GENERAL PLAN
LAND-USE AND MOBILITY
ELEMENT UPDATE

- DRAFT -

Metrics Report

City of Pasadena August 19, 2010

EXECUTIVE SUMMARY

During outreach for the new General Plan Update in 2009, participants asked for objective data summarizing the changes in the community since the last General Plan Update. This report provides data regarding the statistical changes that have occurred in the City since the 1994 and 2004 General Plan Land Use and Mobility Elements were adopted and provides status on the policy directives given in those documents.

A brief summary of key indicators is included below. The body of the report contains greater detail regarding each of the following categories and the appendix includes still greater detail in the form of tables, charts and graphs.

- **Statistical Data**

Population Growth
Since 1990, the City's population has increased by approximately 9,600 people or about seven percent, from 131,591 to 141,180 people. This is approximately 87 percent of the General Plan's total build out population. In comparison, the County of Los Angeles grew ten percent during the same time period.

Housing Development
The 1994 General Plan allowed for the construction of 11,038 net-new market rate units. Since that cap was created, a little over 4,700 units have been constructed. Of these new units, 81 percent were located in specific plan areas and nearly 70 percent of all residential units were constructed in the Central District Specific Plan area.

Commercial Development
The 1994 General Plan allowed for the construction of 21,305,325 net-new, non-residential square feet. Since that cap was created, approximately 3,300,000 square feet have been constructed. Over 80 percent, or nearly 2,500,000 square feet, was located in specific plan areas. Forty percent of all non-residential square footage has been constructed in the Central District Specific Plan area.

Travel Characteristics
Residents of Pasadena average as many cars per household as do residents of the County as a whole. Driving a personal vehicle is the preferred mode of transportation in all cases, however Pasadenans are more likely to walk to do errands than are residents in the rest of the State or county.

Traffic & Travel Times
The data comparison from year 2006 to 2009 shows that the travel times and speeds have remained relatively constant with only minor fluctuations.

Transit
In total, there are 704 bus stops throughout the City served by multiple transit agencies. Pasadena ARTS buses serve more than 400 bus stops including those that serve as essential transfer points at six Metro Gold Line Stations.

Generally, a ¼ mile radius represents the distance and time (about a ten-minute walk) that most people would be willing to walk to public transportation. Transit services are distributed adequately across the City so that nearly 90 percent of the community is within a ¼ mile radius of a bus stop or rail station.

Ridership on the ARTS buses has increased steadily with some existing lines reaching capacity at peak times of day. Metro Gold Line ridership has also shown a 20 percent increase since 2007 to average daily riders of 22,271.

Transit Oriented Development
Since 2000, approximately 3,785 net-new units were constructed in areas designated in the Zoning Code as Transit Oriented Districts. This is approximately 72 percent of all the units constructed citywide in that period.

Between 1994 and 2009, 3,668 units were constructed as part of mixed use developments, or 64 percent of all the units constructed citywide in this time period. Nearly 90 percent of all the new mixed use construction since 1994 was constructed in the Central District Specific Plan. Another five percent was constructed in the East Pasadena Specific Plan. The Commercial zones, the Fair Oaks Orange Grove Specific Plan and the North Lake Specific Plan accounted for three percent or less of the mixed use units constructed.

Central District Changes
Seventy percent of all residential units were constructed in the Central District. Between 1990 and 2009, the City estimates that the area's population grew by 48 percent, from 11,014 to approximately 16,500. The Central District is at 72 percent of population build out and 87 percent of residential unit build out. Recent surveys show that residents of the Central District drive less and walk more.

Economic Development
The median income for Pasadena residents has remained steady since 1990, after adjusting for inflation, while numbers for the County of Los Angeles have declined slightly. The number of people working in Pasadena has increased slightly from 97,640 in 2002 to 100,947 in 2008. Property taxes, which make up approximately 18 percent of the City's General Fund revenue for Fiscal Year 2009, increased 46 percent since 1994, after adjusting for inflation.

Historic Preservation
In 1994, the City had one historic Landmark District and six National Register Districts citywide. Since 1994, the City added 16 historic landmark districts, for a current total of 17 districts. In addition, the City added seven National Register Districts, or a total of 13 Districts (with only one district as both a Landmark and National District). Of the 30,178 properties in the City, 3,693 are designated as historic (or 12 percent of properties citywide).

Open Space and Parks
Since the 2004 General Plan Update, the City has added 42 new acres of parkland for a total of 342.4 acres of developed parkland citywide. This includes neighborhood parks, community parks such as Victory Park and citywide parks such as Brookside Golf Course. In addition, the City has added 20.6 acres of passive open space area for a total of 522.9 acres of open space citywide. Open space areas include publicly owned natural open space areas such as the Arroyo Seco.

The City revised a residential impact fee in December 2005 that has since collected more than $13.5 million in fees and has earned over $1.5 million in interest. As of June 2010, the City has appropriated or spent nearly $15.0 million on improvements to the park system.

Water and Power
Despite an increase in growth of both residential and non-residential square footage, water usage has decreased by 15 percent and the City's gross peak energy load has been reduced by 5.42 megawatts since 2007. Since FY 2007, daily per capita water consumption has decreased from 204 gallons to 175 gallons.

➢ General Plan Policy Updates

The 2004 General Plan Land Use Element included specific implementation measures. In response to those directives, seven specific plans have been adopted, with a new eighth plan under way. The Zoning Code and the Zoning Map were amended to protect single family neighborhoods, to codify specific plans, and to allow for mixed use and transit oriented districts.

The Green Space, Recreation and Parks Element, and a corresponding Master Plan, were adopted. The Open Space and Conservation Element is currently being updated. The Cultural Nexus community plan for arts was adopted, as were Citywide Design Guidelines, design guidelines for six of the seven specific plan areas, and Commercial and Multi-Family Residential Design Guidelines. Numerous historic resource surveys were conducted resulting in the addition of 16 historic landmark districts and a total of 13 National Register Districts. An update of the Economic Development Element of the General Plan is underway.

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INTRODUCTION

During outreach for the new General Plan Update in 2009, participants asked for objective data summarizing the changes in the community since the last General Plan Update. This report provides data regarding the statistical changes that have occurred in the City since the 1994 and 2004 General Plan Land Use and Mobility Elements were adopted and provides status on the policy directives given in those documents.

➢ DATA SOURCES

Decennial Census
The Decennial U.S. Census is a nationwide survey, required by the Constitution that attempts to count every resident every ten years. Given the large sample size, the margin of error for census data is very low. Census data is broken down by geographic area ranging from nationwide to the census block level. For this report, year 2000 census block level data was used. While the 2010 Census was recently conducted, information has not yet been released.

American Community Survey
In response to the desire for information more frequently than every ten years the Census Bureau has created the American Community Survey (ACS). This survey queries a smaller sample of households every year and results are averaged over a three year period. For instance, the 2008 survey results are averaged with the results of the 2007 and 2009 results. The smaller sample size results in higher margin of error, making the data somewhat less useful. For example, the total population for the City of Pasadena has a margin of error of 9,000 people.

California Department of Finance
The California Department of Finance (DOF) publishes an estimate of every city and county's population every year. DOF estimates are based on information provided by cities regarding the number of housing units completed each year. The DOF takes the average household size for each city and multiplies it by the number of units. Recent estimates for Pasadena using this methodology may not be accurate. More than 70% of the City's recent growth has occurred in the Central District, where the average household size has historically been smaller than the City's average. As a result, the DOF estimates may be too high.

City of Pasadena

Permitting and Entitlement Tracking
The City's Planning and Development Department tracks development and reports the number of residential units and non-residential square footage that is in the process of obtaining approvals, has received a building permit, and that has received final occupancy approval. In addition, the City tracks all entitlements that

are approved by the City Council including Municipal and Zoning Code Amendments, General Plan Amendments and Zoning Map Amendments.

Population Estimates
The Planning and Development Department's population estimate for the City uses the Census Bureau's 2000 population as a baseline. From that baseline, the number of net-new units is multiplied by the average number of people per household in the Central District. Since most of the units constructed since 2000 were in the Central District, this small household size is used. This estimate does not take into account many other factors that affect population. However City staff considers these estimates to be more accurate than other estimates, because it considers actual number of units constructed and variations in household size.

Downtown Survey
In 2010 the City completed an on-line survey of residents in the Central District. Approximately 14,000 surveys were emailed to Central District area residents (hard copies were also mailed, if requested). 900 surveys were completed, for a 6.4% response rate. The on-line format may have skewed responses to a younger, more affluent, tech-savvy population.

The survey results were limited to the 210 Freeway to the north, Pasadena Avenue to the west, California Boulevard to the south, and Catalina Avenue to the west. The boundaries are very similar to the block groups used for census data and to the boundaries of the Central District Specific Plan.

It cannot be determined if the sample of this survey is representative of the population of the Central District. Once 2010 census data is released, the population answering this survey can be compared with the residents of the Central District and whether or not this survey is representative can be determined.

Other City References
City staff referred to several other City documents that include data including: 2007 Green Space, Recreation and Parks Master Plan; the 2010 Update of the General Plan Housing Element; the Annual Transportation Report Card; Bicycle Master Plan; the 2009 Green City's Green City Indicator's Report; the Comprehensive Annual Financial Report; 2004 Parks and Recreation Impact Fee Nexus Study; the Master Sewer Plan, the Power Integrated Resource Plan; Commercial and Multi-Family Design Guidelines; the Five Year Implementation Plans for the Redevelopment Areas; and the 2009 Energy Integrated Resource Plan; and the 2010-11 City Budget. Transit information for the ARTS buses was provided by the City's Transit Division.

Other Data Sources
The American Commuter Survey and National Travel Household Survey provided information on transportation. Los Angeles County Metropolitan Transportation Authority (Metro) provided information on Gold Line ridership. The CoStar Group provided commercial real estate information and analysis. The US Census Bureau

Center for Economic Studies provided employment information. The California Employment Development Department's figures were used to report unemployment rates. The Annual Reports of the Property Based Improvements Districts were reviewed to determine their revenue sources and expenditures. The Mineta Transportation Institute Report on the Pasadena Gold Line provided information on residents living in Transit Oriented Developments.

STATISTICAL DATA

➢ POPULATION

Population Growth
The City's population increased rapidly from the years 1880 to 1950, increasing at an average of 44% over those decades, from 391 people to 106,268. The City's growth slowed after the 1950s, but picked up again with ten percent growth in the decade between 1980 and 1990 when the City reached a population of 131,591. Growth then slowed again with an increase of only 1.8% between 1990 and 2000, bringing the total population to 133,936.

See ***Figure 1*** and ***Figure 2***, in the Appendix, for more detailed information regarding the City's population change.

Population Estimates
Until the 2010 Census data is released, there are several sources for information on current population in the City. Each source uses a different methodology, however, and accordingly returns different results.

- The American Community Survey's 3-Year Rolling Average reported a population of 137,885 in 2007. The margin of error for this number is 10,185.

- The California Department of Finance (DOF) estimate for 2009 was 150,185. This number is based on the application of an average-household size to the total number of new housing units. However, more than 70% of the City's recent growth has occurred in the Central District, where the average household size has been smaller than the City's average. As a result, these estimates may be too high.

- The City of Pasadena Planning Division estimated population at 141,180 in 2009. This estimate took the total number of net new units for each district and multiplied it by the average household size of the Central District. The average household size of the Central District is used since the vase majority of the new units were constructed in the Central District. City staff considers this estimate to be more accurate than other estimates outlined above, because it considers the difference between the household size in the Central

District and the City as a whole. Therefore, this report relies on the City's Planning Division's estimate for 2009 population.

General Plan Population Projections
The 2004 General Plan Land Use Element projected a population of 149,940 by the year 2015 and a population of 163,000 at build-out (no year was specified for build-out). This estimated projected build out population was based on the development allocation and potential for each specific plan area and zone. Based on the City of Pasadena current population estimates, the City is at 94% of the 2015 population projections and 87% of the build-out projection.

Relationship to Regional Population Growth
Since 1990, the City's population grew at a slower rate than the County as a whole. From 1990 to 2009, the City grew approximately seven percent (using the City's estimate) while the County grew ten percent, based on the American Community Survey estimates (there is no margin of error for the American Community Survey's estimates for L.A. County). The average rate of growth per year for the City was .36% per year while the County reported .56% per year.

See ***Figure 3*** and ***Figure 4*** in the Appendix for a graphic comparison of the City's growth compared to the County of Los Angeles' growth.

The Cities of Burbank and Glendale – cities of comparable size and relatively close to Pasadena – grew slower than Pasadena over the last nine years. The Department of Finance estimates ten percent growth for Pasadena, six percent growth for Glendale, and seven percent growth for Burbank over the last nine years. The Census Bureau estimates six percent growth for Pasadena, one percent growth for Glendale, and three percent growth for Burbank.

See ***Figure 5*** for a table and ***Figure 6*** for a graph comparing the growth rates of Pasadena, Burbank and Glendale.

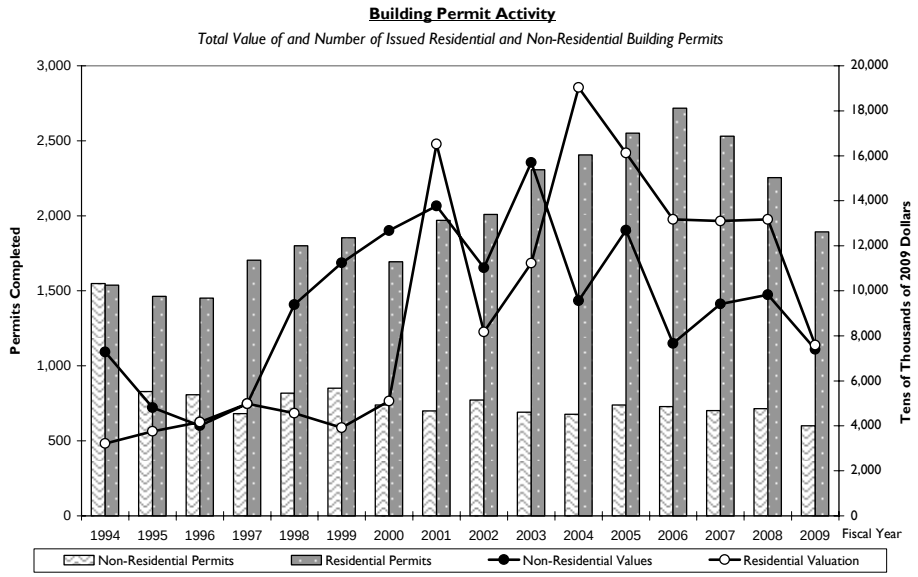
➢ OVERALL BUILDING TRENDS

Since 1994, the City issued on average 2,772 building permits every year. The most active year was 2006 when 3,000 permits were issued and the least active was in 1996 when 2,200 permits were issued. In 2009, 2,500 permits were issued.

While the number of building permits has remained relatively steady over the years, the valuation of the permits has varied more dramatically. Permit valuations have ranged from a high of $302.9 million in 2001 to a low of $81.7 million in 1996 (reported in 2009 dollars). In 2005, the City hit its second highest level of building permit valuations since 1994 ($264 million) and the following year it issued the most number of building permits since 1994 (3,446). Since those highs, building permit issuance and valuations have fallen 29% and 43%, respectively.

See ***Figure 7*** below, and ***Figures 8, 9,*** and ***10*** in the Appendix for more detailed information and graphs showing building permit activity and valuations from 1994 to 2009.

Figure 7.



Source: Planning and Development Department 2009, City of Pasadena

➢ HOUSING DEVELOPMENT

Total Housing Units

In 1994, the City contained 53,000 residential units. Since 1994, 4,709 units have been built throughout the City for a new total of 57,709 housing units.

General Plan Housing Projections

The 1994 General Plan allowed for 11,038 net new market rate residential units at build-out. It allocated these units mostly to the seven specific plan areas. Since 1994, 4,709 units have been built with 81% built in specific plan areas.

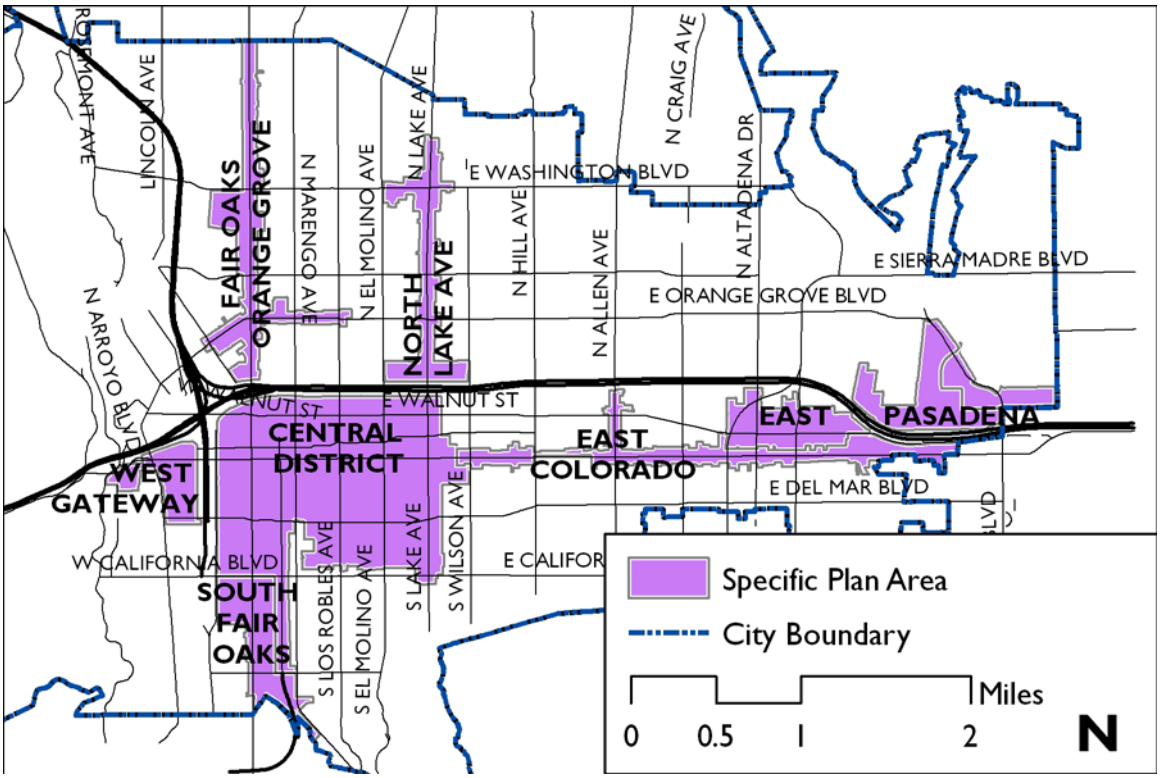
Pace of Construction

The Growth Management Initiative, which controlled growth prior to 1994, limited the number of residential units that could be built every year. The 1994 Land Use Element did not include regulations on the pace of development. Since 2000, the City has seen, on average, 377 residential units completed every year. The highest number of finalized building permits for new residential units occurred in 2002 with 744 units; the lowest number occurred just two years before when the City finalized 44 permits. In 2009, 351 net-new, market rate units were finalized. See ***Figures 11*** and ***12*** in the Appendix for a table and graph detailing the pace of construction from 2000-2009.

Multi-Family Vacancy Rate
A survey by the Planning Division of 1,820 rental units in the City's transit oriented districts in February of 2010 found that the average vacancy rate was 5.8% (see ***Figure 13*** for a map of the City's Transit Oriented Districts). The survey included – The Stuart, Trio, Paseo Colorado, Archstone Old Town Pasadena, Archstone Del Mar, Archstone Pasadena, and Holly Street Village.

In 1990 the multi-family residential vacancy rate for the City and County were virtually identical, at 5.6 and 5.8% respectively. In 2000, the vacancy rate for the two areas dropped to 4.2%. See ***Figure 14***, in the Appendix, for more information comparing vacancy rates in LA County, Pasadena, and the Central District.

Housing Units by Specific Plan Area
The 1994 General Plan Land Use Element created the seven specific plan areas: the Central District, East Colorado, East Pasadena, Fair Oaks/Orange Grove, North Lake, South Fair Oaks, and West Gateway. See the map below for the boundaries of these specific plan areas.



The City targeted most of the future growth in one of seven specific plan areas, the Central District, and in along major transit corridors. Each specific plan area has a cap on the total amount of construction that can occur (or development allocation). This development allocation is reported in dwelling units for residential uses and square footage for non-residential uses. In both cases, only net-new is used, and for residential uses only market rate units are calculated. The following section reports

the amount of development that has occurred and the result of the development in terms of change in population.

The top geographic areas where residential growth occurred since 1994 include the:

- Central District Specific Plan (3,250 units);
- Multi-Family zoned areas (672 units);
- Fair Oaks Orange Grove Specific Plan (205 units); and
- East Pasadena Specific Plan (204 units).

The Specific plan areas that showed the least amount of development include:

- East Colorado Specific Plan (0);
- West Gateway Specific Plan (0); and
- North Lake Specific Plan (4).

See ***Figure 15*** below and ***Figure 16*** in the Appendix, for more detailed information regarding net-new, market rate residential development. ***Figure 20*** includes information on the number of market rate and affordable units constructed since 1994 in each of the specific plans and zones.

Figure 15.

Net New Market Rate Residential Units Completed by Zoning Category

1994-2009

Geographic Area	Total Units Constructed	Percentage of Total	Cap
SPECIFIC PLANS			
Central District Specific Plan	3,250	69.0%	5,095
East Colorado Specific Plan	0	0.0%	750
East Pasadena Specific Plan	204	4.3%	500
Fair Oaks/Orange Grove Specific Plan	205	4.4%	550
North Lake Specific Plan	4	0.1%	500
South Fair Oaks Specific Plan	134	2.8%	300
West Gateway Specific Plan	0	0.0%	75
Sub-Total	3,797		7,770
OTHER ZONES			
Commercial and Industrial (CO, CL, & IG)	38	0.8%	*No cap*
Multi-Family (RM 12, RM-16, RM-32, RM-48)	735	15.6%	*No cap*
Single Family	139	3.0%	*No cap*
Sub-Total	912		
TOTAL	4,709	100.0%	

In compliance with the General Plan, this table reports net-new development. When a smaller building is demolished to construct a larger building, the difference in number of units between the two is reported.

In compliance with the General Plan, units with affordable housing covenants are not counted in terms of growth, except in the Fair Oaks Orange Grove Specific Plan Area.

Source: Planning and Development Department 2009, City of Pasadena

Remaining Development Capacity
Each specific plan area has a cap (or development allocation) limiting the amount of net-new, market rate units.

The top three specific plans closing in on their cap include the:

- Central District Specific Plan (at 69% of its cap);
- Fair Oaks Orange Grove Specific Plan (at 4.4% of its cap); and
- East Pasadena Specific Plan (at 4.3% of its cap).

The specific plans with the most capacity remaining include the:

- East Colorado Specific Plan (at zero percent of its cap); and
- West Gateway (at zero percent of its cap).

See ***Figures 17*** and ***18*** in the Appendix for more information about the remaining development capacity in the Specific Plan areas and other zones.

Affordable Housing
In 2001, the City created an Inclusionary Housing Ordinance which required residential and mixed use projects to dedicate 15% of the units as affordable housing or pay an in-lieu fee. In 2005, the City Council revisited the Ordinance, raising the in-lieu fee to further encourage the construction of affordable housing. The City's Zoning Code also allows density bonuses for projects that include on-site affordable housing.

Since 1994, 867 new affordable units were constructed throughout the City, nearly 15% of all units constructed. The top three areas where affordable units were constructed include the:

- Central District Specific Plan with 441 units (51% of all affordable units),
- Fair Oaks Orange Grove Specific Plan with 156 units (18% of all affordable units), and
- Multi-Family zones with 146 units (17% of all affordable units).

See ***Figure 19, 20, and 21*** in the Appendix for a detailed table on the location of new affordable housing units constructed.

Regional Housing Need Assessment
California law requires cities to have a general plan housing element that plans for the accommodation of population and employment growth. The State of California assigns a housing construction needs goal for each region. The Southern California Association of Governments (SCAG) takes that assignment and provides goals for each city in its region. The City of Pasadena regional housing needs allocation for the 2006-2014 planning period is 2,869 units. The RHNA also determines the number of units by household income and level of affordability as follows: 711 housing units affordable to very low income households, 452 housing units affordable for low income households, 491 housing units affordable for moderate

income households, and 1,215 units affordable for above moderate income households. See ***Figure 22*** for more information on the City's RHNA goal.

In meeting this requirement, state law require that the housing element identifies adequate sites that are appropriately zoned to accommodate the RHNA goal. To determine the appropriate number of sites needed to address the RHNA goal, state law allows cities to first credit projects built since the beginning of the planning period as well as projects that have received approvals and are likely to be built by 2014. The Housing element was updated in 2009-2010. With the credits the City has earned since 2006 an additional 973 units still need to be constructed to meet the City's RHNA. The land inventory completed for the Housing Element identifies 83 sites that could accommodate 1,868 new units. See ***Figure 22*** for a breakdown of the City's credits towards RHNA and deficit broken down by affordability level.

The consequences for not meeting the RHNA goal include the loss of State affordable housing funds and potential lawsuits against the city for violating state law. Additional consequences such as fines are proposed by the legislature every year but have they to be signed into law.

➢ COMMERCIAL DEVELOPMENT

Total Commercial Development
In 1994, the City contained approximately 39.9 million of non-residential square footage. Since 1994, 3.3 million square feet has been constructed throughout the City for a current total of 43.2 million of non-residential square footage.

General Plan Commercial Projections
The 1994 General Plan allowed for approximately 21.3 million net-new non-residential square feet. This number was allocated into different zoning categories and targeted most of the growth into the seven specific plan areas. As stated above, 3.3 million square feet has been constructed throughout the City since 1994, with 71% constructed in specific plan areas. See ***Figure 23*** in the Appendix for the total number of net-new, non-residential square-feet constructed from 1994 – 2009.

Pace of Construction
Since 2000 the City has seen, on average, 254,458 of net-new, non-residential square footage completed every year. The highest number of finalized non-residential building permits occurred in 2004 with 434,839 square feet; the lowest number occurred in 2008 with just 42,044 square feet completed. In 2009, 367,899 net-new, non-residential square feet was completed. Over the last five years the city has seen

- 434,839 net new square feet completed in 2004,
- 86,769 square feet in 2005,
- 157,938 square feet in 2006,
- 377,623 square feet in 2007,
- 42,044 square feet in 2008 and

- 367,899 square feet in 2009.

See ***Figures 24*** and ***25*** in the Appendix for a table and graph detailing the pace of construction from 2000-2010.

Commercial Vacancy Rates
During the fourth quarter of 2009, the retail vacancy rate in Pasadena stood at four percent while the office vacancy rate stood at 20.8%. Vacancy rate information comes from the CoStar Group, a provider of commercial real estate information and analysis. In comparison, the office vacancy rate for Burbank and Glendale were 17% and 20%, respectively. The lowest vacancy rate for Pasadena in the last 13 years was 5.1% in the fourth quarter of 2005 and second quarter of 2006.

Development by Specific Plan Area
The top geographic areas where non-residential growth occurred include the:

- Central District Specific Plan (1,328,329 square feet);
- South Fair Oaks Specific Plan (606,879 square feet);
- Public and Semi-Public zoned areas (469,047 square feet); and
- East Colorado Specific Plan (373,335 square feet).

The Specific plan areas that showed the least amount of development include:

- West Gateway Specific Plan (800 square feet);
- East Pasadena Specific Plan (41,061 square feet); and
- North Lake Specific Plan (52,075 square feet).

Projects in the Public and Semi-Public zoned areas include large institutions such as, Huntington Hospital, Cal Tech, Fuller University and other schools. Numbers in the East Pasadena Specific Plan factor in projects that demolished more square footage than was built.

See ***Figure 26,*** *on the next page, and* ***Figure 24*** in the Appendix, for more detailed information and charts for the location of non-residential development.

Figure 26.

Net New, Non-Residential Square Footage Completed by Zoning Category

1994-2009

Geographic Area	Total Sq Ft Constructed	Percentage of Total	Cap
SPECIFIC PLANS			
Central District Specific Plan	1,328,329	40.2%	6,217,000
East Colorado Specific Plan	373,335	11.3%	650,000
East Pasadena Specific Plan	41,061	1.2%	2,100,000
Fair Oaks/Orange Grove Specific Plan	93,702	2.8%	611,000
North Lake Specific Plan	52,075	1.6%	175,000
South Fair Oaks Specific Plan	606,879	18.4%	1,550,000
West Gateway Specific Plan	800	0.0%	800,000
Sub-Total	2,496,181		12,103,000
OTHER ZONES			
Commercial and Industrial (CO, CL, & IG)	295,838	8.9%	*No cap*
Duplex (RM-12)	0	0.0%	*No cap*
Multi-Family (RM-16, RM-32, RM-48)	0	0.0%	*No cap*
Open Space*	46,117	1.4%	*No cap*
Public and Semi-Public	469,047	14.2%	*No cap*
Single Family	0	0.0%	*No cap*
Single Family - Hillsides	0	0.0%	*No cap*
Sub-Total	811,002		
TOTAL	3,307,183	100.0%	

In compliance with the General Plan, this table reports net-new development. When a smaller building is demolished to construct a larger building, the difference in square footage between the two is reported.
**Construction in the Open Space Zone has been limited to improvements to the Rose Bowl, the new Kidspace Museum, new bathrooms at parks, new picnic shleters, and the Police Department's new shooting range.*
Source: Planning and Development Department 2009, City of Pasadena

Remaining Development Capacity

Each specific plan area has a cap (or development allocation) limiting the amount of net-new, non-residential square footage. The top three specific plans closing in on their cap include the:

- Central District Specific Plan (at 40% of its cap);
- South Fair Oaks Specific Plan (at 18% of its cap); and
- East Colorado Specific Plan (at 11% of its cap).

The specific plans with the most capacity remaining include the:

- West Gateway Specific Plan (at zero percent of its cap); and
- East Pasadena Specific Plan (at three percent of its cap).

See ***Figures 27*** and ***28*** in the Appendix for more information regarding the remaining development capacity in the Specific Plan areas.

➢ TRAVEL CHARACTERISTICS

Vehicles per Household

Vehicle ownership is a contributing ingredient to the amount of travel that occurs in the City. The American Commuter Survey estimates that 40.3% of households in Pasadena have one vehicle and 34.5% have two vehicles. These figures are consistent when compared to Los Angeles County.

Mode Share Trends

Between 2000 and 2008, the percent of Pasadena residents who drove alone to work increased from 68.2% to 72.5%. During this same time period carpooling dropped, but transit use, walking and working at home all increased. See ***Figure 29*** below for additional information on mode share.

Figure 29.
Citywide Trends in Mode Share 1995-2008

Journey To Work	2000	2005-2008
Percent Drove Alone	68.2%	72.5%
Percent Carpool	12.8%	9.1%
Percent Transit	4.2%	7.0%
Percent Walk	5.1%	7.2%
Percent Work at Home	3.7%	4.2%

Source: The American Community Survey (ACS), 2000-2008 three year estimates

Trips by Purpose

The mode of travel compared to the purpose of the trip provides additional detail on travel trends. Using personally owned vehicles (POV) is the preferred mode by far, regardless of the purpose of the trip. See ***Figure 30*** below for more information on purpose of mode of travel.

Figure 30.

Detailed Purpose: WHYTRP	Mode				
	POV	Public Transit	Walk	Bike	Percent of Person Trips, travelers 5 and older
To/Frm Work	90.2	4.2	3.0	1.4	14.6
Work Related	88.1	2.8	5.6	0.7	2.3
Shopping	84.0	2.3	12.0	1.3	20.9
Family/Pers Bus	80.1	1.5	17.2	0.4	20.8
School/Church	70.5	3.8	20.5	0.6	11.3
Medical	83.3	8.8	4.1	0.2	2.5
Visit Friends & Family	83.4	0.9	12.6	2.1	5.9
Other Soc/Rec	72.0	1.4	23.0	2.5	20.1

Source: National Household Travel Survey, US Department of Transportation Federal Highway Administration

Traffic & Travel Times

Travel time studies are widely used to document congestion and to quantify the actual impact of mitigation improvements. Following the completion of the 2004 Land Use and Mobility Element update, the Department of Transportation worked closely with the Transportation Advisory Commission (TAC) to identify 30 corridors, to be studied (See ***Figures 31 to 38*** in the Appendix for more information on the studied corridors).

Out of the 30 total corridors**,** 11 corridors show improvement in the 2009 travel times versus 2006. These included Fair Oaks Avenue (north and south bound), Lake Avenue (north and southbound), Arroyo Parkway (southbound), California Boulevard (westbound), and Washington Boulevard (east and westbound).

A total of 15 corridors showed an increase in time of less than one minute, when comparing 2009 to 2006. These included Colorado Boulevard (eastbound), Orange Grove Boulevard (east and westbound), Lincoln Avenue (north and southbound), Del Mar Boulevard (westbound), Foothill Boulevard (east and westbound) and California Boulevard (eastbound).

A total of five corridors showed an increase of greater than one minute or 20%. They included Orange Grove Boulevard (north and southbound), Colorado Boulevard (westbound) and Del Mar Boulevard (eastbound). See ***Figure 39*** below for the complete list of studied corridors and their change in travel time.

Figure 39.

Change in Travel Time Corridor & Direction of Travel	2009 vs. 2006 (min:sec)	% Change
IMPROVEMENT IN TIME		
Fair Oaks Ave NB	-1:34	-16%
*Green St EB	-1:13	-23%
Lake Ave SB	-1:11	-17%
Lake Ave NB	-1:01	-14%
Arroyo Pkwy SB	-0:50	-16%
California Bl WB	-0:33	-9%
Washington EB	-0:17	-9%
Washington WB	-0:11	-7%
Fair Oaks Ave SB	-0:11	-2%
San Gabriel NB	-0:10	-7%
**Union WB	-0:02	-1%
INCREASE IN TIME – LESS THAN ONE MINUTE		
Colorado Bl EB	0:05	1%
San Gabriel SB	0:06	5%
Lincoln Ave SB	0:11	18%
Orange Grove (E-W) EB	0:12	3%
Hill Ave NB	0:14	5%
Lincoln Ave NB	0:18	11%
Walnut EB	0:19	5%
Walnut WB	0:19	4%
Hill Ave SB	0:21	8%
California Bl EB	0:23	6%
Orange Grove (E-W) WB	0:25	5%
Foothill Bl WB	0:30	10%
Arroyo Pkwy NB	0:31	14%
Foothill Bl EB	0:44	14%
***Del Mar Bl WB	0:52	10%
INCREASE IN TIME – MORE THAN ONE MINUTE OR 20%		
Orange Grove (N-S) SB	0:44	20%
Orange Grove (N-S) NB	0:54	22%
Colorado Bl WB	1:03	10%
***Del Mar Bl EB	1:08	16%

*Green Street only includes Hill Avenue to Arroyo Pkwy segment
**Union Street only includes Hill Avenue to Arroyo Pkwy segment
***Del Mar Blvd only includes Arroyo Pkwy to San Gabriel segment

Traffic counts have been collected by the Department of Transportation since the year 2000. See ***Figure 40*** in the Appendix for a citywide map that indicates traffic counts for designated corridors.

Traffic Collision Data

The following data are traffic collision counts from the Police Department Traffic Section. The Department of Transportation utilizes the data to conduct many types of traffic investigations. The data is broken down to the various types of collisions; this provides a better sense of what type investigation will be conducted and the type of mitigation that might be needed. The counts identified in the table are from the years 2004 and 2009; collisions did decrease by approximately 30%. The decrease was predominately in the areas of Broadside, Rear-End and Sideswipe collisions. See ***Figure 41*** in the Appendix for a comparison of traffic collisions in 2004 and 2009.

Gold Line Gate Times

When the Gold Line began its operations, there were instances when maximum gate down times reached 4:00 minutes. Subsequently, in 2007, City staff along with Metro conducted a study that suggested distinct improvements for the various grade rail crossings. Several crossing improvements were implemented at Glenarm, California and Del Mar that provided relief. Some of the improvements involved installing advanced communication paths between traffic controllers and the grade crossing systems. Traffic engineers continue to examine options to optimize the traffic signal operations and responses to the indications provided by the crossings. As well continue to coordinate with Metro operations.

During a 24 hour period a total of 160 trains service Pasadena. This number of trains remained constant since 2006. Of the 160 trains 31% result in a dual train crossing impact at one of the at-grade crossings.

The standard wait time at a red light, when a train is not present going westbound on California at Arroyo Parkway and eastbound on California at Raymond is 50 seconds. This is a similar wait time for a single train to cross an intersection.

See ***Figures 42 to 44*** in the Appendix for the average gate down times for Glenarm, Del Mar Boulevard and California Boulevard.

Traffic Improvement Programs

SR-710 Corridor Improvements

Despite the limited opportunities to increase street capacity in the Central District through road widening, the City completed over $28 million in street and intersection improvements in 2009 to address traffic impacted by the gap in the 710 corridor (currently the 710 freeway ends six miles to the south in Alhambra). Improvements include the addition of a right turn lane on California Boulevard between Raymond Avenue and Arroyo Parkway, improvements to Arroyo Parkway and Raymond Avenue as well as the improvements to the intersection of Lake Street and Walnut

Avenue. This project also included the construction and installation of Intelligent Transportation Systems (ITS) allowing improved automated traffic signal control along major corridors through the City impacted by the gap in the 710 corridor.

Kinneloa Avenue Extension
In 2010, the City completed an extension of Kinneloa Avenue. The extension begins at Colorado Boulevard and extends north, under the 210 freeway, to Foothill Boulevard via Titley Street. This project also included the placement of four traffic signals, and street improvements on Walnut Avenue between San Gabriel Boulevard and Altadena Drive. The result of the extension will greatly improve traffic circulation in the immediate area, and in particular, the intersection of Foothill Boulevard and Sierra Madre Villa Avenue

Neighborhood Traffic Management Program
The City's Neighborhood Traffic Management Program is tasked with protecting neighborhoods from the negative effects of traffic. This comprehensive program reduces and manages traffic volume, travel speeds, and traffic related noise on local streets. Twelve neighborhood traffic programs have been completed and three more are scheduled for the coming year.

Pasadena Trip Reduction Ordinance
The Trip Reduction Ordinance was adopted to incorporate alternative travel programs and incentives into the design of new buildings. For instance, multi-family, mixed-use, and other non-residential buildings greater than 15,000 square feet must provide bicycle parking. The ordinance also requires large new projects to submit a Travel Demand Management (TDM) plan that provides for a schedule of alternative travel programs and incentives. In 2008, the Trip Reduction Ordinance was strengthened and now requires compliance from all new non-residential projects greater than 75,000 square feet, multi-family projects with 100 units or more, and mixed use projects with 50 or more units. To date, there are 42 regulated sites that have an average 1.21 Average Vehicle Ridership (AVR). Of the 42 regulated sites, 23 are concentrated in the Transit Oriented Development areas; however these sites show similar AVR's to those outside the TOD areas.

Traffic Reduction and Transportation Improvement Fee
Through the 2004 General Plan update, City Council directed staff to study a new "fair share" transportation impact fee to anticipate and mitigate the impacts of growth on City streets. In November 2006, the City Council established the Traffic Reduction and Transportation Improvement Fee. Since 2007, the City has collected an estimated two million dollars in collected fees.

Funds are used to implement traffic and transportation projects required to mitigate traffic generated by new development. Example projects include enhancing street capacity, improving intersections and traffic signals, and increasing the frequency of service of the ARTS buses.

The fee is waived for non-residential projects in the Enterprise Zone Business Development Area and for affordable housing units built on-site. Projects that have workforce housing in at least 15% of the units pay a reduced fee.

➢ TRANSIT

Access to Transit

In total, there are 704 bus stops throughout the City served by multiple transit agencies. Pasadena ARTS buses serve more than 400 bus stops including those that serve as essential transfer points at six Metro Gold Line Stations.

Generally, a ¼ mile radius represents the distance and time (about a ten-minute walk) that most people would be willing to walk to public transportation. Transit services are distributed adequately across the City so that nearly 90% of the community is within a ¼ mile radius of a bus stop or rail station. See ***Figure* 45** in the Appendix for a map showing transit coverage.

Transit Frequency

Transit frequency is targeted in the high density corridors and commercial centers like the Central District. These areas create adequate transit ridership to justify frequent service (see ***Figure 46*** in the Appendix for a map showing route frequencies). The Central District consistently has higher transit frequencies. The Central District also encompasses four Gold Line Stations. During the weekday peak periods, Colorado Boulevard, Fair Oaks Avenue and Arroyo Parkway are frequently serviced by Metro and ARTS buses. It is estimated that a bus travels through the Fair Oaks Avenue and Colorado Boulevard intersection every one to five minutes.

All other major corridors such as Orange Grove Boulevard, Washington Avenue, North Fair Oaks Avenue, Los Robles Avenue, North Lake Avenue and Altadena Drive are serviced every 16 to 30 minutes. The lowest frequency areas are the Rose Bowl and Linda Vista Avenue, which are serviced every 46-60 minutes.

ARTS Ridership

The total number of passengers using each route provides an important look at service productivity. In Fiscal Year 2009, the total system carried an average of 30 passengers per hour, per line, which was a ten percent increase compared to Fiscal Year 2008.

Routes 31/32, 20 and 40 have the highest ridership. These lines are considered Local Lines, which connect major neighborhood service areas to diverse community destination centers as well as schools, shopping centers and Gold Line stations. The combined ridership on these lines increased by nine percent, compared to Fiscal Year 2008.

Ridership on Route 20 grew by four percent to 41 passengers per hour; ridership on Routes 31/32 increased by 14% to 42 passengers per hour; and ridership on Route 40 increased by 14% to 35 passengers. The Feeder Lines which include Routes 10, 51/52, 60 and 70 provide links between the business districts and Gold Line stations or connect low density residential neighborhoods to the Central District. Overall, the ridership on these lines increased by 16%. Route 10 had a 20% increase; Route 51/52 had an increase of seven percent; Route 60 had a 17% increase; and Route 70 had an increase of 39%. See ***Figure 47*** in the Appendix for more information on changes in ridership.

ARTS Bus Capacity

Current data shows that Routes 20, 31/32 and 40 reach capacity generally around the AM and PM peak times. Route 20 running counterclockwise experiences passenger overloads most of the route between 1:20 p.m. and 4:20 p.m. This may be a result of the various schools and train stations along the route. Route 31 Westbound experiences high capacities between 2:00 p.m. and 4:15 p.m. See ***Figures 48*** to ***52*** in the Appendix for a detailed map identifying passenger loads for Routes 20, 31/32 and 40.

Gold Line Ridership

Since the inception of the Metro Gold Line, ridership continues to grow on a year by year basis. The cities that are served by the Gold Line have seen an approximately 20% increase in ridership from 2007 to 2009. The Los Angeles County Metropolitan Transportation Authority (LACMTA) provided the City with ridership. Ridership on the average weekday increased from 17,564 in February 2007 to 19,541 in February 2008, to 22,271 in February 2009. See ***Figures 53*** and 5***4*** in the Appendix for the average boarding and alighting per Pasadena Gold Line station.

➢ BICYCLE MASTER PLAN

Bikeways

In November 2000, the City adopted its Bicycle Master Plan. The plan called for a comprehensive network of bike lanes and routes, proposes bicycle parking and bicycle programs, identifies funding sources, and lists project priorities. The City has implemented a majority of the existing Bicycle Master Plan. Currently, Pasadena has 18.6 miles of Class II bike lanes, 25.1 miles of Class III bike routes and 37.7 miles of enhanced Class III bike routes.

The Department of Transportation is presently updating the Bicycle Master Plan. The draft plan proposes 3.3 miles of Class I bike path, 16.3 miles of new bike lanes, 15.8 miles of new or improved Class III bike routes, 0.6 miles of new or improved Class III enhanced bike routes, and 11.1 miles of emphasized bikeways. While Pasadena has an extensive network of bikeways, a finer network and a higher-design level will accommodate and encourage more bicycling.

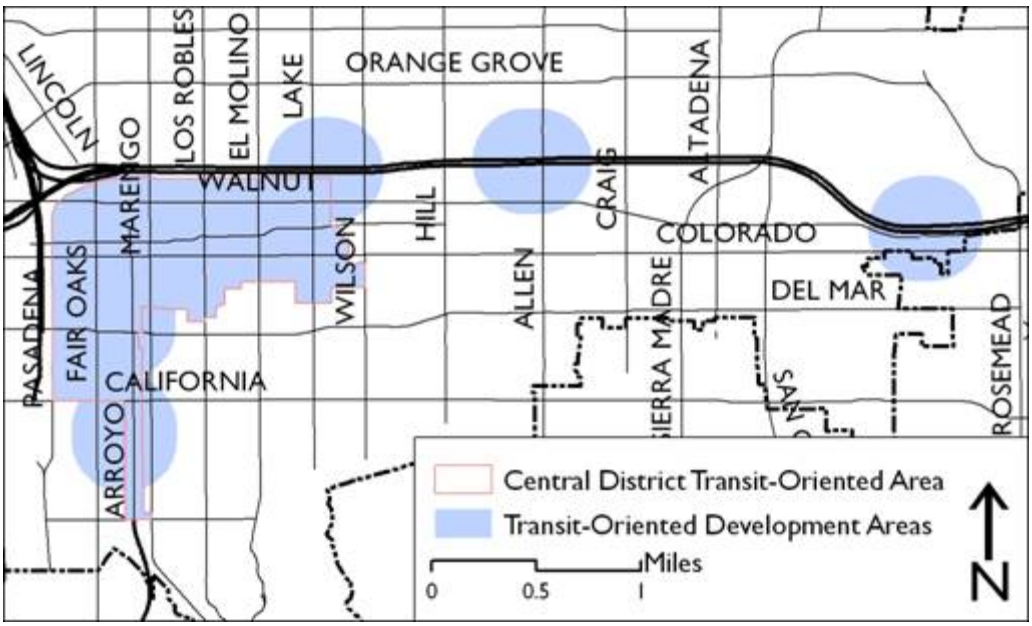
Bicycle Parking
Since 2000, the Department of Transportation has added 300 bicycle parking racks and lockers at 235 locations. These parking devices have capacity for 611 bicycles, and are located at train stations, along city streets, in parks, at libraries, at civic buildings, and other locations as needed. The Department of Transportation regularly adds bicycle racks upon request.

➢ TRANSIT ORIENTED DEVELOPMENT

Standards and Uses in Transit Oriented Districts
Since 1994, the City adopted standards to promote non-auto related trips in Transit Oriented Districts, or TODs. The City's TOD areas include most of the Central District (the main exception being Lake Avenue south of Cordova Street) and areas within one quarter mile of a Gold Line light rail station. ***Figure 55***, below, shows the Central District Transit-Oriented Area, and the TODs.

Figure 55.

Map of Transit Oriented Development Areas



The TOD standards prohibit uses that do not encourage pedestrian activity at the sidewalk or are geared to cars. For instance, uses such as vehicle services, storage, wholesale distribution, large-scale recycling facilities, and drive-through businesses are prohibited. Additionally, to make walking more attractive, some specific plans include special design standards. At the same time, TODs in Pasadena allow higher density residential uses and mixed use developments with ground level commercial and upper level housing.

Parking rates are also reduced in TODs: for an office use it is reduced by 25%, for other non-residential uses by ten percent, and for multi-family residences from two spaces per unit to one and one-half spaces per unit. To further incent pedestrian activity, the Central District Specific Plan sets a minimum sidewalk width to ensure adequate room for people to enjoy moving around the area.

TOD Residential and Mixed Use Developments

Since 2000, approximately 3,785 net-new units were constructed in areas designated in the Zoning Code as Transit Oriented Districts. This is approximately 72% of all the units constructed citywide in that period. See ***Figure* 56** in the Appendix for a map showing locations of all multi-unit construction in relation to the TOD areas since 1994. It is important to note that the Zoning Code was modified in 2005 to include TOD standards.

Between 1994 and 2009, 3,596 units were constructed as part of mixed use developments, or 64% of all the units constructed citywide in this time period. Nearly 90% of all the new mixed use construction since 1994 was constructed in the Central District Specific Plan. Another five percent was constructed in the East Pasadena Specific Plan. The Commercial zones and the Fair Oaks Orange Grove Specific Plan accounted for three percent of the mixed use units constructed. See ***Figures 57* and 58** in the Appendix for information about the locations of mixed-use development city-wide.

Effects of TOD Parking Reduction on New Multi-Family Developments

In an effort to mitigate any potential impact on existing neighborhoods from the reduced parking rates in new multifamily developments, residents in new multi-family projects are prohibited from receiving on-street parking permits. To date approximately 100 new projects have had this condition imposed ensuring that all vehicles are parked on site or in off-street lots.

Characteristics of TOD Residents

In 2005, the Mineta Transportation Institute completed a survey of residents, building managers and developers of TOD projects along the Gold Line from Downtown Los Angeles to the Sierra Madre Station in Pasadena. The study included residents of 23 buildings within walking distance of Pasadena's six Gold Line stations. Of those who responded, 81.4% live in small, one- or two- person households representing relatively few families with children. More than 70% of respondents' households have one vehicle available for each person of driving age.

The largest share of survey respondents (41%) classified their current occupation as "professional". This is much higher than the region as a whole, where only 14% of the population works in professional occupations. The next largest category was unemployed and retired persons (16%), and persons in managerial and administrative positions (15.6%). Household incomes were fairly evenly distributed, similar to that of the greater Los Angeles area, except that the station-area households are les likely to have incomes of less than $30,000.

People were most likely to move in to the TOD area because of the neighborhood quality (72%), the cost of housing (62%), and the type or quality of housing (57%). Thirty-seven percent moved to their current residence for improved access to shops and other services, and 18% moved for improved highway access. Only 22% of respondents reported “access to transit” as one of their top three reasons for moving to the station area. Transit was most frequently noted as a factor in the Allen and Sierra Madre Villa stations.

Nearly 15% reported that they commute by transit every day, 4% use it two to three times per week, and 10.7% use transit at least once per month. More than 75% never or rarely use transit for commuting. Statewide nearly 30% of TOD residents use transit every day so the Gold Line TOD results are lower than the average.

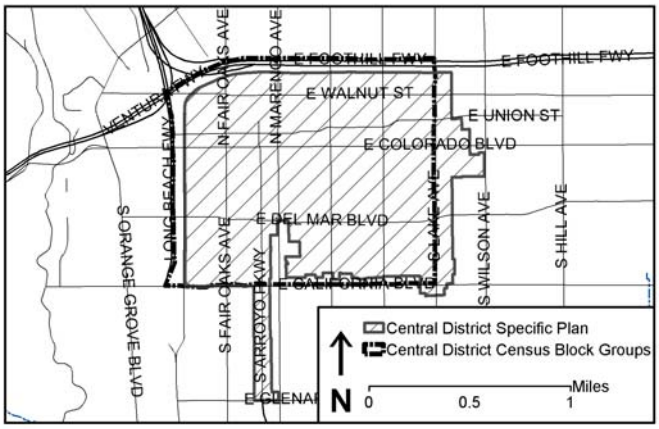
➢ FOCUS ON THE CENTRAL DISTRICT

Since the 1994 General Plan, the Central District saw more residential and non-residential growth than any other area of the city. Approximately 69% of all residential units and 40% of all non-residential square footage built in the City since 1994 was constructed in the Central District.

General Plan Growth Projections
The 2004 General plan allotted 5,095 residential units and 6,217,000 non-residential square-feet to the Central District. As of 2009, the Central District is at 72% of its cap for residential units but at only 23% of its cap for non-residential square footage.

Population
To calculate the Central District’s population, the City used the boundaries of the US Census block groups that covered the same geographic area as City’s Central District Specific Plan. While the boundaries of the block groups and specific plan area are not identical, they are very consistent and both were used for calculating purposes. See ***Figure 59,*** below, for a map of the Central District and the Census block groups.

Figure 59.



The Central District's population grew slowly in the 1990s, and only increased by four percent from 1990 to 2000 to 11,491. The City's Planning Division estimates from 2000 to 2009 population of the Central District increased by 40% to approximately 16,497.

Between 2000 and 2009, 2,872 market-rate and 295 affordable residential units were constructed in the Central District. Applying an average household size of 1.664 people per unit (2000 US Census figures for Central District Census block groups) and a five percent vacancy rate in the new units, an estimate of the added population for the Central District since 2000 comes to 5,006 people. The 2000 Census reported 11,491 people in the Central District. The estimated total population of the Central District at the end of 2009 was approximately 16,497.

Claritas, a demographics analysis company, estimates that the population in the Central District in 2010 is 16,658. Claritas bases some of its estimates on the American Community Survey, which at the City level has a margin of error of eight percent. Claritas does not provide a margin of error for its survey.

Housing

In 1994, the General Plan set a maximum number of 5,095 net-new, market rate units that could be built in the Central District. Based on that number the City projected that the Central District's population could expand to 22,478 at build out. In terms of population, the Central District is at 72% of its build out, and in terms of units it is 87% of its build out.

The percentage of residents who owned their own units remained relatively constant in the City as a whole from 1990 to 2000, decreasing slightly from 46.3% to 45.8%, and remained lower than the percentage of residents who owned their own units in the County overall. Current ownership data is not available except in the 2008 American Community Survey and Downtown Survey. The American Community Survey is not considered accurate because of its large margin of error for sub-areas such as the Central District. Of those who participated in the City's 2010 Downtown Survey, 33% owned their own unit. See ***Figure 60*** in the Appendix for a detailed table showing a comparison of renters and homeowners in the Central District, Pasadena, and LA County.

Age Distribution

Between 1990 and 2000 the Central District has maintained a distinctive age breakdown. There are a larger percentage of 25-34 year olds and a smaller percentage of people under 18, than the County and the City. In the 2000 Census, approximately 33% of the Central District was made up of 25-34 year olds, nearly double the figure for the County and the City's population. While 23% of the City's population and 28% of the County's population were under the age of 18, only eight percent of the Central District's population was under the age of 18.

The 2010 Downtown Resident Survey asked respondents how many children currently live in their homes. 763 respondents answered that question. These respondents reported that there are 1,235 adults and 125 children living in the households of respondents to this survey. Children made up ten percent of the population of the households that responded to this survey.

Claritas, a demographics analysis company, estimates that in 2010 approximately 12% of the population of the Central District is under the age of 18. Claritas relies on Census data and the American Community Survey and does not publish a margin of error.

See ***Figure 61*** in the Appendix for a detailed table showing the age of Central District residents.

Average Household Size

Average household size for the Central District has consistently been lower than the County and City. In the 2000 Census, the average household size for the Central District was 1.66, compared to 2.98 for the County and 2.52 for the City. Of those who participated in the City's 2010 Downtown Survey, the average household size was 1.67 persons.

How Residents Travel

According to the 2000 Census, approximately 70% of Pasadena residents drove alone to work, and an additional 13% carpooled. An additional 4.7% used public transit, 5.3% walked and 3.8% worked at home. Within the Central District, 77% drove alone and 3.2% used public transit.

Of those who participated in the City's 2010 Downtown Survey, 51% of Central District reported driving alone. An additional 15.8% of residents reported taking public transit to work.

The Downtown Survey also included questions that asked people mobility questions outside the commute to work. For these non-commute trips, respondents favored walking over biking and riding the bus or Gold Line. Thirty-five percent of respondents stated that they walked daily and another 32 percent stated they walk two to three times per week. The least favored mode of transportation for respondents to the survey appeared to be bus travel; nearly 90% said they either never take the bus or take it less than once a month. See ***Figure 62***, for a graph showing the modes of transportation for Central District residents on non-commute related trips, or ***Figure* 63**, in the Appendix for the corresponding table.

While Central District residents have fewer vehicles per household than do residents of the City and County, they also have more vehicles per person. This may be due to the fact that Central District households have fewer persons per household than other parts of the City. See ***Figure 64*** and ***Figure 65*** in the Appendix showing the number of vehicles per person.

➢ ECONOMIC DEVELOPMENT

Median Income

The median income of Pasadena residents appears to be more stable than residents of Los Angeles County. While the County's median income fell eight percent from $57,343 in 1990 to $52,736 in 2000, the City's median income fell less than one percent, from $57,569 in 1990 to $57,515 in 2000 (when adjusted into 2009 dollars). The 2006-08 estimates (an average of the three years) from the American Community Survey are $54,961 to $56,037 for the County and $54,486 to $61,106 for the City (the range incorporates the survey's margin of error). If the Survey's estimate is correct, it would demonstrate that the City's increase in median income since 1990 has been negligible. See ***Figures* 66** and ***67*** in the Appendix for comparisons of the median income between the City and LA County.

Employment

According to the US Census Bureau Center for Economic Studies estimates, the number of employees that work in the City of Pasadena has increased from 97,640 in 2002 to 98,636 in 2005 to 100,947 in 2008 (Note: these numbers do not include federal employees, self-employed workers and a worker's second place of employment). In 2008, the five largest industries by type included: professional, scientific and technical services with 14,600 employees; education, with 13,100; health care with 12,400; finance and insurance with 12,000; and retail with 10,400.

According to the 2000 Census, approximately 37% of the residents of Pasadena who are in the workforce worked in Pasadena. According to Census estimates for 2006-2008 this percentage increased to 43% (the margin of error is +/- 4%). In comparison, the estimates for Burbank and Glendale for the 2006-2008 period are 32 and 34%, respectively. See **Figure 68** for more detailed information on residents that work in the place of residence.

Business

In 2007, the Census Bureau, estimated that the City contained 4,584 business establishments, with a total annual payroll of $3,741,666. These establishments took in $11,111,472 in sales, shipments, receipts, or revenue. For a comparison to Glendale and Burbank, other nearby cities with similar characteristics, see ***Figure 69.***

Since 1997 the City's sales tax revenue increased every year, up until 2003. In 2009 dollars, the City received $28 million in sales tax revenue in 1997 and $39 million in 2003. Since 2003, the City's sales tax revenue has fallen by almost 20% from $39 million to $32.9 million (numbers adjust to 2009 dollars). See ***Figures 70*** and ***71*** for more detailed number and a line graph of retail sales tax revenue. See ***Figure 72*** for a comparison of retail sales generated by five of the City's business areas – Hastings Ranch, Old Pasadena, Playhouse, Paseo Colorado, and South Lake.

In 2008, there were 594 business licenses for companies that operated out of their homes. This number dropped to 429 in 2009. As of June, 2010 there were 223 home business licenses.

Unemployment Rates

The City's unemployment rate averaged 5.36% from 1998 to 2010. The lowest unemployment rate recorded for the City occurred in 2006, at 3.6% and rose to its highest at 9.4% in June of 2010. The unemployment rates for the City follow similar trends for the County and the Nation, but are consistently lower. See ***Figures 73*** and ***74*** in the Appendix for more information about unemployment rates.

Assessed Value of Property

The assessed value of property has increased by 64% since 1994 (when adjusted into 2009 dollars). The only period of decline occurred from 1994 to 1998, when property values declined by six percent. Properties subsequently regained their losses by 2001, three years later. See ***Figures 75*** and ***76*** in the Appendix for a detailed graph and table showing the assessed valuation of taxable property.

City Revenue

The largest source of revenue to the City's general fund comes from property taxes, followed by utility users' taxes and sales taxes. Together, these taxes and others make up nearly 55% of the City's general fund. One time fees - such as licenses, permits and fines, and charges for services - make up approximately 14% of the city's general fund revenue. The City's total general fund revenue has increased by 39% since 1994 (when adjusted for 2009 dollars). During that period there were nine years of growth and six years of decline in revenue, all nearly evenly spread out. See ***Figure 77, 78 and 79*** in the Appendix for a summary of the City's Revenue sources.

Tax Revenue

The seven major tax revenue sources for the City's general fund include: property tax, sales tax, utility users tax, transit occupancy tax, construction tax, business license tax, and franchise tax. Property taxes are the largest of these sources and have increased the most since 1994, nearly 46% from $47,428,000 to $69,062,000 (when adjusted in 2009 dollars). Sales taxes and utility user's taxes have increased the least, 14 and 17% respectively. In 2009, utility users taxes totaled $31,162,000 and sales taxes totaled $32,913,000. Local sales tax return is .0075 times the purchase prices, plus .0025 in state return of sales tax to the city, for a total of .01 times the purchase price. Of these sources, construction taxes vary the most from year to year and utility users' taxes vary the least. See ***Figures 70 and 71*** in the Appendix for more information about sources of tax revenue.

Property Based Improvement Districts

The City has three property based improvement districts (PBID) – Old Pasadena, The Playhouse District, and South Lake Avenue. Business improvement districts are areas where, in this case, property owners vote to pay an assessment to support improvements to the area. In 2009, the property owners of the City's three districts

assessed themselves $2,003,277. Old Pasadena's PBID received $853,473 from its assessments, the Playhouse District received $669,364, and South Lake Avenue received $480,440. In addition to the assessments, the Districts receive support from the City. In 2009, Old Pasadena received $545,000, South Lake Avenue received $18,000 and the Playhouse District received $165,000. The assessments and the City's contributions are used to pay for things such as sidewalk cleaning, trash removal, visitor guides (or ambassadors), marketing, and professional staff. In addition the PBIDs work on programs to address parking, physical improvements, and economic enhancements.

Parking Meter Districts
Another source of revenue that funds improvements to the City's sidewalks, alleys and streetscapes is the parking meter districts. In Fiscal Year 2009, the districts brought in $2.5 million in meter revenue. For more detail on the revenue and expenses of four parking meter district, see ***Figure 80***.

Growth in Enterprise Zones
The City has two Enterprise Zones which provide tax credits for businesses and employees within the zones. These zones make up more than four square miles of the City, which is roughly one-fifth of the City's land area. Since 2002, the Pasadena Enterprise Zones have issued over 5,000 hiring credit vouchers, generating $81 million in state tax savings for Pasadena companies.

➢ HISTORIC PRESERVATION

Landmark and National Register Districts
In 1994, the City had one historic Landmark District and six National Register Districts citywide. Since 1994, the City added 16 historic landmark districts, for a current total of 17 districts. In addition, the City added seven National Register Districts, for a total of 13 Districts (with only one district as both a Landmark and National District). Both the landmark and national districts include a broad range of commercial and residential areas.

Many of the new districts were established as a result of completing historic surveys. Between 1999 and 2003, the City completed three historic resource surveys targeted to different thematic categories: Arts and Crafts Period Residential Architecture, Period Revival Residential Architecture, and Multi-Family Residential Architecture. Studies such as these and other geographically targeted studies inform the community on the extent of the City's historic heritage and take steps to preserve it.

Of the 30,178 properties in the City, 3,693 are designated as historic (or approximately 12% of properties citywide). Adherence to standards for rehabilitation of historic buildings ensures preservation of these buildings and neighborhoods.

Mills Act
Another tool, commonly called the Mills Act, offers tax incentives to property owners for preservation and improvements made to historic properties. Currently, there are 104 properties that make use of this incentive.

➢ OPEN SPACE AND PARKS

Total City Parkland
Since the 2004 General Plan Update, the City has added 42 new acres of parkland for a total of 342.4 acres of parkland citywide. This includes neighborhood parks, community parks such as Victory Park and citywide parks such as Brookside Golf Course. In addition, the City has added 20.6 acres of passive open space area for a total of 522.9 acres of open space citywide. Open space areas include publicly owned natural open space areas such as the Arroyo Seco.

The City's Green Space, Recreation and Parks Element, approved in November of 2007, followed the best practices of the National Recreation and Park Association (NRPA), by preparing a recreation demand analysis to quantify facility and program needs. The study showed an existing deficit in facilities for organized adult softball, organized youth soccer, tennis courts and skate boarding. The full analysis can be found in Table 4-2.1 of the Element.

Residential Impact Fee
In 2004, the City approved the Parks and Recreation Impact Fee Nexus Study, in which the existing ratio for developed parkland was 2.19 acres per 1,000 residents. The ratio for open space was 1.49 acres per 1,000 residents (this does not include golf course, schools, and parkland and open spaces outside the City boundaries). The Nexus study determined that by 2024 an additional 44.5 acres of parkland and 30.5 acres of open space will be needed to accommodate estimated population growth.

Based on the findings of the Nexus Study, the City established a residential impact fee to fund improvements to the park system. Since December 2005, the City has collected more than $13.5 million in fees and has earned over $1.5 million dollars in interest. As of June 2010, the City had appropriated or spent nearly $15.0 million on improvements to the park system. Many of the project expenditures are detailed below.

Green Space Acquisition and Development
The 2004 Parks and Recreation Impact Fee Nexus Study established a rationale and standard for determining park and recreation needs for residential development. The existing ratio in 2004 was 2.19 acres per 1,000 residents for developed parkland, and 1.49 acres per 1,000 residents for open space (note: The Nexus Study did not include Pasadena golf courses, schools, and parkland and open space outside City boundaries). The Nexus study determined that by 2024 an additional

44.5 acres of parkland and 30.5 acres of open space will be needed to accommodate estimated population growth.

Since 2004, the City has added 42 acres of parkland and 20.6 acres of open space:

- In 2005 – the City purchased the 30 acre Hahamongna Watershed Park Annex area. A Parks Mater Plan addressing the future use of the annex area was adopted by the City Council in 2010.
- In 2006 – the City converted 7.6 acres of unimproved park to the City's first dog park. Besides changing the name of the park to Viña Vieja, the City also added play equipment and picnic tables.
- In 2008, the City opened the 1.9 acre Linda Vista Park on land leased from the Pasadena Unified School District.
- In 2010, the City expanded Robinson Park by 2.5 acres.
- In 2009, the City purchased 20.6 acres of natural open space in Annandale Canyon for use as passive open space.

The City estimates the population of Pasadena increased by 3,995 people since 2004. The ratios for the new green space to residents is higher than the ratios established in 2004, or 10.5 acres of developed parkland for each 1,000 new residents and 5.2 acres of passive open space for each 1,000 new residents.

Other green space and public areas have been developed as part of private developments, with much of it in or near the central district. The Ambassador West project preserved many gardens and the great lawn as a public park. The Westgate project set aside areas for public green space, the Del Mar mixed-use project included a public courtyard at the Gold Line Station and the Paseo Colorado reestablished an important historic walkway as a public plaza.

The City has partnered with the Pasadena Unified School District to keep the following sites open to the public when the schools are not in use: Madison Elementary, McKinley Elementary, Pasadena High and Muir High. Beyond establishing joint use agreements, the City also improved recreational space at these sites by installing new playground equipment at Madison Elementary in 2007 and at McKinley Elementary in 2008. Also, the City resurfaced ten tennis courts at Pasadena High School.

➢ UTILITY AND CAPACITY

Water Usage

Since Fiscal Year 2007, daily per capita water consumption has decreased from 204 gallons to 175 gallons (see the City's 2009 Green City Indicator's Report for more information). Additionally, since 2006, the City's number of residential units and non-residential square footage has grown by 2.4% and 1.8%, respectively. Despite this increase in growth for residential unit and non-residential square footage growth, water usage has decreased. See ***Figure 81*** and ***Figure 82*** in the Appendix for more details on water usage.

Water usage from single-family residential units in Pasadena is higher on a per unit basis compared to higher density construction. In a review of residential units constructed between August 2008 and January 2010, new single-family homes used approximately 20,500 more gallons of water in an average month than new units in high density residential zones (or the RM-48 zones, which allows up to 48 units per acre). This is approximately ten times the water usage. For comparison purposes, the average 20 foot by 40 foot swimming pool holds approximately 27,000 gallons. Multi-family units in medium density residential zones (or the RM-16 zone, which allows up to 16 units per acre) used approximately three times the amount of water in an average month as those in the high density zones.

Average water usage for single-family lots is highly variable during the year, peaking during the summer months. Increased landscape irrigation causes this summer peak. Water usage is nearly constant throughout the year in RM48 zoning. See ***Figure 83*** and ***Figure* 84** in the Appendix for more details on water usage.

Energy Usage

Load Growth

In 2009, the City Council adopted a 20-year Energy Integrated Resource Plan (IRP). This plan acts as a roadmap for ensuring reliable, environmentally responsible electric service, competitive rates and energy independence.

The Pasadena Department of Water and Power (PWP) manages a service territory of 58,000 customers with a peak load of slightly more than 300 MW (Megawatt or one million watts). PWP's electricity sales growth has averaged less than one percent per year over the past two decades. Total sales grew from 1.07 TWh (terawatt hour) in 1990 to 1.22 TWh in 2007, for an average annual growth rate of 0.8%.

As part of the 2009 IRP process, a long-term forecast of electricity sales for PWP was developed, based on the General Plan's 1994 and 2004 forecasts of population growth, employment and commercial floor space, as well as trends in retail electricity prices.

Existing Supply Resources

The City of Pasadena owns over 200 MW of on-site, natural gas-fired local generation and is capable of importing up to 215 MW more. Pasadena also has ownership shares and long term contracts with a number of power generation facilities located throughout the west.

The 2009 Energy Integrated Resource Plan reported that Pasadena Water and Power relies on power generation from the coal-fired Intermountain Power Plant in Utah for over 60% of its energy needs and natural gas for 14% of its energy needs. Ten percent of the City's power energy needs come from renewable sources, while

nuclear and hydro make up for approximately five percent. Another five percent is purchased from the wholesale energy market.

Green Power Goals

The City of Pasadena's Green City Action Plan, adopted in 2006, calls for significant reductions in peak demand. PWP has a standing goal of reducing the City's peak load by ten percent by 2012 (the baseline year for the Green City Action Plan is 2004). Despite an increase in residential and non-residential development, the city's gross peak energy load has been reduced by 5.42 megawatts from 2007 to 2009. The City's goal is to reduce peak electric load in 2012 from the projected 322 megawatts to 289 megawatts. In addition residential energy use has remained relatively constant at approximately 337,000 megawatts-hours from 2007 to 2009.

Savings from energy efficiency programs have improved from 2006 to 2009 in both the residential and commercial sectors. Residential efficiencies increased from 1,300 megawatt-hours to 7,956 and commercial efficiencies from 3,201 megawatt-hours to 13,766. One megawatt hour of energy can sustain 1,000 average houses for one hour.

Water and Power Capacity

Pasadena Water and Power's charge is to provide sufficient water and power service to meet the city's needs. To ensure that this happens, PWP prepares four major plans:

- Water Delivery Master Plan (Adopted 2002)
- Power Delivery Master Plan (Adopted March, 2005)
- Power Integrated Resource Plan (Adopted March, 2009)
- Water Integrated Resource Plan (2010 recommendations pending)

Each of these plans is intended to reliably meet demand forecasts that incorporate trends in consumer behavior and contemplate a full build out of the 1994/2004 Land Use Element of the General Plan.

The Water and Power Delivery Master Plans are designed to ensure that PWP has adequate infrastructure to safely and reliably deliver power or water to meet its peak projected demands. These infrastructure plans are reviewed annually as part of the capital improvement budget process.

The Integrated Resource Plans (IRPs) are used to determine the most appropriate mix of supply-side (traditional, renewable, distributed resources) and demand-side (conservation) resources to meet projected peak demand and annual average demand. The IRPs must balance reliability, cost, and environmental goals along with other community interests. To be successful, major updates to the IRP's require substantial stakeholder involvement. Typically, these plans are reviewed by staff annually and substantially updated every three to five years.

Sewer facilities
The City contains 350 miles of sewer pipe. Nearly 90% of the sewer line is constructed of vitrified clay pipe (VCP). VCP pipelines are generally considered to provide reliable service for 90 to 110 years if they are properly designed, constructed, and maintained. By this standard, the oldest portions of the City's VCP sewer lines are nearing or have passed into the end of their useful life. Inspection during the preparation of the Master Sewer Plan, in 2007, showed these pipes to be in acceptable condition.

However, 8.6% of the system is constructed of concrete, which has a shorter life span than VCP and must be monitored more often. Concrete has a much shorter useful life than VCP (50-70 years) and is much less resistant to corrosion. The Master Sewer Plan recommends that sewer pipes constructed of concrete, especially the older ones, be prioritized for analysis and identified for inclusion in the City's proactive pipeline replacement program.

Approximately 35% of the City's sewer system is 80 years old and over 60% is over 70 years old. Video inspections have shown that much of the older system is in good condition. Despite that, the Master Sewer Plan recommends that the City plan for replacement. See **Figure 85** in the appendix for a table hosing the age of the City's sewer line by decade.

Collection System Capacity Insufficiencies
The Master Sewer Plan looked at six scenarios to analyze the sewer system's capacity. Neither of the average dry weather flow (AVDWF) scenarios, existing or future, showed a lack of capacity. This fact indicates that the capacity of the collection system has been fundamentally maintained during the City's growth and development.

Nonetheless, the lack of capacity during the remaining four scenarios (existing peak dry weather flow, existing peak wet weather flow, future peak dry weather flow, and future peak wet weather flow) requires improvements that should be undertaken to lower the probability of hydraulic failure under peak dry weather flow (PDWF) or peak wet weather flow (PWWF).

The Master Sewer Plan found that the sewer use fee present at the time did not generate enough revenue to properly maintain and improve the sewer system. Consequently the Council approved an increase in the sewer use fee in accordance with the findings of the Master Sewer Plan. In addition, the Council created a sewer facility charge on new construction to ensure that the cost of capacity upgrades be borne by those generating new sewage to the system. With these fees in place the necessary improvements and maintenance can be made to meet the City's population build out numbers in the 2004 General Plan.

For a list of the pipelines with insufficient capacity, see Table 6-3 and Figure 6-1 of the Master Sewer Plan.

Solid Waste Disposal
Since 1994 the City has increased by 10,207 residents and by approximately 3.3 million square feet of commercial square footage. Despite this, the tons of solid waste generated citywide decreased from 258,752 in Fiscal Year 2006 to 190,802 tons in Fiscal Year 2009. From 1995 to 2008, the diversion rate increased from 42% to 66%. The number of pounds of solid waste disposed per capita decreased from 1,634 in Fiscal Year 2006 to 1,349 in Fiscal Year 2009, similarly the numbers for solid waste generated declined from 3,590 to 2,591 per person during the same time period.

GENERAL PLAN POLICY DIRECTIVES

➢ GUIDING PRINCIPLES

Seven guiding principles were adopted as part of the 1994 General Plan update, and reaffirmed in 2004:

1. Growth will be targeted to serve community needs and enhance the quality of life.
2. Change will be harmonized to preserve Pasadena's historic character and environment.
3. Economic vitality will be promoted to provide jobs, services, revenues and opportunities.
4. Pasadena will be promoted as a healthy family community.
5. Pasadena will be a City where people can circulate without cars.
6. Pasadena will be promoted as a cultural, scientific, corporate, entertainment and education center for the region.
7. Community participation must be a permanent part of achieving a greater City.

Each of the seven principles is supported with multiple policies and objectives, creating a complex and sometimes conflicting array of directives. Some of the policies and objectives read as simple affirmations regarding the kind of city Pasadena should be and others are worded in more specific terms, almost as action items. Because of this inconsistency and the broad scope encompassed by the principles, it is difficult to prepare a summary of what has been done to accomplish them. As a result, the following narrative focuses on the directives specifically called out in the plan as the implementation tools. While this is undoubtedly inadequate to describe all the work and progress that has been done under the principles, it allows a more manageable focus on those actions that were deemed the highest priority by the authors of the plan at the time.

Lacking more detailed and potentially unwieldy documentation, it is still important to express that the seven guiding principles have served as the City's vision for

achieving a greater city and have guided many decisions at the City Council level and down through the organization.

➢ IMPLEMENTATION TOOLS

The 1994 General Plan and 2004 updates included an implementation section. The 2004 implementation section identifies ten actions to implement the Guiding Principles as listed below.

Specific Plans
The 1994 General Plan called for the creation of the following seven specific plans, and targeted growth to them. The 2004 General Plan Update reaffirmed the need and purpose of the specific plans. The General Plan designates the intensity of development and the mix of allowed uses within each specific plan area. See Figure 71, in the Appendix, for a map of the specific plan areas.

The specific plans contain detailed development standards, distribution of land uses, infrastructure requirements, and implementation measures for the development of its specific geographic area. Transit-oriented development, pedestrian-oriented development, urban villages and mixed use development were included in several of the plans. It is through these standards that the goals and policies of the General Plan are implemented.

All seven plans have been completed. In addition, an eighth specific plan is currently underway for the North Lincoln Corridor.

Figure 87.

Date of Specific Plan Completion and Updates

Specific Plan	Year Completed	Last Update
Central District Specific Plan	2004	--
East Colorado Boulevard Specific Plan	2003	--
East Pasadena Specific Plan	2000	2006 Minor changes
Fair Oaks / Orange Grove Specific Plan	2000	2006 Minor changes
North Lake Specific Plan	1997	2008 5-year update
South Fair Oaks Specific Plan	1998	2006 Minor changes
West Gateway Specific Plan	1998	--

See ***Figure 86*** in the Appendix for a map showing the location of the plan areas.

Other Planning Tools

The 1994 General Plan and 2004 Update identified zoning map amendments and code revisions as key tools to implement the policies, objectives and policies of the General Plan.

Zoning Map Amendments

Since the adoption of the 1994 General Plan, the City implemented more than 20 zone changes intended to protect residential neighborhoods. These zone changes reduced future densities of multi-family zones adjacent to single-family neighborhoods. In addition to the density changes, a special height limit overlay was implemented in four neighborhoods where multi-family development was occurring at a height that was incompatible with existing residential development. See ***Figure 88*** in the Appendix for a map showing the location of these overlays.

Zoning and Municipal Code Revisions

Since 2004, numerous zoning code amendments were adopted to implement the principles of the General Plan. One key amendment included a 2004 update to the City's Hillside Ordinance, which reduced allowed floor area for larger lots and established neighborhood compatibility standards.

In addition, a comprehensive update to the Zoning Code was completed in 2005, which codified all standards of the Specific Plan areas and established standards for Transit-Oriented Developments (TODs), mixed-use, urban housing and work-live projects.

Numerous Code Amendments were completed between 2005 and 2010 to protect neighborhoods. Examples include an amendment prohibiting medical marijuana dispensary uses and others developing stricter regulations for sexually oriented businesses, pawn shops and massage uses, and wireless facilities.

To further review the impacts of multi-family developments on single-family neighborhoods, an in-depth review of the City of Gardens standards (standards for multi-family development) was completed. This process resulted in updates to the Zoning Code which included additional second and third story setbacks for residential structures from single-family zoned areas. In 2009, the floor area for large single-family lots was reduced to address issues of mansionization. See ***Figure 89*** in the Appendix for a more comprehensive list of Zoning Code Amendments.

In 2002, the City Council adopted the Tree Protection Ordinance, which established requirements for protecting landmark, native and specimen trees on public and most private properties. An update to the ordinance was adopted in 2010, which increased the number of protected trees.

In 2005, the City adopted the Green Building Practices Ordinance to increase the environmental performance standards of buildings in Pasadena by requiring developers to design large developments with the intent to meet LEED (Leadership in Energy and Environmental Design) standards. All new municipal buildings and large renovations must also achieve LEED Silver standards. From Fiscal Year 2006 to Fiscal Year 2009, the number of LEED certified buildings increased from three to eight, and the number of LEED registered buildings increased from just five to 48. In Fiscal Year 2008, building permits were issued for 1,052,058 square feet of new construction that met the threshold of the Green Building Ordinance, this accounted for approximately 63% of all new construction.

Green Space and Conservation Element

The 2004 General Plan directed that the Open Space Element be revised and renames the Green Space Element. It also called for the element to incorporate all existing plans prepared for open space and park areas and include new planning and implementation efforts. In addition, it called for the Conservation Element to be revised in tandem with the Green Space Element.

In 2007, the City approved the Green Space, Recreation and Parks Element. The element included nine core principles related to natural open space, developed parklands, recreation facility use and distribution, recreation programs types and distribution, and organizational structure and ongoing community participation. At the same time, the City adopted the Green Space, Recreational and Parks Master Plan to provide a guide for the creative, orderly development and management of recreational facilities and programs for the City.

The need for a separate element focusing on natural open space was identified during the development of the Green Space, Recreation and Parks Element. In 2008, the City initiated the process to incorporate open space into the existing Conservation Element and update the element as the Open Space and Conservation Element. That update is currently in process and is expected to be completed by the end of 2010.

Arts and Culture Element

The 2004 General Plan update directed the preparation of an Arts and Culture Element to address items such as creative support, cultural equity, education, funding, market and cultural tourism and public art. In 2005, the City adopted the *Cultural Nexus: An Action Plan for the Cultural Sector in Pasadena*, to address many of the items that would be incorporated in a General Plan element. The document includes a nexus vision, principles and policies to help advance the cultural life of the community by drawing together the City's rich and diverse assets.

In addition, a *Master Public Art Plan* is being prepared and several new programs have been implemented in response to the needs identified in *Cultural Nexus.* Those include a new community mural program, a rotating public art exhibition program, and art in vacant storefronts.

Economic Development and Employment Element
The 2004 General Plan update directed the preparation of an update to the Economic Development and Employment Element with goals and policies to guide decisions affecting economic opportunities and employment growth in the City. The City is currently in the process of developing a strategic plan. Upon its completion the City will begin updating the Economic Development and Employment Element General Plan Element.

Citywide Design Principles
In 1992, the City adopted broad Design Principles for all new development projects. These principles were updated and refined as part of the 2004 General Plan update. The principles include: enhance the surrounding environment, incorporate human values and needs, and show creativity and imagination. These general principles are to be used for projects throughout the City.

The seven specific plans further refined these design principles into design guidelines and development standards. The Central District took this a step further and included detailed design guidelines. In 2009, the City approved the Commercial and Multi-Family Design Guidelines, which work in conjunction with the design guidelines that can be found in six of the seven specific plan areas (the exception being the more detailed Central District Specific Plan).

The 2009 Design Guidelines reflect the concern in the community about the need for a building to reflect its context. The document is divided into three chapters. The first focuses on how a building should relate to and activate the street. The second chapter discusses how a building should relate to its surrounding context. The third chapter focuses on how a building's mass, details, and materials should emphasize the building's permanence. The Guidelines do not specify one design theme for the City, but offer designers flexibility and imagination – a concern offered during public outreach – while defining elements of popular styles.

Other Design Tools
Starting in January of 2010, two additional tools were added to help improve the design process and decisions. First, applicants can now submit for a preliminary consultation phase of design review. This allows building designers to obtain comments from city staff and, in some cases, the Design Commission, on their preliminary design concept prior to preparing formal design drawings. Second, applicant must now submit a three-dimensional, digital model of the proposed new building. The model can then be placed in the City's three-dimensional model to view the project's relationship with the surrounding built environment.

Over the last 15 years the City has instituted a number of policies and regulations to help new development blend with the old. This includes revising the City of Gardens standards (standards for multi-family development), creating additional building height limit overlays, and requiring the 2nd and 3rd stories of multi-family and non-residential structures to be setback further from single family zoned areas. In

addition to the height limit overlays approved, the Central District Specific Plan called for height reductions, in some places this was as much as 80 feet.

Historic Preservation

The 2004 General Plan update identified the following strategies to achieve the goal of preservation of Pasadena's historic character and environment:

- Completing historic context/ property type reports;
- Conducting Citywide survey of historic resources;
- Long range program of conducting Certified Local Government funded intensive surveys;
- Identification of strategies to protect or minimize negative impacts to historic resources; and
- Cultural Heritage Ordinance; incorporation into the City's Land Management System (now the City's Tidemark System).

Landmark and National Registered Districts

In 1994, the City had only one historic Landmark District and six National Registered Districts citywide. Between 1999 and 2003, the City completed three historic resource surveys targeted to different thematic categories: Arts and Crafts Period Residential Architecture, Period Revival Residential Architecture, and Multi-Family Residential Architecture. Studies such as these and other geographically targeted studies inform the community on the extent of the City's historic heritage and take steps to preserve it.

As a result of these studies, the City added 16 historic landmark districts since 1994, for a current total of 17 districts. In addition, the City added seven National Register Districts, or a total of 13 Districts (with only one district as both a Landmark and National District). Both the landmark and national districts include a broad range of commercial and residential areas.

Adherence to standards for rehabilitation of historic buildings ensures preservation of buildings and neighborhoods. Of the 30,178 properties in the City, 3,693 are designated as historic (or approximately 12% of properties citywide).

Code Amendments and Computer Tracking

Besides designating structures as historic, the City also created tools to assist owners of historic structures. The City created a process in which it can modify zoning standards in order to make relocation and reuse of historic structures easier. Similarly, owners of historic structures in multi-family zones can apply to convert their buildings to office space or bed and breakfast lodges. Furthermore the City also created the adjustment permit, which allows sites of two acres or more to tailor zoning standards in cases of preservation of historic resources. This new permit provided the flexibility needed to create a design for the Ambassador West site, which garnered neighborhood support and preserved numerous buildings, structures, and landscapes.

Information on historic properties (e.g. photographs, site plans, survey documents, etc.) are tracked on the City's Tidemark computer system and mapped on the City's Geographic Information System (GIS).

Other Preservation Tools
Another tool, commonly called the Mills Act, offers tax incentives to property owners for preservation and improvements made to historic properties. So far, there are 104 properties that make use of this incentive. Of the 30,178 properties in the City, 3,693 are designated as historic (or approximately 12% of properties citywide).

Redevelopment Areas
The 2004 General Plan update stated that the Redevelopment Plans should define future development for those areas not in Specific Plan areas. The City contains eight redevelopment project areas: the Downtown, Fair Oaks, Halstead Sycamore, Lake Washington, Lincoln Avenue, Old Pasadena, Orange Grove, and Villa Parke. The majority of these are located in the Central District and Northwest Pasadena areas.

Five year implementation plans, as required by the State of California, have been completed for Pasadena's Redevelopment Areas, including those areas not within a Specific Plan area. The most recent plan was adopted for the planning period of 2009-2014. The plan describes the specific goals and objectives related to reducing and eliminating blight for the project areas and describes how the Agency will implement the requirement to increase, improve and preserve low and moderate-income housing.

Master Development Plans
The 2004 General Plan update called for the City to continue using Master Plans as a tool to implement the objectives and principles of the General Plan. Since 1994, the City has approved or updated 13 master plans for property owned by major public institutions, including the California Institute of Technology (Caltech), Fuller Theological Seminary, Las Encinas Hospital, private schools, churches, and clubs. Another five are in the process of being updated. The plans establish the rules of development on the property, including the maximum amount, type and location of future development during the lifespan of the Master Plan. See ***Figure 90*** in the Appendix for a comprehensive list of existing Master Development Plans adopted by the City Council.

Management and Administration
The 2004 General Plan update identifies various management and administrative roles and implementation tools of the General Plan. They include General Plan updates, General Plan Amendments, development of GIS and other computer tools, and incorporating the General Plan in the City's Budget Development Plan and Capital Improvements Programs.

The 1994 General Plan and 2004 update called for annually updating various commissions and the City Council on the progress of meeting the plan's goals and

objectives. In May 1999, the City presented an update, or status report, on the General Plan's progress to the City Council.

In addition, the plan called for updating, or re-evaluating the General Plan at five-year intervals beginning in 1998. Citizen participation was to be incorporated in the re-evaluation. In 1999, the City initiated an update to re-evaluate the General Plan that update was completed in 2004. The current update was launched in 2009, or five years after the last update was completed.

Since 1994, over 30 General Plan Amendments have been approved by the City Council. Nearly a third of them were to change the land use map from residential to institutional for existing churches, schools and public uses. Others included comprehensive updates to General Plan Elements and text changes within the Land Use or Mobility Elements. See ***Figure 75*** in the Appendix for a comprehensive list of General Plan Amendments approved by the City Council.

The 2004 General Plan Update called for the City to develop a Geographic Information System (GIS), a computerized land use mapping and information system. The City first started using GIS in 2001. A layer with the general plan land use designations was added in 2004 and another layer with the zoning districts and specific plan areas was added in 2006. Other layers that have been added since 2006 include historic districts, hillside overlays, redevelopment areas, business improvement districts, enterprise zones, schools and public facilities.

The 2004 General Plan Update called for the plan to become a tool for setting spending priorities in the City's Budget and the Capital Improvement's Programs (CIP). To date, these tasks have not been fully integrated.

Sustainability and Environmental Conservation

Although sustainability and conservation were not called out as implementation tools in the 1994 General Plan and 2004 Updates, they have become an important priority for the community. In 2006 the City endorsed the U.S. Conference of Mayors Climate Protection Agreement and the United Nations Urban Environmental Accords (UEA), and adopted a Green City Action Plan. The Green City Action Plan follows the framework of the UEA, which list 21 specific actions for cities to take as first steps in achieving urban sustainability, and includes over 70 initiatives to conserve energy and water, reduce waste, tailor urban design, protect natural habitats, reduce risks to human health, improve transportation options and address global warming. The city tracks progress towards achieving the goals of its Green City Action Plan through a sustainability metrics program, and reports progress back out to the community through its annual Green City Reports and Indicator Reports which can be viewed at www.cityofpasadena.net/greencity.