2013
Green City Annual Progress Report

April 15, 2014

City Council

City of Signal Hill
2175 Cherry Avenue, Signal Hill, CA 90755

Achieved Local Goals

1. Renewable Energy

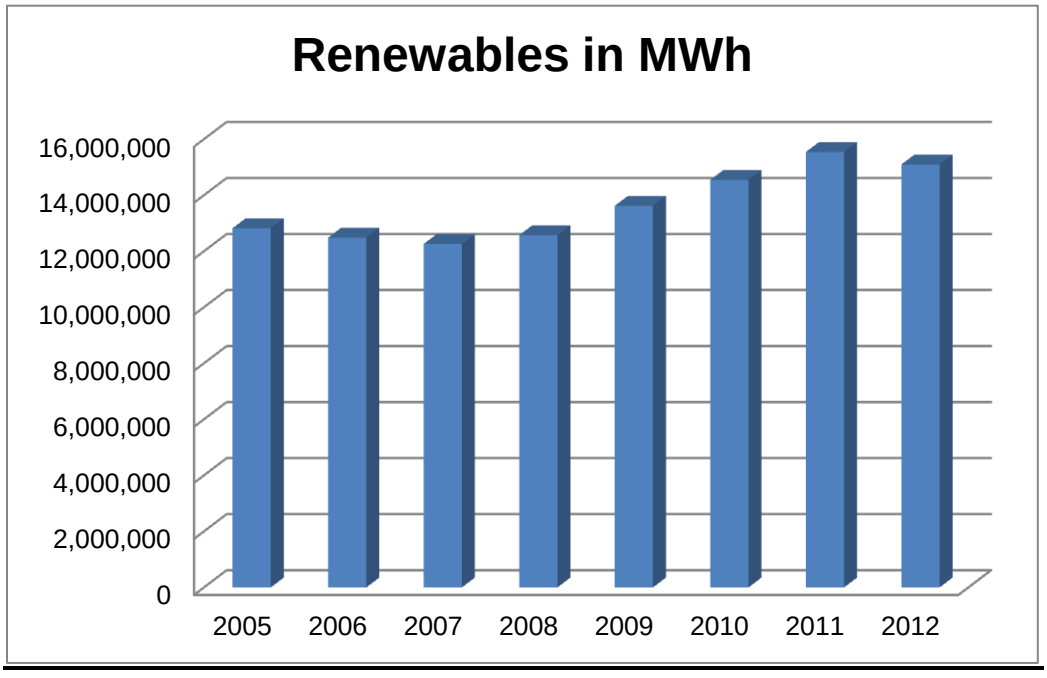
Signal Hill Goal: Demonstrate that the City's energy provider is in compliance with California state goals to increase the use of renewable energy and that it will meet the 10% target by 2012.

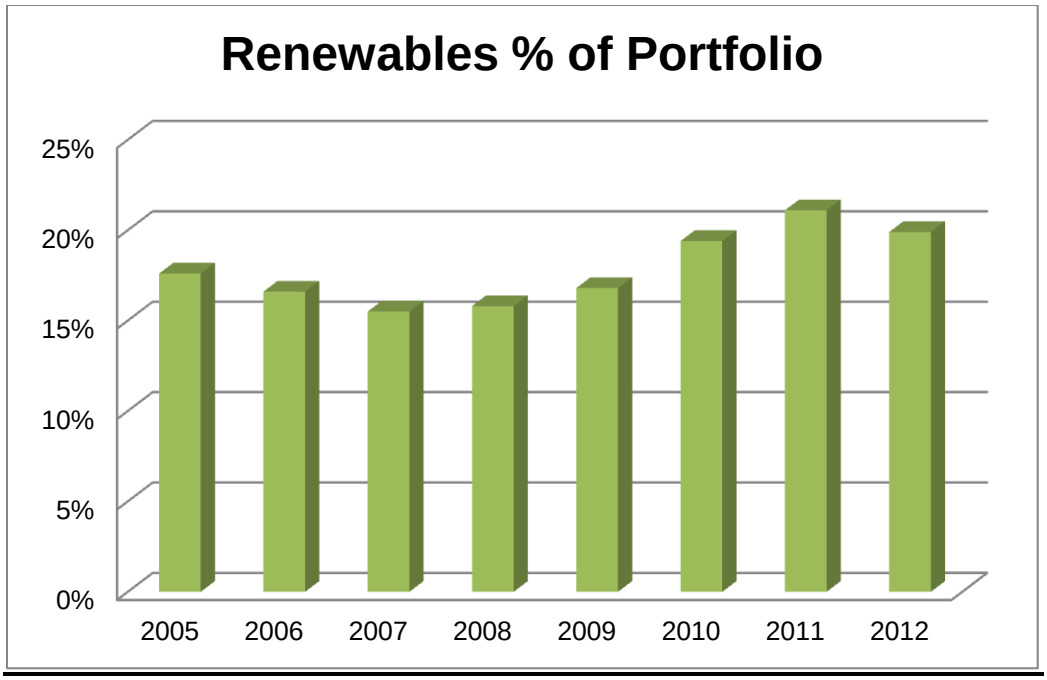
Status: ☘ Achieved July 2011**. Maintained achieved status in 2013.**

Justification: Signal Hill's electrical utility is Southern California Edison (SCE). SCE was under a State mandate to provide 20% renewables by 2010. In 2005 it achieved 17.6%. The following chart illustrates that SCE has exceeded the local goal of 10% renewable energy use from 2005 to 2012.

Renewable Energy

Year	Procurement in MWh	Procurement %
2005	12,822,189	17.6%
2006	12,485,998	16.6%
2007	12,260,513	15.5%
2008	12,574,328	15.8%
2009	13,622,219	16.8%
2010	14,548,328	19.4%
2011	15,544,000	21.1%
2012	**15,098,000**	**19.9%**





Data and Research

- SCE supplies electricity to Signal Hill. In 2012, **SCE generated 19.9% of its power from renewable sources, an increase of .3% from 2011** (SCE 2013 RPS Compliance Report).

- The City's new police station is nearly complete and will feature a solar car port structure that will generate 55 KwH of power that will offset 33% of its electrical usage. **In 2013, the new police station opened. The facility makes use of natural daylighting and includes a solar panel system. The system was activated on June 26, 2013. The City is currently performing an energy modeling evaluation and documentation of the recycled content of materials used in construction is being provided to the State as part of the LEED certification review.**

- Las Brisas, an award winning and affordable housing development, has installed three solar power systems on its Community Center and Phase 2 building. The three systems generate a combined 46 KwH of electricity for common areas such as hallways, exterior lights and laundry room. The installations are predicted to offset up to 89% of the Community Center's power and up to 13% and 46% for Las Brisas II South and North, respectively. Abode Communities, manager and owner of Las Brisas, was selected by the Sustainable City Committee to receive a Sustainability Award, which was presented to them on April 19, 2011 by the City Council.

- In 2010, the City issued 2 permits to install residential solar power systems, and 2 systems were installed in 2011-12. **In 2013, 7 residential solar systems were installed.**

- Phases 1 and 2 of the Signal Hill Collection have been completed. This is the City's first LEED certified multi-family housing development. These homes are all-electric and feature solar panels and are pre-wired for electric vehicle chargers. **In 2013, construction of the Signal Hill Collection was completed and construction of Aragon townhomes continued. Both projects include solar systems for all of the dwellings. The Sustainable City Committee selected both projects as Sustainability Award winners for their energy efficient designs. The Signal Hill Collection was presented with a Sustainability Award at the April 3, 2012 City Council meeting and the Aragon townhomes was presented with a Sustainability Award at the September 17, 2013 City Council meeting.**

2. Recycling

Signal Hill Goal: Demonstrate that the City consistently meets California state waste diversion targets of 50% by 2012.

Status: Achieved July 2011. **Maintained achieved status in 2013.**

Justification: In 2005, the City had a diversion rate of 43%. In 2006, the rate was 59%. Beginning in 2007 the equation used by the California Department of Recycling and Recovery changed from the percentage diversion rate to a pounds per person per day (PPD) measurement.

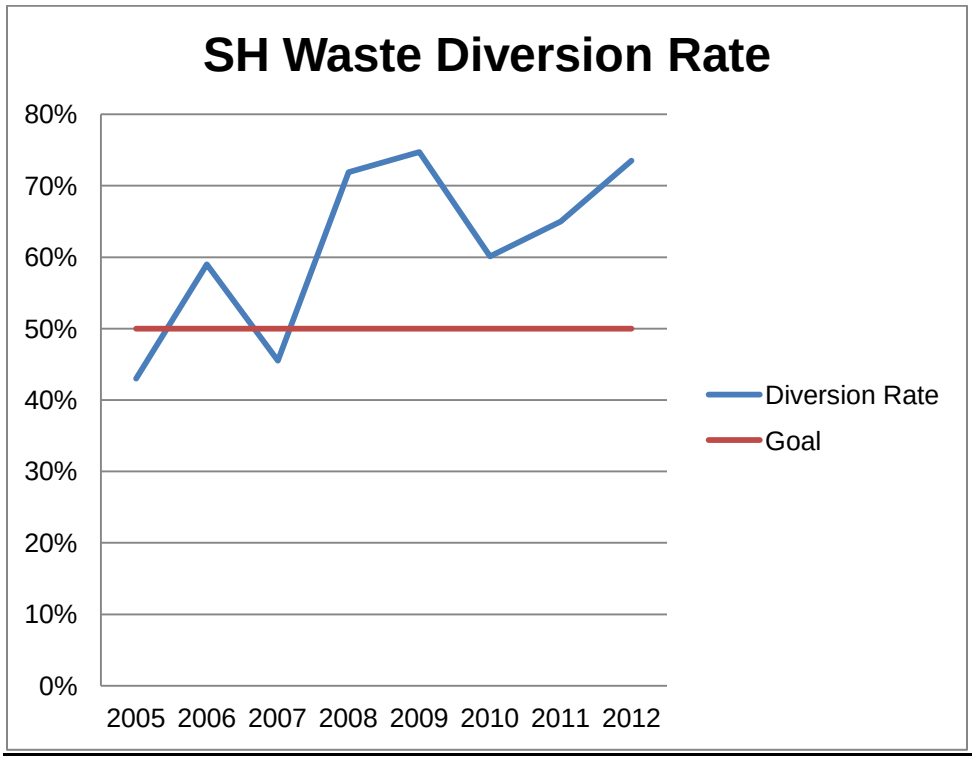
The target in this equation is to stay under 8.9 PPD, which represents 50%. Under both scenarios the City met the target of the local goal every year except 2007.

Waste Diversion Rate

Year	Diversion Rate
2005	43%
2006	59%
2007	9.7 PPD*
2008	5.0 PPD
2009	4.5 PPD
2010	7.1 PPD
2011	5.6 PPD
2012	**4.7 PPD**

* In 2007, the measurement equation was revised; however, the City exceeded the local goal.

The following chart represents the trend in percentages of the City meeting the local goal of a 50% diversion rate between 2005 and 2012.



Data and Research

- In 2012, the EDCO recycling and transfer facility on California Avenue began operations, allowing the large scale sorting of recycling materials to occur here in Signal Hill. The City contracts with EDCO for its waste hauling and recycling needs. EDCO's residential recycling program accepts glass, cardboard, newspapers, cans, plastic containers marked 1 to 7 and mixed paper. **In 2013, EDCO added the household hazardous waste program.**

- On February 2, 2010 the City approved a Sustainable Purchasing Policy. **In 2013, sustainable purchasing is ongoing and includes such products as:**
    - Printer/copier toner cartridges
    - Ink cartridges
    - Copier paper/steno pads/envelopes/post-its
    - 3-ring binders
    - Dividers/folders/document organizers
    - Trash bags/cleaning wipes/tissue
    - Pencils/pens
    - Desk trays/phone stands/

- Materials recovery facility (MRF) collects from residents and businesses.

- Each cycle, 10% of waste is sent to Southeast Resource Recovery Facility (SERRF) for waste to energy and City credit for waste diversion.

- The City achieved a per capita disposal rate of 7.1 for 2010 and an even better rate of 5.6 in 2011. **In 2012, the City achieved a per capita disposal rate of 4.7, or a 73.5% diversion rate which is well below the State mandate of 8.9. Data for 2013 is not yet available.**

3. Green Building

Signal Hill Goal: Adopt a policy to meet a minimum LEED Silver standard for the construction of all new municipal buildings.

Status: ☘ Achieved May 2012. **Maintained achieved status in 2013.**

Justification: The SCC drafted a Municipal Green Building Policy for construction of all new municipal buildings, new construction and other commercial and residential additions. The City Council adopted the Municipal Green Building Policy in May 2012.

Data and Research

- The City is seeking LEED certification for its new police station. **In 2013, the new Signal Hill Police Department opened for operations and features solar collectors. The City is in the process of seeking LEED certification for the facility.**

- The proposed library will be designed to meet LEED standards.

- The State has adopted the CalGreen building code. It establishes a minimum green building standard for residential commercial construction. The City adopted this standard by ordinance in May 2012.

- In May 2012, the City Council approved the Municipal Green Building Policy for construction of all new municipal buildings, new construction and other commercial and residential additions.

4. Urban Planning

Signal Hill Goal: Adopt urban planning principles and practices of smart growth in the General Plan that advance higher density, mixed-use, pedestrian, bike-friendly, and disabled-person accessible neighborhoods and coordinate land use and transportation with open space systems for recreation and ecological restoration.

Status: ☘ Achieved October 2011. **Maintained achieved status in 2013.**

Justification: Policies in the Land Use Element and Circulation Element of the General Plan advance the principles of smart growth.

Data and Research

The main element that addresses mixed use and smart growth principles is the Land Use Element which was last updated in 2001. The goals section contains the following policies that encourage higher density and mixed use developments:

- Policy 1.2—Provide opportunities for a variety of residential densities and housing styles. **In 2013, in order to meet the State housing requirements the City increased the density for the Hill Street Special Purpose Housing site to the maximum allowed in the General Plan.**
- Policy 1.3—Support the maintenance of residential areas and encourage infill of vacant lots close to transportation, municipal facilities, and shopping opportunities. **In 2013, seven infill housing projects were completed.**
- Policy 1.4—Provide for density bonuses, which exceed maximum densities specified in the land use plan and classification system, for development projects for low and very-low income or "special need" households in low, medium and high-density land use classifications. **The newly adopted 2013-2021 Housing Element commits the City to adopting a density bonus ordinance early in the eight year cycle.**
- Policy 1.12—Increase the amount and improve the network of public and private open space areas for active or passive recreation. **In 2013, plans for the new community garden went out to bid.**
- Policy 3.4—Promote mixed-use development and ensure compatible integration of adjacent uses to minimize conflicts. **In 2013, construction was completed on the Pacificwalk high density housing project and continues on the Aragon project. These projects replaced blighted commercial buildings and provided a cul-de-sac on Orizaba Avenue, reducing cut through traffic in the adjacent residential areas.**
- Policy 3.17—Promote "smart growth" principles that encourage development that is economically viable, creates a sense of community, and preserves natural resources. Smart growth includes narrower streets, mixed uses, smaller setbacks, open spaces, habitat preserves and parks, infill development and compact commercial centers, and the reuse of brownfields. **In 2013, construction of the new police facility, which was built on what was previously a brownfield, was completed.**

The Circulation Element addresses walkable and disabled-accessible neighborhoods and transportation, and was recently updated in 2009. It contains the following policies that help to meet the Signal Hill goal:

- Policy 1.b—Require that new development include circulation and utility system improvements, including dedication of land for widening of roadways for pedestrian and bicycle facilities, where appropriate, and construction of

new public works facilities reasonably related to the impacts of the development and intended use on the existing systems.

- Policy 1.g—Examine shared parking strategies for developments in mixed-use areas.
- Policy 2.f—As areas develop or are redeveloped, require the construction of "complete streets" which serve all users of the roadway, including motor vehicles, pedestrians, bicyclists and others**. In 2013, the City adopted the Complete Streets Policy.**
- Policy 3.a—Promote healthy, energy-efficient, and sustainable living by promoting the expansion of the city trails and walkways system.
- Policy 3.b—Preserve existing public access to the trails system to promote recreational walking and hiking, fitness, and alternative modes of transportation. **In 2013, the City applied for the Los Angeles County Competitive Trails Program grant.**
- Policy 3.g—Prioritize pedestrian and bicycle projects that help meet the requirements of the Americans with Disabilities Act.
- Policy 4.b—Support increased transit service frequency and capital improvements to serve high-density employment, commercial, residential and mixed-use areas. **In 2013, the developer of the Pacificwalk/Aragon residential development installed the traffic signal at Orizaba Avenue on Pacific Coast Highway.**
- Policy 8.a—Encourage infill of vacant lots close to transportation, municipal facilities, and shopping opportunities to maximize the use and efficiency of the existing circulation system and with high-density and/or high-FAR development encouraging the use of alternative modes of transportation, which will help reduce total vehicular trips. **In 2013, seven infill housing projects were completed.**
- Policy 8.b—Promote mixed-use development to reduce the expansion of the roadway system and minimize maintenance costs.

In addition to the General Plan, the City is a participating member of the Gateway Cities Council of Governments (COG) and the Southern California Association of Government's (SCAG) Sustainable Communities Strategy (SCS) to address SB 375 to reduce greenhouse gas emissions through land use. The plan has been developed with specific regional targets. The final SCS was made available in June 2011 and the Executive Summary is attached to this report. **In 2013, the City continued participation with SCAG and the Gateway Cities to provide data for preparation of the 2012-2035 RTP/SCS.**

5. Green Space Access

Signal Hill Goal: Show that there is a public park or recreational open space within

½ kilometer (1,640 feet) of the majority of properties in residentially zoned neighborhoods.

Status: ☘ Achieved July 2011. **Maintained achieved status in 2013.**

Justification: Over 99% of residential properties in the city are within a ½ kilometer of a park or recreational open space such as a trail or school.

Data and Research

- There are a only a few residential neighborhoods that are not currently within a half-kilometer (1,640 ft) of a public park or recreational open space in Signal Hill. These are the condominiums at Willow Street and Walnut Avenue, along with a few residences in the North End neighborhood near Target on California Avenue. The Willow/Walnut condominiums do have a golf driving range next door and the North End residences have Reservoir Park which lies within 0.64 kilometers. **In 2013, the Planning Department reviewed conceptual plans for the Crescent Square development located on Walnut and Crescent Heights. The development will include a pathway connection between the Walnut/Willow condominiums, Town Center West, and the Hilltop trail system. A site for a dog park was proposed at 3100 California Avenue just south of the 405-freeway.**

6. Tree Canopy

Signal Hill Goal: Plant and maintain street trees in not less than 50% of all available sidewalk planting sites.

Status: ☘ Achieved September 2011. **Maintained achieved status in 2013.**

Justification: The City's Street Tree Ordinance has definitive guidelines for street tree maintenance and replacement. Sidewalk planting sites are City-owned trees in the public right-of-way. An inventory was carried out to prepare a Street Tree Master Plan and it found that 90% of all sidewalk planting sites are in good to fair condition.

Data and Research

- A consultant was hired to survey all the street trees in the City in order to develop a new street tree policy. The policy addressed planting sites.

- The Department of Public Works completed work on a Street Tree Ordinance in August 2011. The ordinance replaces the street tree policy and establishes more definitive guidelines for street tree maintenance and replacement. The ordinance was adopted by City Council in September 2011.

- The Street Tree Ordinance was presented to the Sustainable City Committee in August 2011 for endorsement to the City Council to demonstrate that providing and maintaining street trees are vital in creating a sustainable city.

- "Sidewalk planting sites" are defined as City-owned trees located in the public rights-of-way which include parkways (between street curb and sidewalk), trees located in sidewalk tree wells, and behind sidewalks but within the public street right-of-way. Trees on private property and on private streets are not subject to these regulations.

- A Street Tree Master Plan inventoried 4,066 planting sites, and established specimen requirements and a maintenance schedule for each. Based on this inventory, 90% of all available sidewalk planting sites are filled and maintained in good-fair condition. **In 2013, Public Works reported that 90% of planting sites have been maintained in good condition.**

- As development occurs, new trees shall be planted as suitable to each site which will lead to 100% planting of available planting sites. **In 2013, landscaping at the Pacificwalk project was installed. The city has retained a tree trimming contractor and 2,429 trees were trimmed.**

- The Street Tree Master Plan calls for the planting of a variety of street tree species planted at 30 to 50 feet off center with average canopy coverage or tree spread of 30 feet. As demonstrated in the hypothetical examples below, this results in average canopy coverage in excess of 50% along a typical street. **In 2013, fifteen new trees were planted by the City.**

- Average canopy coverage on sample streets:
    - **1900 block of Junipero** = **63%** tree spread coverage
      (Based on an assumption of a 600' linear-foot block with average spacing of 40 feet, 15 trees with a 25-foot average spread at maturity can be planted)
    - **2700 block of Gaviota** = **88%** tree spread coverage
      (Based on an assumption of a 600' linear-foot block with average spacing of 40 feet, 15 trees with a 35-foot average spread at maturity can be planted)
    - **3300 block of Falcon** = **88%** tree spread coverage
      (Based on an assumption of a 600' linear-foot block with average spacing of 40 feet, 15 trees with a 35-foot average spread at maturity can be planted)

- The Street Tree Ordinance was approved at City Council on November 15, 2011.

7. Water Conservation

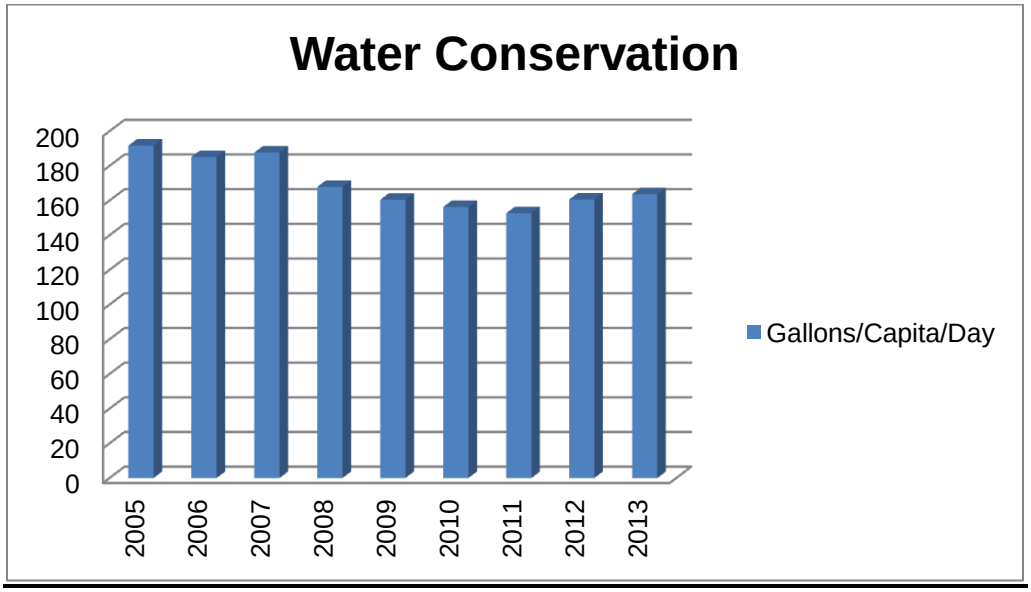
Signal Hill Goal: Demonstrate that the City is on track to reduce its per capita use of water 10% by 2012.

Status: Achieved July 2011. **Retained achieved status in 2013.**

Justification: The City reduced water consumption by 20.1% from 2005 to the end of 2011 (191.7 gallons/capita/day in 2005 vs. 156.3 gallons/capita/day in 2010). The 2011 per capita water usage is 153.2 gallons/capita/day. The City has implemented numerous measures to reduce water usage and passed a Water Conservation Program Ordinance and Landscape Water Conservation Ordinance. It is also studying expanding use of recycled water. **In 2013, the City reduced its per capita use of water by 15% (when compared to the base year of 2005).**

Water Consumption

Calendar Year	Gallons/Capita/Day
2005	191.7
2006	185.1
2007	187.7
2008	167.9
2009	160.5
2010	156.3
2011	152.7
2012	**160.6**
2013	**163.7**



Data and Research

- The City serves safe and reliable tap water, with a consumption of greater than 100 liters per capita per day.

- The City's tap water supply meets and/or exceeds standards set by EPA and California Department of Public Health. The water supply is tested regularly for unsafe levels of chemicals, radioactivity, and bacteria.

- The California Water Conservation Act of 2009 set a goal for state urban water suppliers to reduce per capita water use by 20% by the year 2020. In June 2011 the City entered into an agreement with other southeast Los Angeles County agencies to meet this 20% water reduction goal on a regional level. **In 2013, the City reduced its per capita use of water by 15%.**

- The City has implemented numerous significant water conservation measures since 2005 which include, but are not limited to: installing waterless urinals, installing weather based irrigation controllers in the parks and large landscape areas, assisting Homeowner Associations to install efficient irrigation systems, encouraging the installation of artificial turf at the golf driving range, performing water audits at property owners' request, and implementing a tiered water rate structure to discourage over-usage of water. **In 2013, the SCC initiated development of alternative parkway design guidelines aimed at water conservation, and stormwater control. A community workshop for input and education was recently conducted.**

- In May 2009, the City implemented a new Water Conservation Program Ordinance with new permanent water use restrictions. In 2010 the City also implemented a Landscape Water Conservation Ordinance as required by the California legislation. **This program and all other conservation measures resulted in a water demand reduction of 15% in 2013.**

- The City has constructed two drought tolerant California native landscape demonstration gardens. **Planning for operation of the future community garden next to Signal Hill Park should include water conservation measures.**

- The City utilizes recycled water at one large park and elementary school which offsets the City's tap water demand**. In 2013, the City completed a major study to expand the use of recycled water throughout the City with the goal of further offsetting tap water demand. The City has applied for grants to construct the system. The status of the grants is pending.**

- City staff participated in a monthly regional Water Conservation Roundtable forum attended by numerous municipalities throughout the southeast Los Angeles County. This forum allows municipalities to work together to further the development and promotion of water conservation policies. **Monthly**

forums are no longer convened however; regional Water Independence Now (WIN) projects to treat and replenish water are ongoing.

- Staff has calculated water consumption on a per capita basis measured in gallons per day since base year 2005. The chart above shows water consumption measured in gallons per capita per day. What the data indicates is that the City has reduced its water consumption by 20.1% from 2005 to the end of 2011. **The 2013 consumption continues this trend of reduced consumption, following the City's commitment to reduce its usage by 20% from 2005 levels.**

8. Water Source Protection

Signal Hill Goal: Show that the City is maintaining the highest standards for drinking water quality.

Status: Achieved July 2011. **Retain Achieved status in 2013.**

Justification: The City provides tap water to 11,465 people (2010 census) through approximately 2,900 water service connections. Of the water delivered, 90 percent is from two City groundwater production wells (Well No. 7 and Well No. 8); the remainder is imported water provided through Central Basin Municipal Water District, which in turn purchases water from the Metropolitan Water District of Southern California (Metropolitan). The water system comprises more than 50 miles of distribution and transmission pipeline, a groundwater treatment facility, three booster pump stations, and three storage reservoirs.

The two City wells draw from the Central Coastal Basin (Central Basin), which is operated by the Water Replenishment District of Southern California (WRD). The City's groundwater entitlement is 2,022 acre-feet per year (acre-ft/yr) and the City pays a replenishment assessment to WRD for each acre-foot (acre-ft) of water pumped. Well No. 7 and Well No. 8 are both located north of the City service area in the City of Long Beach.

Production from Wells 7 and 8

Calendar Year	Acre-ft
2007	1,938
2008	2,033
2009	2,021
2010	1,295
2011	**1,862**
2012	**2,147**
2013	**2,066**

The City also owns Well No. 9 located in the City's maintenance yard. **Currently, the City is reviewing available options for construction of Well No. 9**.

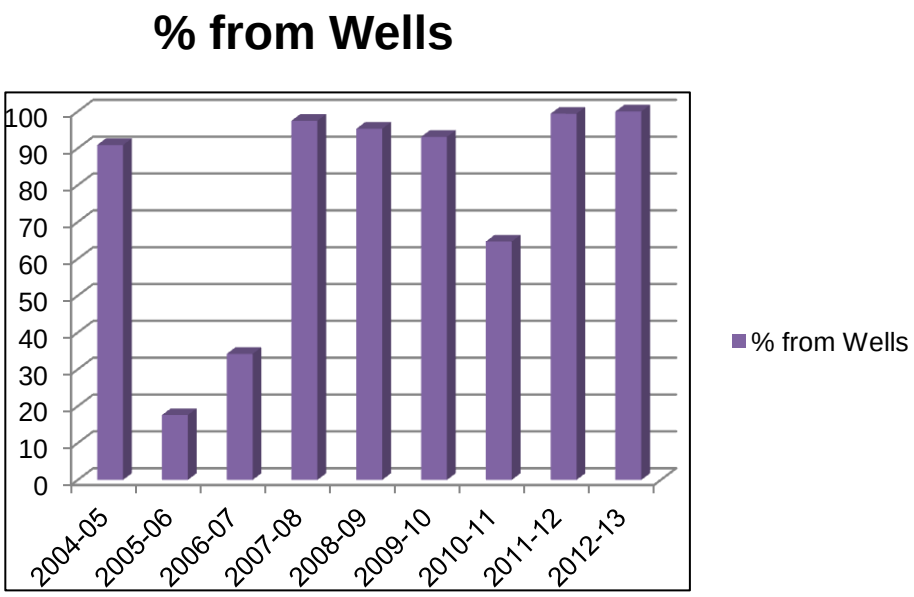
Data and Research

- The majority of the City's tap water supply comes from deep groundwater aquifers know as the Central Groundwater Basin. Agencies such as the Water Replenishment District, the California Department of Public Health, the California Department of Water Resources, and the Regional Water Quality Control Board are charged to protect these groundwater sources.

Water Use Wells

Fiscal Year	Total from Wells (Acre-Feet, AF)	Total Production (AF)	% from Aquifer
2004-05	2126.9	2340.4	90.9
2005-06*	404.2	2295.4	17.6
2006-07*	822.7	2406.8	34.2
2007-08	2121.8	2175.7	97.5
2008-09	2006.8	2105.3	95.3
2009-10	1835.1	1971.2	93.1
2010-11*	1263.6	1953.9	64.7
2011-12	2118.9	2132.7	99.4
2012-13	**2066.5**	**2066.7**	**100.0**

* In fiscal years 2005-06 and 2006-07, well production was low due to the rehabilitation of Well No. 7 and the Reservoir Roof Project. In 2010-11, the wells were offline for repair.



- In 2003, the City completed a Drinking Water Source Assessment study as required by the California Department of Public Health. This study found that the physical barrier protecting the City's groundwater supply is "Highly

Effective." The assessment determined that the aquifer, where the City pumps its groundwater, is confined; meaning surface contaminants cannot percolate down through the ground and into the deeper aquifers. Several thick impermeable clay layers separate the water producing aquifers. These clay layers will protect the deeper aquifers from the percolation of surface contaminants.

- All City water supply wells meet or exceed the Department of Public Health's construction requirements to protect the groundwater sources from contamination. Each of the City's water supply wells has a "sanitary seal" that prevents surface contaminants from moving down around the well casing and degrading the water quality below. In addition, the City's well sites are built outside the 100-year flood plain.

- There are three Seawater Barriers managed by the Water Replenishment District and Los Angeles County Department of Public Works. These barriers protect the Central Groundwater Basin from seawater intrusion and are currently using a blend of highly treated recycled water and imported water, thereby reducing the region's reliance of imported water.

- The Water Replenishment District manages the Water Independence Now (WIN) program, which is a series of projects that will fully utilize stormwater and recycled water sources to restore and protect the groundwater resources of the Central and West Coast Basins. The WIN program seeks to completely eliminate the dependence on imported water to ensure the future security of our region by developing local resources to create a locally sustainable groundwater supply. **In 2013, one of the WIN projects received 15.6 million dollars of federal funding from the Department of the Interior's WaterSMART program to increase the capacity of the Leo J. Vander Lans advanced water treatment facility (LJVL Facility) in Long Beach.**

- The Groundwater Reliability Improvement Program (GRIP) will replace a significant portion of the imported water purchased by the Water Replenishment District for replenishment in the Central Groundwater Basin with highly treated recycled water, thus reducing the region's reliance of imported water. **In 2013, the Notice of Preparation was circulated for construction of an advanced treatment plant at the San Jose Creek Water Reclamation Plant located just north of the Pomona (60) Freeway and the San Gabriel (605) Freeway. An Integrated Regional Water Management (RWM) Grant Proposal provides funding for the project.**

- The California Department of Water Resources actively monitors all water extractions within the Central Groundwater Basin to assure no over-pumping takes place by the water producers. Oversight and control of the groundwater extractions protects the water levels within the basin and assists with the elimination of seawater intrusion.

- The Regional Water Quality Control Board has developed a “basin plan” for our hydrologic area and issues waste discharge requirements designed to protect the water quality within the local water bodies. The Board will take enforcement action against violators and monitor water quality.

- The City also has an active program to protect water bodies from debris associated with stormwater runoff. The City has trash nets installed on several outfalls and will be installing new catch basin inserts and provide annual cleaning to reduce the amount of trash and debris that enters the Los Angeles River and Los Cerritos Channel.

- **On April 15, 2011, the State agency issued a letter stating that the Signal Hill Water Department complies with Federal and State drinking water regulations. The California Department of Public Health conducted a review of the City of Signal Hill Water Department water quality testing procedures, records, and water treatment process.**

- **In 2012, the City conducted a Consumer Confidence Report from the most recent testing performed in accordance with the State and Federal drinking water regulations.**

- **In 2013, the Consumer Confidence Report was distributed with the City Views newsletter. The report provided information on where the City’s tap water comes from, how drinking water is tested, what drinking water standards are, and testing results. The City’s drinking water meets the Federal and State standards.**

9. Waste Water Reduction

Signal Hill Goal: Implement wastewater management guidelines to A) reduce the volume of accidental sewer discharges, B) prevent trash and debris from entering the storm drain system by increasing collection methods, and C) expand the use of recycled water.

Status: ☘ Achieved January 2012. **Retain Achieved Status in 2013.**

Justification: A) The City is part of Sanitation District 29 and has a goal of zero preventable sanitary sewer overflows per year and within the last four years has not allowed untreated wastewater to reach Waters of the State. B) The City has an active program for street sweeping and inserted screens on its catch basins. C) The City uses recycled water for a park and school and is studying expanding its use.

Data and Research

A. Sewer

- In 1986 the City Council adopted an Industrial Waste ordinance and concurrently implemented an Industrial Waste Program which involves the inspection of all facilities equipped with a wastewater pre-treatment system. These wastewater pre-treatment systems include onsite recycling systems, clarifiers, grease interceptors and grease traps. Sites are inspected at varying intervals correlating to their respective classifications. The restaurants on the list are inspected annually and must provide evidence of proper grease handling to ensure the grease is not discharged into the sanitary sewer system. Grease can be one of the leading causes of sanitary sewer system overflows. There are currently 106 active Industrial Waste sites within the City. Each site goes through a City Industrial Waste permitting process involving site plans. Once issued, the permits are effective for 5 years, and then must be renewed. Approximately 216 Industrial Waste inspections are conducted annually, with roughly 20 to 40 follow ups per year.

- In 2003/04 the Los Angeles County Sanitation District (District) was required to take measures to reduce the number and volume of sewage spills from its collection system. In response, the District developed several programs, including a Sanitary Sewer Overflow Response Plan, a Sewer Pipe Inspection and Condition Assessment Plan, a Sewer Repair, Rehabilitation and Replacement Plan, a Force Main and Pump Station Condition Inventory and Improvement Plan, a Pump Station Upgrade Plan, a Force Main Upgrade Plan, a Capacity Conditions Assessment Report and a Capacity Assurance Plan.

- In February 2009, the District adopted a Sewer System Management Plan (SSMP) for Sanitation District 29. Sanitation District 29 consists of 34.4 miles of sewer. The boundaries of Sanitation District 29 and the City of Signal Hill are the same. The overall goals for the SSMP ensures:
    - That the collection system facilities are properly managed, operated, and maintained to eliminate preventable sanitary sewer overflows (SSO's).
    - That response measures are in place and all feasible steps are taken to mitigate the impacts of SSO's to public health and the environment when they occur.
    - That reporting procedures are in place to notify the appropriate regulatory and health authorities of SSO's within the required time frames.
    - That SSO events, mitigation measures, and corrective actions are documented.

  To measure performance of the SSMP goals, the following levels of service were established:

    - Zero preventable SSO's per 100 miles of sewer per year;
    - Complete 100% of scheduled preventative maintenance work per year; and

- Respond to the scene of an SSO within 1 hour of notification.

Staff is working with the Sanitation District in an attempt to obtain baseline data beginning in year 2005. The City currently has SSO data for the past four years.

1. On August 3, 2009, an SSO occurred on Burnett Street, west of California Avenue, releasing approximately 1,900 gallons of untreated wastewater. The Sanitation District was able to recover 100 gallons, but the remainder of the wastewater did not reach the Waters of the State.

2. 2010 - No SSO's reported.

3. On March 21, 2011, an SSO occurred at 640 E. Wardlow Road, releasing approximately 1,900 gallons of untreated wastewater. The Sanitation District recovered all 1,900 gallons. No untreated wastewater reached the Waters of the State.

4. Only one 30 gallon SSO occurred in 2012 at 28th Street and Signal Parkway. It was recovered and no untreated waste water reached the Waters of the State. **In 2013, there were two documented SSO's, however; recovery was successful in both cases and no untreated waste water reached the Waters of the State.**

- In April 2011, as part of the Pump Station Improvement Plan, the District installed a permanent emergency back-up generator at the 28th Street lift station and upgraded the controls. **In 2013, the District completed installation of the redundant Force Main at the Alamitos Lift Station, as part of the Force Main Upgrade Plan.**

B. Stormwater

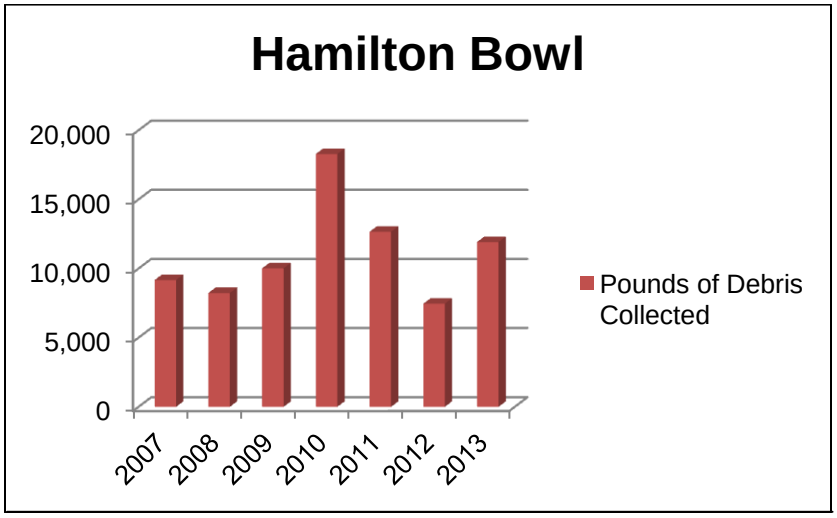
- In 2005, as the base year, street sweeping was the primary program to reduce the amount of trash, green waste and debris from reaching the storm drain system and ultimately the Pacific Ocean.

Year	Street Sweeping Debris Collected (Tons)
2012	**513**
2013	**612**

- In 2007, debris (trash, silt, leaves) removal at the Hamilton Bowl stormwater detention basin began. The annual pounds of debris collected from Hamilton Bowl are as follows:

Year	Hamilton Bowl Debris Collected (Pounds)
2007	9,171

2008	8,236
2009	10,017
2010	18,287
2011	12,660
2012	**7,460**
2013	**11,920**



- In 2011, as part of a Gateway Cities grant, catch basin inserts and screens were installed on 138 of the 174 catch basins that flow to the Los Angeles River. These devices are designed to capture trash and debris at the entrance to the catch basin and within the catch basin, and thereby prevent the debris from entering the storm drain pipe itself. The City is responsible for removing the captured debris on an as-needed basis. **Under the current MS-4 permit 3 cleanings are required during the wet season and 1 cleaning is required during the dry season.**

  The following catch basin cleanings have been conducted.

  - October 2011 — 3.80 tons of waste collected
  - January 2012 — 7.44 tons of waste collected
  - **October 2012 — 4.42 tons of waste collected**
  - **January 2013 — 4.80 tons of waste collected**
  - **February 2013 — 3.74 tons of waste collected**
  - **June 2013 — 7.28 tons of waste collected**

Before **After**

- With the collection of the waste right at the catch basin, the amount of waste that makes its way to the Hamilton Bowl will be greatly reduced. The City will continue to manage both programs. **Since the catch basin inserts were installed, there has been less than 2% of the debris collected has been trash, the majority of the debris collected is silt (85%) and leaves (13%).**

- Water Quality Best Management Practices (BMP's) are also required on all construction projects throughout the City.

- The current City Stormwater Discharge Permit (MS4 Permit) requires use of Low Impact Development (LID) BMPs (SUSMP) on larger development sites only.

- **In 2013, 20 storm drain inlets were re-stenciled with a no dumping.**

- LID options include:
  - Biofiltration
  - Infiltration
  - Biotreatment

Underground infiltration system

- **In 2013, the City prepared NPDES compliance plans for twelve known trucking and storage yards to reduce or eliminate erosion and tracking onto the streets.**

- **In 2013, the City amended Chapter 12.16 of the Signal Hill Municipal Code to incorporate low impact development measures in response to the Municipal Separate Storm Sewer System (MS4) permit requirements. The City continues to work with developers and property owners as an**

increased number of development projects will now be required to submit plans and obtain approval of low impact development measures. This is implemented through review of grading and subdivision improvements.

C. Recycled Water

- The City of Signal Hill uses approximately 12,000 gallons of recycled water per day for irrigation at two locations, Reservoir Park and Burroughs Elementary School, and has a goal of expanding the use of recycled water to other areas of the City.

- In 2005, the City completed a Recycled Water Feasibility Study. The results of the study concluded that the use of recycled water is economically feasible and will reduce the City's annual demand for tap water.

- In January 2010, the City Council authorized the City Manager to file for a Water Recycling Facilities Planning Grant from the State Water Resources Control Board in the amount of $75,000.

- A grant between the City and the State Water Resources Control Board was fully executed effective August 13, 2010.

- On October 5, 2010, the City Council authorized a Contract Services Agreement with MWH Americas Inc. for the preparation of a recycled water facilities plan. The cost of this contract is not to exceed $150,000.

- MWH is in the process of completing an expanded feasibility study and has completed a preliminary recycled water system design. Approximately 60 potential recycled water customers have been identified, with an annual usage of approximately 199 AF (Acre-Foot).

- As Grant funds become available, the City will proceed with the final design and construction of the expansion of the recycled water system. **In 2013, grant funding is still pending.**

Urban Environmental Accord Goals

1. Energy Efficiency

UEA Goal: Adopt and implement a policy to reduce the City's peak electric load by ten percent within seven years through energy efficiency, shifting the timing of energy demands, and conservation measures.

Signal Hill Goal: To be determined.

Status: **In 2013, the SCC chose Energy Efficiency as the next action to pursue.**

- The City is a participant in the County of Los Angeles Energy Upgrade California program. This program provides incentives for homeowners to complete energy-saving home upgrades. As of October 12, 2011, funding became available for Signal Hill residents through Long Beach Gas, SCE and Los Angeles County. The City has information at the Community Development Department counter and has placed information on its website.

- Low energy light fixtures have been installed in City Hall, Police Department, Library and City Yard with motion sensors. The renovated restrooms at Signal Hill Park use solar tubes for natural daylight. LED light fixtures were installed on Jessie Nelson and around the exterior of the Civic Center buildings. **In 2013, the Committee heard a presentation from Energy Management Solutions Incentives program for a lighting retrofit energy efficiency project that encompasses the lighting systems at several City locations and could reduce the load factor by 40-45%.**

- Several departments shut off computers, printers and shredders at end of day.

- In 2010 a Fresh & Easy was built in the city that features numerous energy conserving technologies. Fresh & Easy is seeking LEED certification of its store. SCE's Savings by Design estimates that F & E stores use 30% less energy than a traditional supermarket (Fresh & Easy website).

- Staff obtained electricity use reports from SCE for years 2009 and 2010. The reports show an increase in peak load of 3.9% from 2009 to 2010. Additional reports going back to 2005 baseline year can be obtained for $300 each year. Staff feels that it is only necessary to obtain 2005 baseline year data and will obtain the funds to obtain this report. **In 2013, in response to the SCC's choice to pursue Energy Efficiency as the committee's next local action, staff has gathered and usage reports for citywide electricity consumption for the years of 2008, 2011, 2012 and 2013 from SCE. The City's SCE accounts for the past three years including public facilities, parks, irrigation, street signals and street lights has also been requested SCE. The Committee directed staff to continue to collect and analyze data on public and private energy use in order to develop a local goal for action.**

- **In 2013, the Committee picked energy efficiency as the goal that they would focus on for the year, to gather data and establish a local goal for achievement.**

- **In 2013, solar panel systems were installed for 7 single-family dwellings and solar panel systems were installed for all the Pacificwalk and Aragon residential developments. The new police station includes a rooftop photovoltaic system. In addition, a permit was issued to install a rooftop photovoltaic system at the EDCO administrative offices.**

2. Climate Change

UEA Goal: Adopt a city-wide greenhouse gas reduction plan that reduces the jurisdiction's emissions by twenty-five percent by 2030, and which includes a system for accounting and auditing greenhouse gas emissions.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- The State through AB 32 seeks to reduce greenhouse gas emissions to 1990 levels by 2020.

- The City is participating in the SCAG regional Sustainable Community Strategy program through SB 375 which has been given a target of reducing its greenhouse gas emissions 8% by 2020 and 13% by 2035.

- The City is entirely surrounded by the City of Long Beach. Long Beach is conducting an annual emissions report that may be useful for Signal Hill.

- **In 2013, continued to actively participate in the Gateway Cities Council of Governments, which has continued work on the 2016-2040 draft Regional Transportation Plan / Sustainable Communities Strategy through general plan, zoning, existing land use and resources data collection and the local government questionnaire for submittal to SCAG for inclusion in their data base.**

- **The Gateway Cities greenhouse emission target is to reduce GHG 8.5% by 2020 and reduce GHG 15.02% by 2035. The five strategies to reduce greenhouse gases include: Transportation Strategies (340), TDM Strategies, Land Use (4D's travel behavior), Regional Projects (Measure R) and Interaction Land Use (Measure R).**

3. Zero Waste

UEA Goal: Establish a policy to achieve zero waste to landfills and incinerators by 2040.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- Construction started in 2010 on the EDCO Recycling and Solid Waste Transfer Station. The facility will increase the City's recycling rate and also provide a hazardous waste drop off site for the community. **Completed.**

- The new CalGreen standards require a construction debris recovery and recycling rate of 50 %.

- In 2010, the City met the state target of 8.9 pounds per person of waste generated by realizing 5.0 pounds per person per day or an equivalent 70% diversion goal. **In 2013, the diversion rate of 73.5% met the goal.**

- The City has given out over 500 reusable shopping bags at community events and at City Hall to reduce the use of plastic bags.

- The City's landscape contractors use mulching mowers to eliminate green waste and tree trimming contractors shred trimmings into mulch.

- The City has a program for free curbside collection and disposal of used motor oil.

- The City purchases park playground equipment and surfacing made with recycled plastic and repaves its roads with recycled rubber shavings.

- In 2009, the City recorded a disposal rate of 4.5 pounds per person. This is a 53% drop from the rate recorded in 2007, 9.7 pounds per person.

4. Manufacturer Waste

UEA Goal: Adopt a citywide law that reduces the use of a disposable, toxic, or non-renewable product category by at least fifty percent in seven years.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- In 2009, the City adopted a green purchasing policy.

- Since 2008, the City has not used plastic water bottles at its Council and Planning Commission meetings.

- Youth programs are using more earth-friendly utensils.

5. Environmental Jobs

UEA Goal: Adopt a policy or implement a program that creates environmentally beneficial jobs in slums and /or low-income neighborhoods.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- The Long Beach Conservation Corps constructed a new facility in Signal Hill which is a green building. It offers job training and education for area at-risk youths.

- The City's Redevelopment Agency used to create jobs through development of retail and auto centers that offer job opportunities. As of February 2012, the Redevelopment Agency and its funding for these opportunities were dissolved due to State action.

6. Habitat Protection

UEA Goal: Pass legislation that protects critical habitat corridors and other key habitat characteristics (e.g. water features food-bearing plants, shelter for wildlife, use of native species, etc.).

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- Signal Hill does not have protected and critical habitat corridors but does have its share of urban wildlife such as coyotes, opossums, squirrels and skunks. The City provides an information pamphlet on coyotes to protect its citizens and pets.

7. Public Transportation

UEA Goal: Develop and implement a policy which expands affordable public transportation coverage to within half-a-kilometer of all city residents in ten years.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- Signal Hill is served by Long Beach Transit (LBT) and the Metropolitan Transit Authority (MTA) with its Blue Line. There are LBT bus stops on the city's major streets like Cherry, Willow, Orange, Redondo and Spring. The only residential area that is beyond a half-kilometer of a transit stop is a central part of the Hilltop generally bounded by the Panorama Promenade and 21st Street (north and south) and Stanley and Orizaba (west and east). Due to the topography of the Hilltop it is unlikely that this area will ever be serviced by public transportation, however, there are other services such as Dial-A-Lift and Dial-A-Taxi that provide curbside pick-up for the mobility impaired.

8. Clean Vehicles

UEA Goal: Pass a law or implement a program that eliminates leaded gasoline (where it is still used); phases down sulfur levels in diesel and gasoline fuels, concurrent with using advanced emission controls on all buses, taxis, and public fleets to reduce particulate matter and smog-forming emissions from those fleets by fifty percent in seven years.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- The City has purchased a number of hybrid vehicles and several heavy duty vehicles used by Public Works run on natural gas.

- Long Beach Transit is on its way to becoming one of the cleanest transit fleets in the country. It is increasing its fleet of hybrid buses which have outperformed even liquefied natural gas (LNG) and compressed natural gas (CNG) vehicles in fuel efficiency, emissions and maintenance costs.

- The City has entered into a contract to install an electric vehicle charging station (EV) in its Legion Drive employee parking lot. This station will provide a charging point for future city vehicles that are electric-powered and will be available to the public and visitors to the Civic Center. The contract was approved by the Council on October 4, 2011 and was reviewed by the City Attorney. **The charging station is not being pursued at this time.**

- City Ventures, the developer of the Signal Hill Collection of townhomes at PCH and Orizaba, has formed a partnership with Nissan to prewire all their homes for EV charging units. This will make it possible for owners to easily install charging units that will power the new LEAF and other EVs.

- **In the 2012-13 fiscal year, the City purchased 2 CNG Public Works trucks. One of the new CNG vehicles will be replacing an existing CNG vehicle so the net gain will be 1 vehicle.**

- **In 2013, charging stations for electric vehicles were installed at the Glenn E. Thomas FIAT dealership at 2002 E. Spring Street.**

- **In 2013, permits were issued for new diesel fuel tanks for the Chevron gas station at 2599 Cherry Avenue. The 76 station at 2790 Cherry Avenue also offers diesel fuel. The California Air Resource Board mandated that all diesel fuel retail sales in California must meet 15 ppm maximum sulfur limit as of Sept. 1, 2006. Ultra-Low Sulfur Diesel fuel economy is 20-40% better than regular gasoline and reduces green house gas emissions.**

9. Traffic Congestion

UEA Goal: Implement a policy to reduce the percentage of commute trips by single occupancy vehicles by ten percent in seven years.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- The City has increased its usage of email and electronics communications such as providing information on its website which helps to reduce trips to City Hall.

10. Toxic Reduction

UEA Goal: Every year, identify one product, chemical, or compound that is used within the city that represents the greatest risk to human health and adopt a law and provide incentives to reduce or eliminate its use by the municipal government.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- In its most recent custodial contract for 2011, the City encouraged the use of environmentally friendly cleaning agents.

- **In 2013, the City installed material safety data sheet software that allows staff to look up the safety information on products used by the City. The City follows OSHA standards in regards to use of any products, chemical or compound.**

11. Organic Foods

UEA Goal: Promote the public health and environmental benefits of supporting locally-grown organic foods. Ensure that twenty percent of all city facilities (including schools) serve locally-grown and organic food within seven years.

Signal Hill Goal: To be determined.

Status: **Ongoing.**

- City staff has formed a team to promote First Lady Michelle Obama's national 'Let's Move!' campaign. This campaign promotes healthy eating and exercise. The City will provide information on its website about this program with links to local organic food vendors, community supported agriculture (CSAs) and farmers markets and is also promoting the program at its community events.

12. Air Quality

UEA Goal: Establish an Air Quality Index (AQI) to measure the level of air pollution and set the goal of reducing by ten percent in seven years the number of days categorized in the AQI range as "unhealthy" or "hazardous"

Signal Hill Goal: To be determined.

Status: **Ongoing.**

Signal Hill under the jurisdiction of the South Coast Air Quality Management District which measures air pollution levels and sets pollution reduction goals. **In 2013, the City continues to participate with the Gateway Cities COG and SCAG by providing local data for development of the 2012-2035 RTP/SCS aimed at improved air quality through reduction of traffic volume and congestions though local and regional coordination of planning and development practices.**

APPENDICES

Waste

Water

Energy