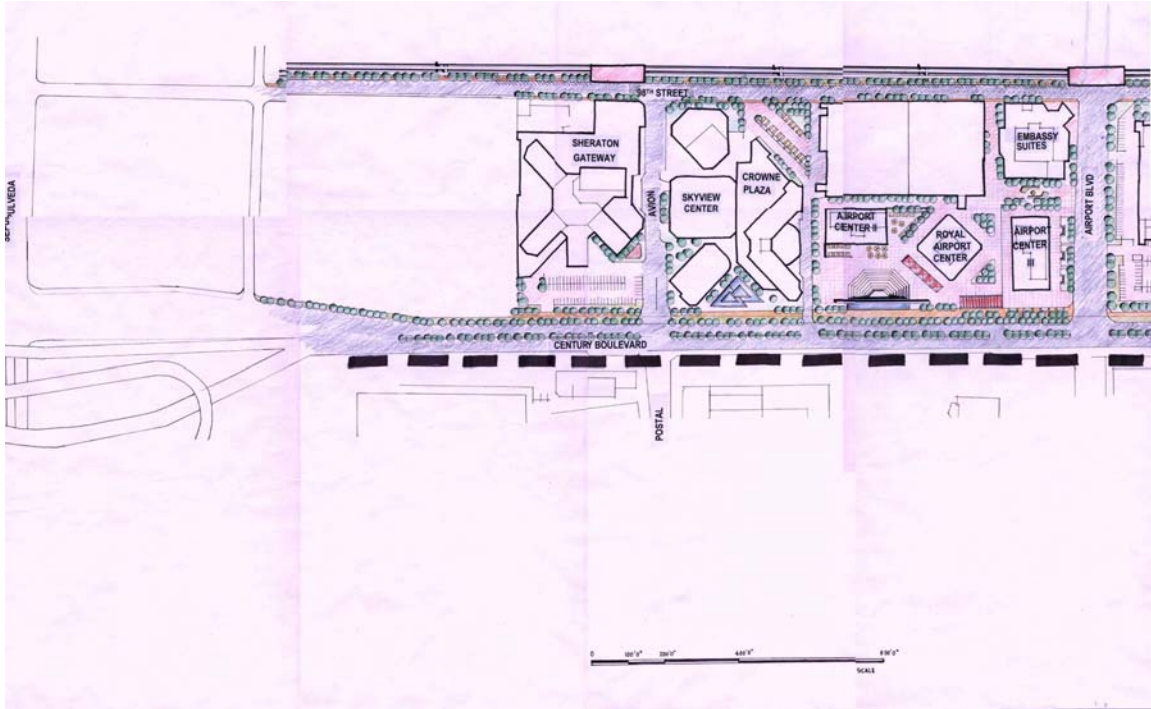


Fig. 30: Development proposal for the west end of Corridor

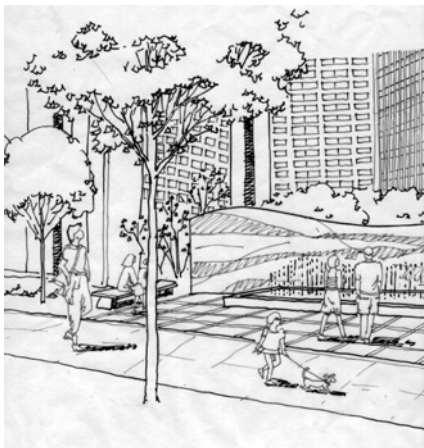


Fig. 31: Development along Century Blvd

SALIENT PROPOSALS

- Infill Development abutting Century Blvd with facilities like amphitheater, landscaped courts with water fountain, outdoor dining, kiosks etc.
- Infill development along 98th street using the existing outdoor parking areas (which are not optimal utilization of the space) to house outdoor café and eating spaces.
- People mover station along 98th street near the existing Wyndham Hotel.

CENTRAL STRETCH OF CORRIDOR

... bound by Airport Blvd on the West and Aviation Blvd on the East side

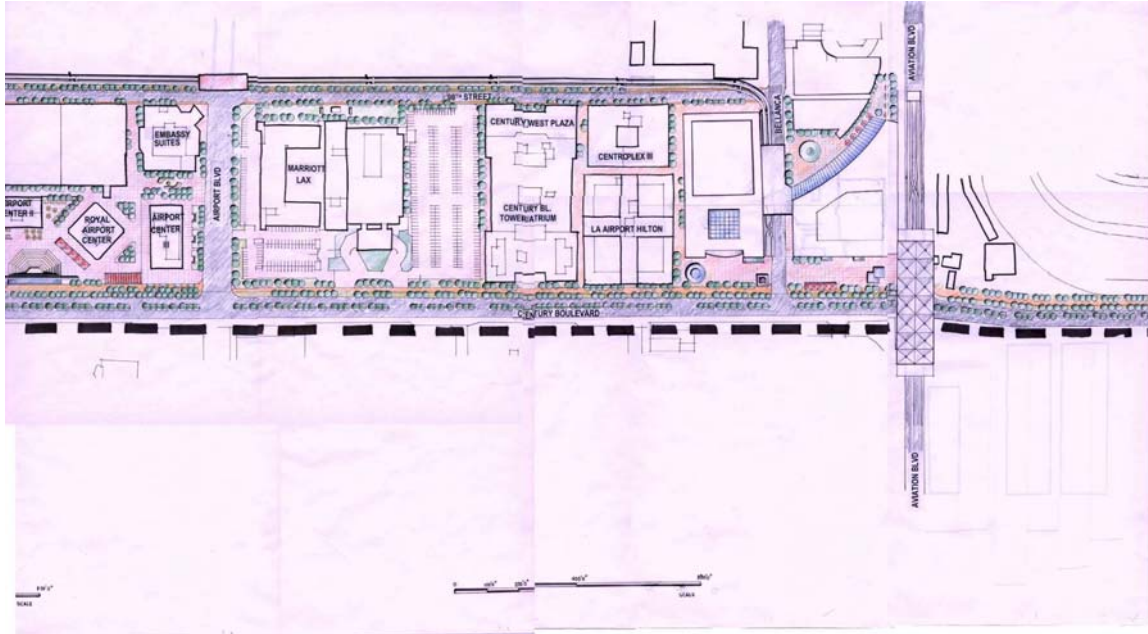


Fig. 32: Development proposal for the central stretch of Corridor

SALIENT PROPOSALS

- New entertainment retail complex comprising movie theaters, speciality retail outlets, boutiques, recreational facilities.
- People-mover terminal integrated with the greenline station on Aviation Blvd. Recreational facilities like nightclub etc, restaurants etc.
- The Greenline ® (Metro) station at higher grade will serve both as a landmark and a portal framing the entrance in to the corridor.
- Terminal for transit shuttle service connecting the PBID area with the beaches.
- Public Art/ Billboard Alley along the 98th street

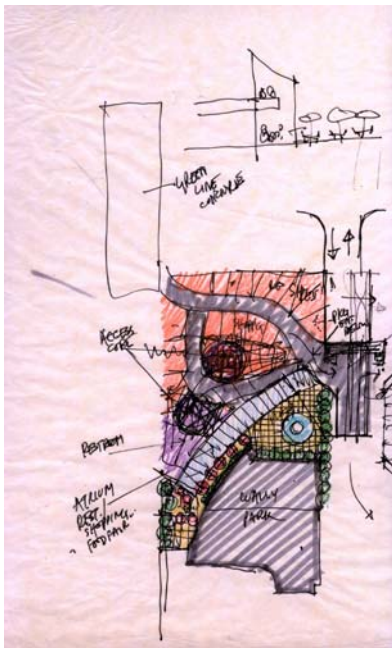


Fig. 33: Study sketches – Evolution of the transit and entertainment center

WEST END OF CORRIDOR

Aviation Blvd on the West and La Cienega Blvd on the East

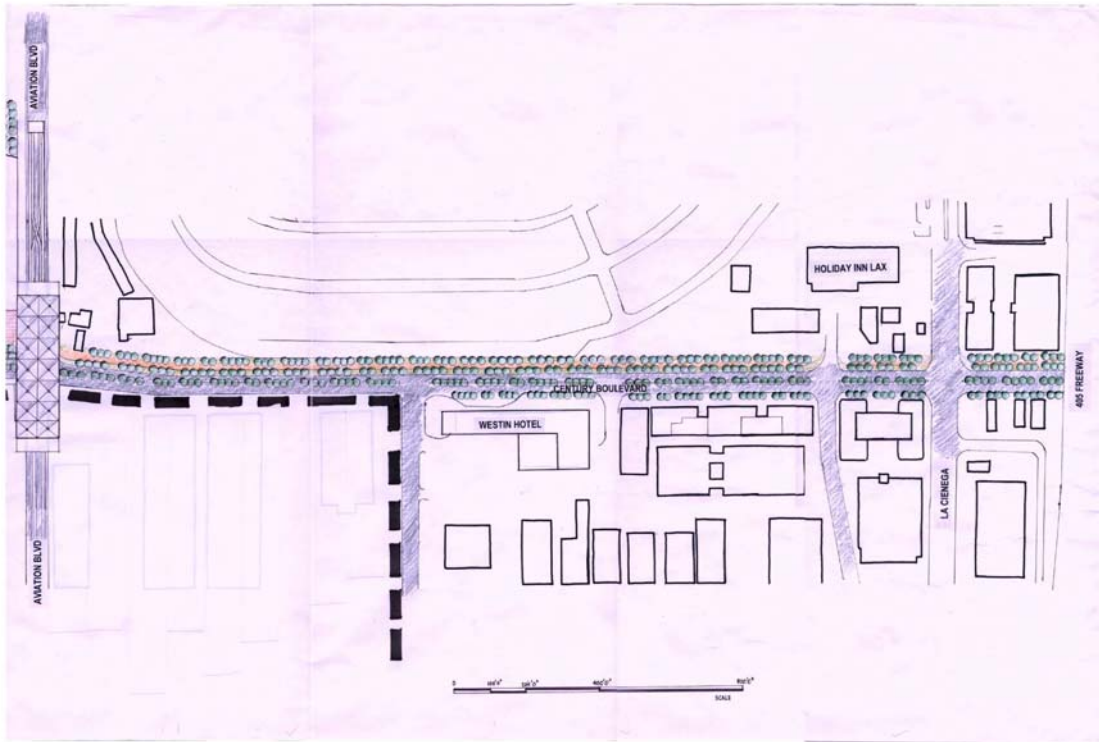


Fig. 34: Development proposal for the east end of Corridor



Fig. 35: Sidewalk with pedestrian friendly street-furniture

SALIENT PROPOSALS

- Infill development promoting pedestrian activity
- Landscaped wide sidewalks on Century Blvd to attract more visitors to the retail/entertainment hub at the intersection of Bellanca St and Century Blvd.

INDIVIDUAL RECOMMENDATIONS

RETAIL/ENTERTAINMENT COMPLEX

To better compete with other Southern California Attractions, The Century Corridor is in need of an anchor development to establish it as a destination place. Our project team is proposing the construction of a retail/entertainment complex to be located on the northern corners of Bellanca and Century Boulevard. This new complex will not only serve as a destination for visiting tourists and local residents, but also as a transportation hub linking the MTA's Greenline with airport's proposed people mover (described below).

The new mixed-use retail/entertainment complex will serve as the gateway for people going in and out of the local region, as well as those traversing the world. It is envisioned that the new center will provide locals and tourists alike with shopping and recreation opportunities as they move in and out of the area. It will encourage people to arrive early (for departure) and leave later (upon arrival) to take advantage of the opportunity to relax and enjoy before heading to their final destination.

The entertainment/retail center will be approximately 600,000 square feet and accommodate between 1500-2000 parking spaces. Likely tenants include a movie theater, restaurants (such as CPK, the Cheesecake Factory, Starbucks, Olive Garden, Hard Rock Café, Gordon Birsch, etc), retail stores (such as Tower Records, The Disney Store, Pottery Barn, Restoration Hardware, J. Crew, etc.), and an aerospace museum.

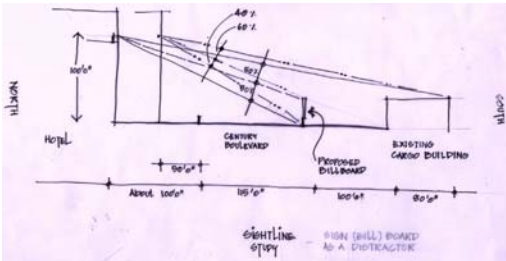


Fig. 36: Study of eyeline to determine the billboard height on South of Century Blvd



Fig. 37: The vanishing line of billboard along Century Blvd



Fig. 38: Billboards- Analogy from New York

IDEA FOR BILLBOARDS

The south side of Century Boulevard needs a visual lift, for pedestrian and auto traffic as well as the businesses along the north side. In addition to any landscaping, billboards could be used as a visual screen that blocks the view of the massive cargo terminal facilities. These billboards would add an exciting visual experience utilizing modern technology such as turnaround computerized displays while contributing to the promotion of the Century Corridor.

As the Gateway to LA, the billboards could advertise cultural institutions and events in Los Angeles such as the Getty Museum, the Museum of Modern Art, the new Museum of Science and Technology, the Symphony and the Opera. Many of these institutions advertise on billboards here and there in the city now. By advertising along Century Boulevard they would have an opportunity to attract additional visitors from those entering Los Angeles for a visit.



Fig. 39: Outdoor amphitheater, mural wall and courtyard along Century Blvd

Billboards could also advertise entertainment destinations in the Los Angeles Basin such as the venues on Sunset Strip in West Hollywood or Disneyland, Dodgers Games and Universal CityWalk. Ordinary advertisers would also be welcome – the cache would be in the use of technology and compliance with design guidelines established to spur creativity. The use of billboards along the corridor is designed to generate revenue for the business improvement district.

The idea is for the billboards to be owned and leased by the P-BID. They would be built on an easement on the north edge of the LAX property on Century Boulevard. Both the location and design would need to conform to city and FAA regulations. Permission to access and operate the billboards could be negotiated with LAX at a nominal rate as a mitigation measure for the negative impacts on the businesses.



Fig. 39-a: Outdoor space along 98th street

ALTERNATIVE INFILL USES / OUTDOOR PLAZA

Encouraging a mix of uses in existing office buildings will contribute to the revitalization of the area. Currently there are very few amenities in the Century Corridor. Employees and visitors to the area are limited in terms of the number of choices available for dining, shopping and entertainment. Often, people have to go outside the area just to purchase such basic needs as lunch.

One component of our proposal includes placing restaurant and retail uses into the ground floors of existing office buildings. We propose creating an outdoor plaza and lining it with a balanced mix of retail, shops and restaurants. The outdoor plaza will open-up to Century Boulevard and surround Airport Centers II & III, The Royal Airport Center, and the Crowne Plaza Hotel. It will contain such amenities as park benches and tables for eating and relaxing, water displays and fountains, and an open amphitheater style stage for live performances.

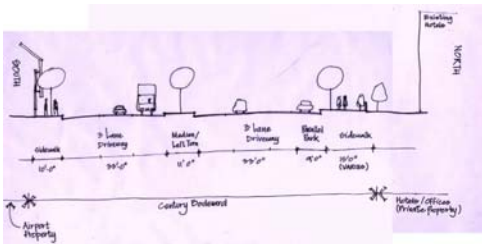


Fig. 40: Cross Section- Proposed streetscape of Century Blvd

Retail shops could range from Banana Republic and The Body Shop, to Rand McNally (a travel store) and The Sharper Image. We envision creating an experience similar to One Colorado in Old Town Pasadena, Two Rodeo in Beverly Hills, and Third Street Promenade in Santa Monica.

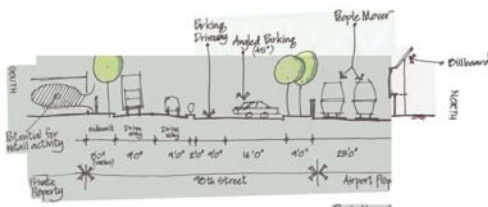


Fig. 41: Cross section –98th street – option 1

CENTURY BOULEVARD

We propose reconfiguring Century Boulevard to promote a pedestrian friendly atmosphere. This is accomplished by taking out one lane in each direction. As a result, Century Boulevard will have three eleven foot wide lanes in either direction. A ten foot service sidewalk is recommended on the south side. A nine foot wide

parking lane is proposed on the north side of Century. The sidewalk on the north side should be as wide as possible and will vary according to the overall width of the street and width of the median. A landscaped sidewalk that promotes pedestrian activities such as jogging, leisurely walking, and biking is advocated. The median is proposed to be shifted southward and will have a variable width ranging from 12 to 15 feet. The median should remain attractively landscaped.

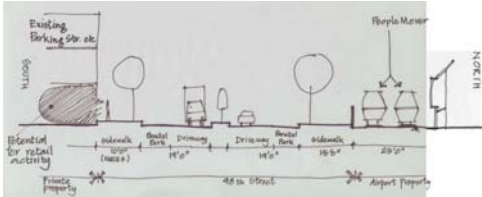


Fig. 42: Cross section – 98th street – option 2

98TH STREET

We propose to reconfigure 98th Street. There is one lane in each direction. Angled curb parking is proposed on the north side of 98th Street. On the south side, we propose to have one lane of parallel parking. Although there are several curb cuts on the south side of 98th Street there will be enough parking spaces available to justify the reconfiguration. The sidewalks on either side should be landscaped with trees to promote pedestrian activity.

TRANSPORTATION TERMINAL

One alternative of the LAX Expansion Plan suggests extending the MTA Green Line using existing rail tracks on Aviation Boulevard. The same plan also proposes to extend the People Mover of LAX to Aviation. The People Mover moves to the north of 98th Street at the intersection of 98th Street and Sepulveda. The tracks run parallel along the northern edge 98th Street. LAX master plan proposes a terminal for interchange between the two services at the intersection of 98th and Aviation. We recommend that this new interchange be fully integrated into the new retail/entertainment center.

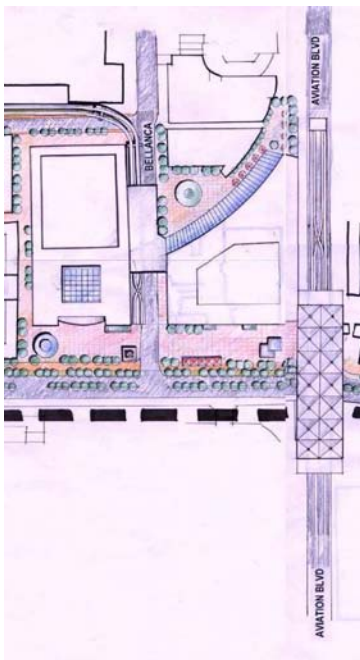


Fig. 43: Transit Center, Greenline terminal

The preferred route of the Green Line extension is along Aviation Boulevard. Once the Green Line has been extended, the next step is to connect it to Union Station to provide access to the airport for a larger population of Los Angeles. Encouraging employees to utilize the Green Line would also strengthen the possibility of the extension. Perhaps the hotel shuttles as a joint project could set up a bus connection to the current station. Having statistics on ridership would enhance the position for expansion.

We recommend three stations for the People Mover strategically located so as to provide maximum access to the hotel and entertainment spots after considering all location constraints. The stations are expected to be entirely within the Airport property. However, all ingress and egress points will be on the 98th Street. The tracks should be elevated to make the People Mover safer. The terminus for the People Mover is on the second floor of the new development right above Bellanca.

TRANSIT SHUTTLE

A transit shuttle (bus) service is proposed to originate from the Transit Concourse at Bellanca. The service will connect all hotels along Century with the beaches west of LAX. This will help in attracting customers from the newly developed hotels and offices northwest of LAX to the PBID. Guests of the PBID hotels and transit passengers with limited time will have convenient sightseeing and recreational opportunities. This will benefit entertainment and shopping establishments in the PBID. The frequency and fare structure of the shuttle service should be determined after conducting a detailed financial analysis. However, a free service is preferred.

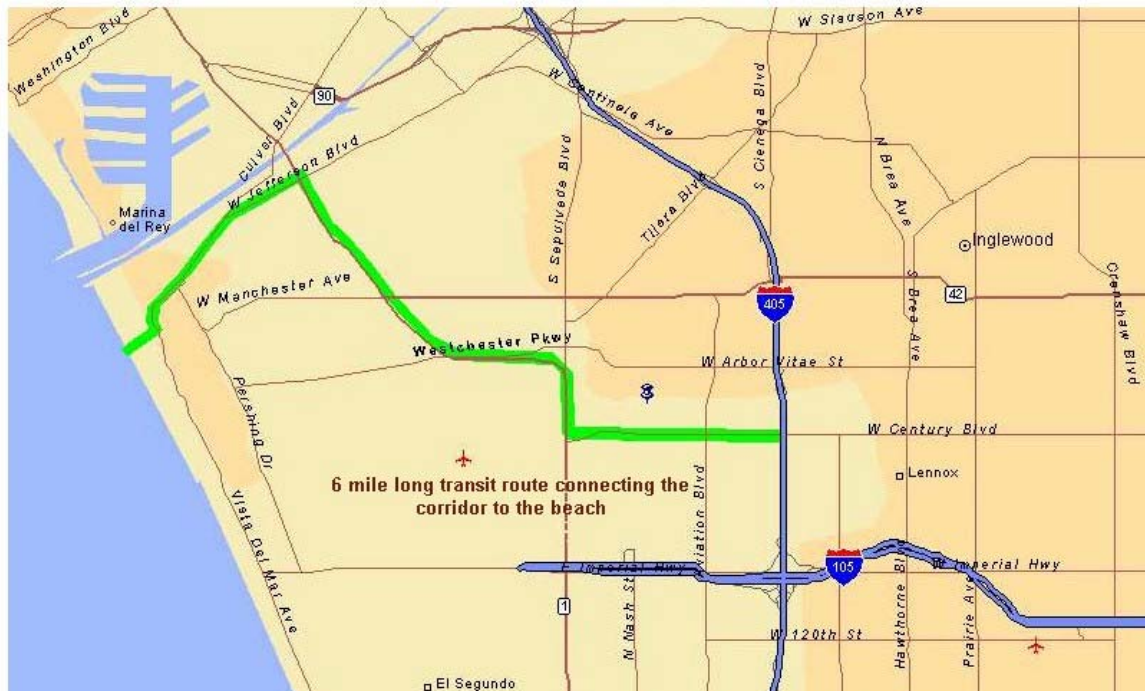


Fig. 44: Map showing transit route

POSSIBILITIES

Two major projects for this corridor should also be planned in the future. A mid-sized, high technology aerospace museum and a major conference/convention center. The museum could bring visitors to the area and the convention center could bring visitors and generate revenue.

The museum could be themed on aerospace, defense, aircraft production or transportation. It could take advantage of its location near a major airport and aerospace center. Local aerospace companies could underwrite individual exhibits.

The convention center could be connected to the entertainment retail project and the airport. It would be much more convenient for regional conventions than downtown LA or the westside of LA because of its proximity to the airport. It could also complement area hotels' existing facilities by allowing the century corridor to host larger conventions.

Transportation and Circulation Analysis

A detailed analysis of the existing traffic situation on Century Boulevard was conducted to determine the feasibility of actually implementing the proposed changes in Century PBID. Several remedial measures are suggested to economically revitalize the PBID. Los Angeles Department of Transportation (LADoT) provided data, which was used in the actual analysis. Our multi-pronged development proposal included the following:

- Reducing the width Century by removing one lane in each direction,
- Re-orienting the median on Century by shifting it southward,
- Providing a service sidewalk on the south side of Century,
- Providing one lane of parking on the north side of Century,
- Creating a promenade by widening the sidewalk on the north side of Century,
- Providing landscaped sidewalk on both sides of 98th Street,
- Removing the median on 98th Street,
- Creating a transit concourse at the intersection on Bellanca between 98th Street and Century,
- Reducing truck traffic to a minimal level to promote pedestrian movement,
- Reducing the average speed of traffic on Century which is desired for promoting pedestrian activity,
- Introducing a transit bus service to connect the PBID to the Beaches west of LAX and nearby centers of attractions,
- Extending the MTA Green Line to the Transit concourse (part of LAX's expansion plan), and
- Creating three stations for the LAX People Mover on 98th Street to connect the hotels within the PBID to LAX.

As a part of the analysis, LADoT personnel were interviewed at Westchester. Institution of Transportation Engineers' – Trip generation Manual and Transportation Research Board's Highway Capacity manual were used in determining the expected traffic generation from the new development. Local hotel, office and parking lot owners and managers were interviewed to understand the feasibility of introducing shared parking.

On analysis of LADoT traffic data we observed that traffic on Century significantly reduced after the opening of the I – 105 Freeway. However, it is observed that traffic has increased marginally in 1996. Growth forecasts predict that the expansion of LAX will have minimal impact on traffic along Century. Truck traffic will

register highest increase but in absolute value this change is minimal.

LADoT officials suggested that reduction in width of Century is possible only if the capacity thus lost is replaced or mitigated in some way. We can argue that the Ring Road along Arbor Vitae, proposed in LAX expansion plan, can compensate for the lost capacity on Century to some extent. The major development of LAX is geared towards the western fringe of the airport. This development will be well served by I –105 Freeway and the Ring Road. LAX expansion plan also suggests improved truck access from I- 105 and I – 405 freeways. LAX also proposes to have extensive internal circulation network to ensure smooth traffic movement. Considering these measures, we propose to reduce the width of Century Boulevard.

On a thumb rule, one lane of a highway is expected to accommodate 800 vehicles per hour at all time. The figure can go up to 1400 vehicles per hour depending on the speed limit. Therefore, at present Century is expected to accommodate 6400 vehicles per hour according to most conservative estimates. Average traffic volumes on Century, both peak and off-peak, are given in figures 1 and 2 respectively. The 'before' and 'after' data indicates current and forecasted traffic volume on Century respectively.

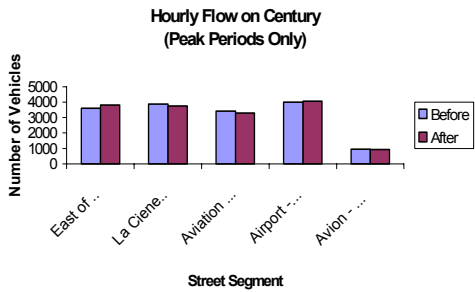


Figure 1

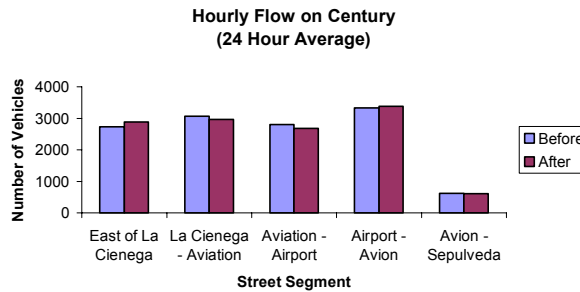


Figure 2

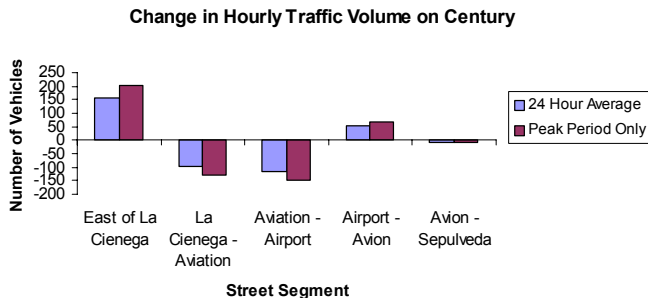


Figure 3 gives the change in hourly traffic volume along Century for both off-peak and peak hours.

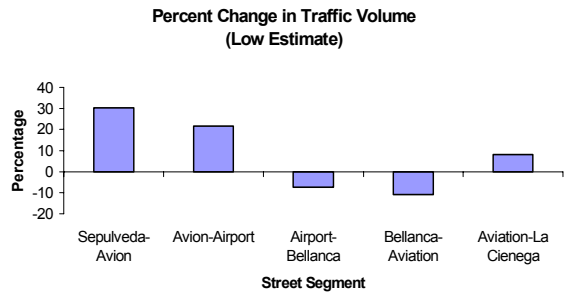
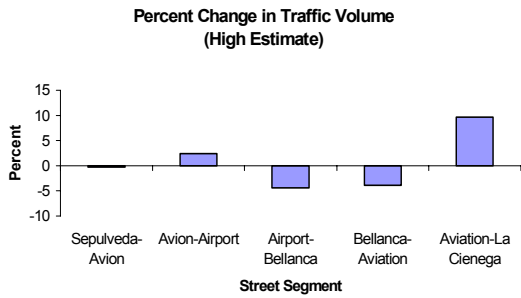


Figure 4 and 5 provides the percentage change in traffic flow on Century according to the high and low estimates respectively.

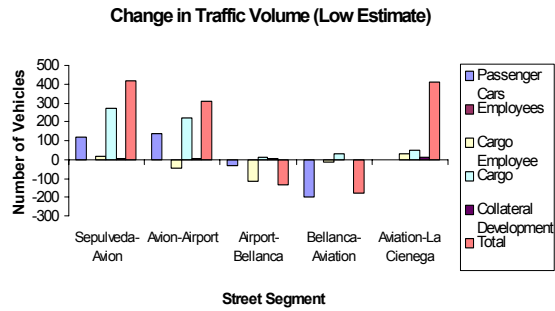
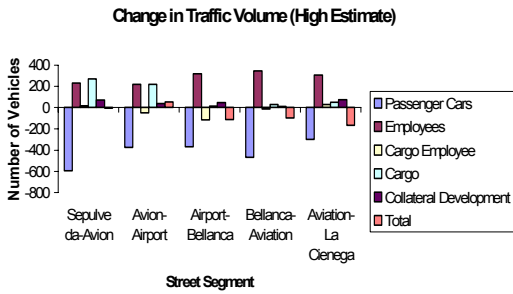
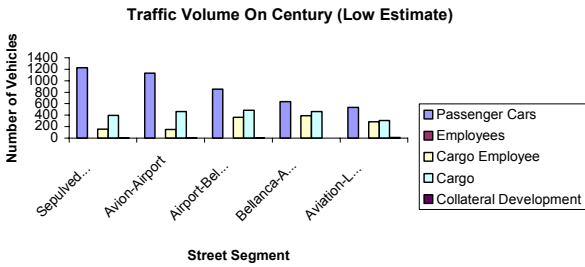
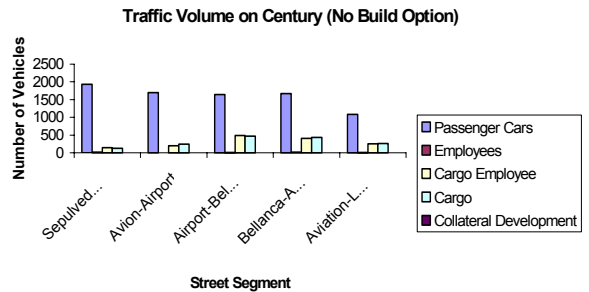
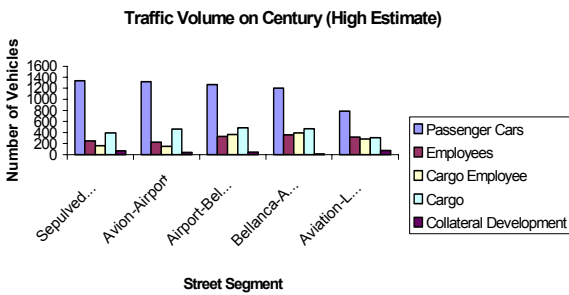


Figure 6

Figure 7



The actual change in traffic volume expected according to high and low estimates is illustrated in figures 6 and 7 respectively.



Figures 8, 9 and 10 illustrate the difference in traffic flow on Century under no-build, high and low traffic estimates respectively.

Conclusion

We are proposing to reduce the width of Century by reducing one lane in each direction. This means that Century will have six traffic lanes instead of eight. Therefore, capacity of century will reduce from 6400 vehicles per hour at present to 4800 vehicles per hour. This is according to standards prescribed by the Highway Capacity Manual (1985). Traffic volume, according to high estimate, is expected to decrease marginally from present situation. However, traffic volume shows an increase of approximately 400 vehicles per hour as per low estimate. Therefore, the worst case scenario presents an increase in traffic volume of 400 vehicles per hour. Highest traffic volume (24-hour average) is observed on Airport – Avion segment of Century and is approximately 3500 vehicles per hour. So, volume is expected to be in the range of 4000 vehicles per hour. This is far below the capacity of reconfigured Century at 4800 vehicles per hour. Even peak period flows indicate maximum observed volume of 4000 vehicles per hour. If we assume increase in peak period traffic is 25% higher than the daily average, the peak hour traffic is expected to be around 4500 vehicles per hour which is still less the minimum threshold capacity.

Therefore, we recommend reducing the width of Century by one lane on each side without having any significant negative impact on traffic circulation.