

Energizing Las Vegas: A Resilient & Sustainable City

3.7.17

CITY OF
Las Vegas

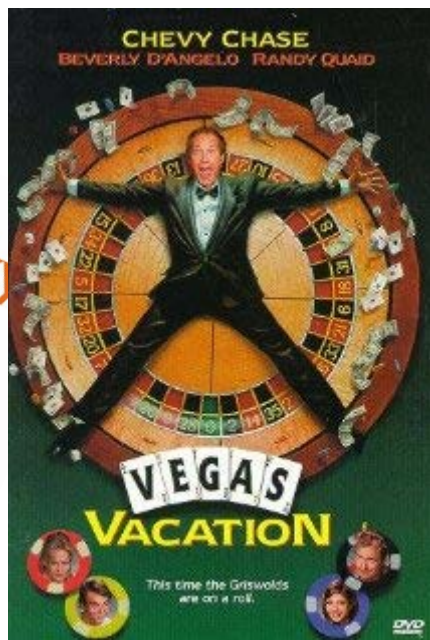
The Vegas You See:



The Vegas You See:

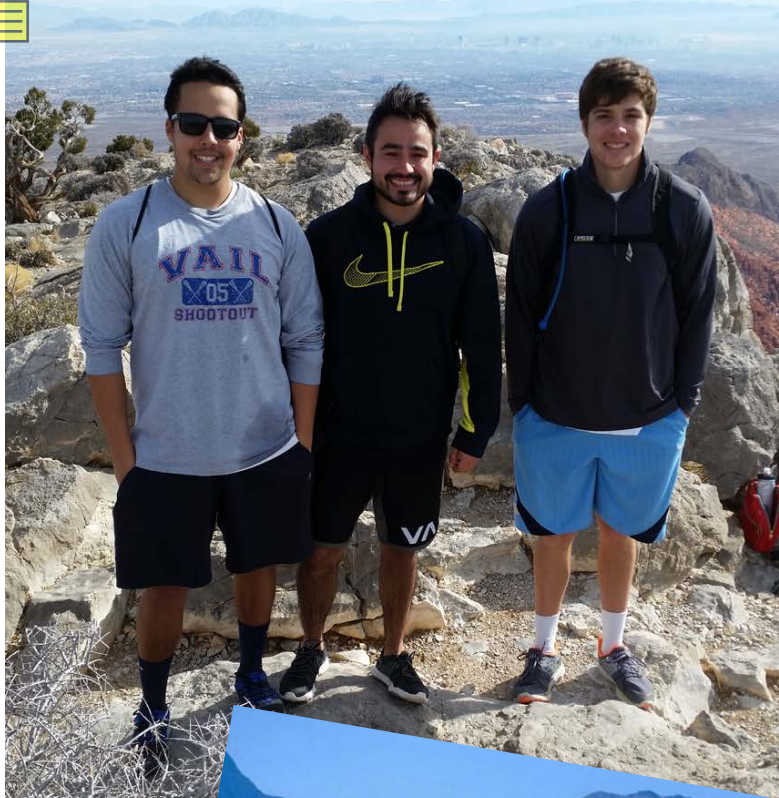






The Vegas We Live In:







The Vegas We Hear About

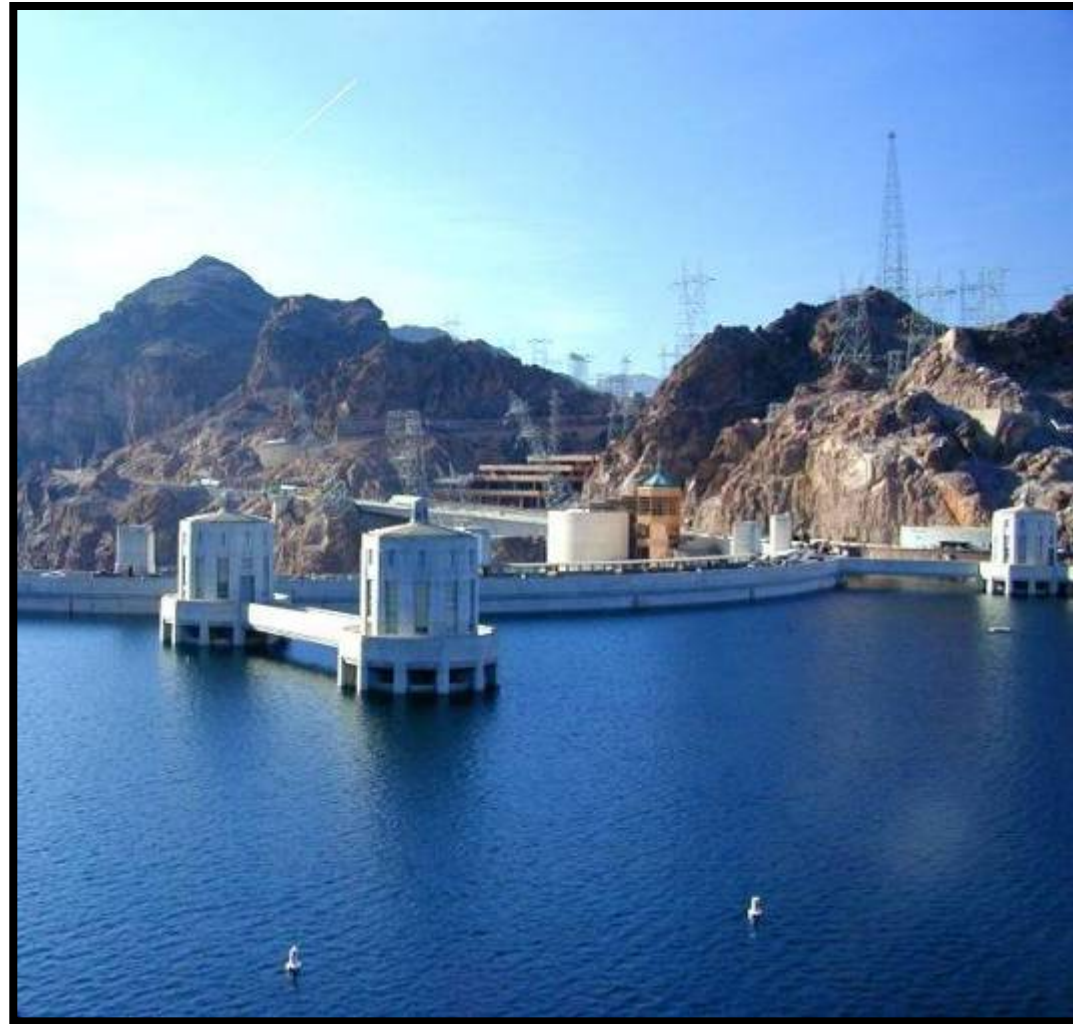
Drought -- and neighbors -- press Las Vegas to conserve water

~John Glionna, LA Times

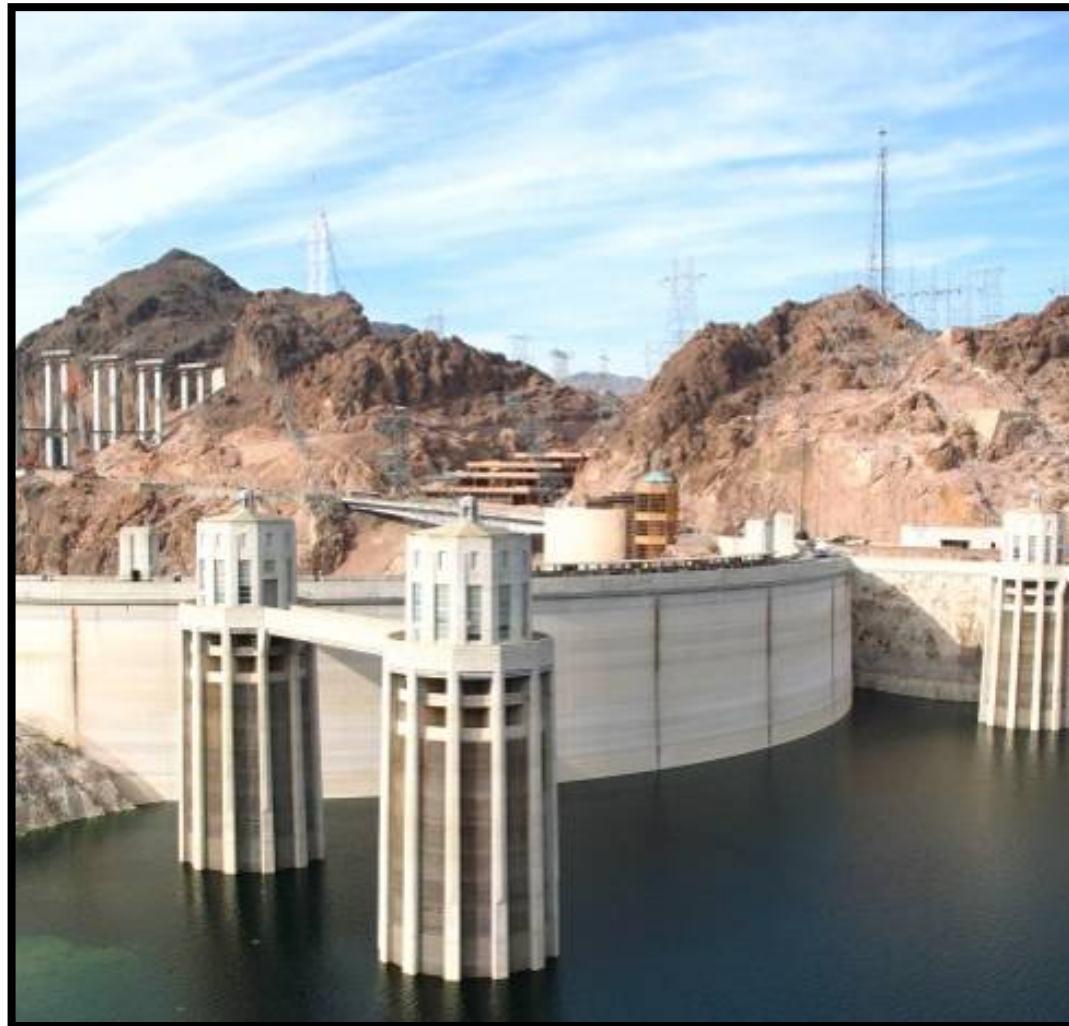
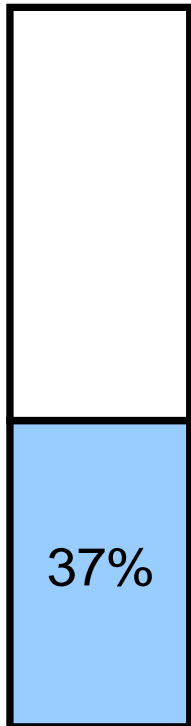


Lake Mead, 2000

96%



Lake Mead, 2016







The Vegas We Hear About

“At some point, you have to live within your means, but that doesn't fit with the image of Las Vegas. These people need to remember that it's a city built upon an inhospitable desert. What were they thinking?”

~Steve Erickson, Great Basin Water Network

The Vegas We Hear About

“But, as with many things in Sin City, the apparently endless supply of water is an illusion. America’s most decadent destination has been engaged in a potentially catastrophic gamble with nature and now, 14 years into a devastating drought, it is on the verge of losing it all.”

~Nick Allen, UK Telegraph

The Vegas We Hear About

The Thirsty West: What Happens in Vegas Doesn't Stay in Vegas

Even Sin City's attempts to conserve water are wasteful.

~Eric Holthaus, Slate (ASU)



“Las Vegas shouldn’t
even be there.”



The Vegas We Hear About

Las Vegas, which gets so much criticism for being a completely unsustainable city in the middle of a desert, has quietly become the most water-smart city in the U.S.

~Charles Fishman, The Big Thirst

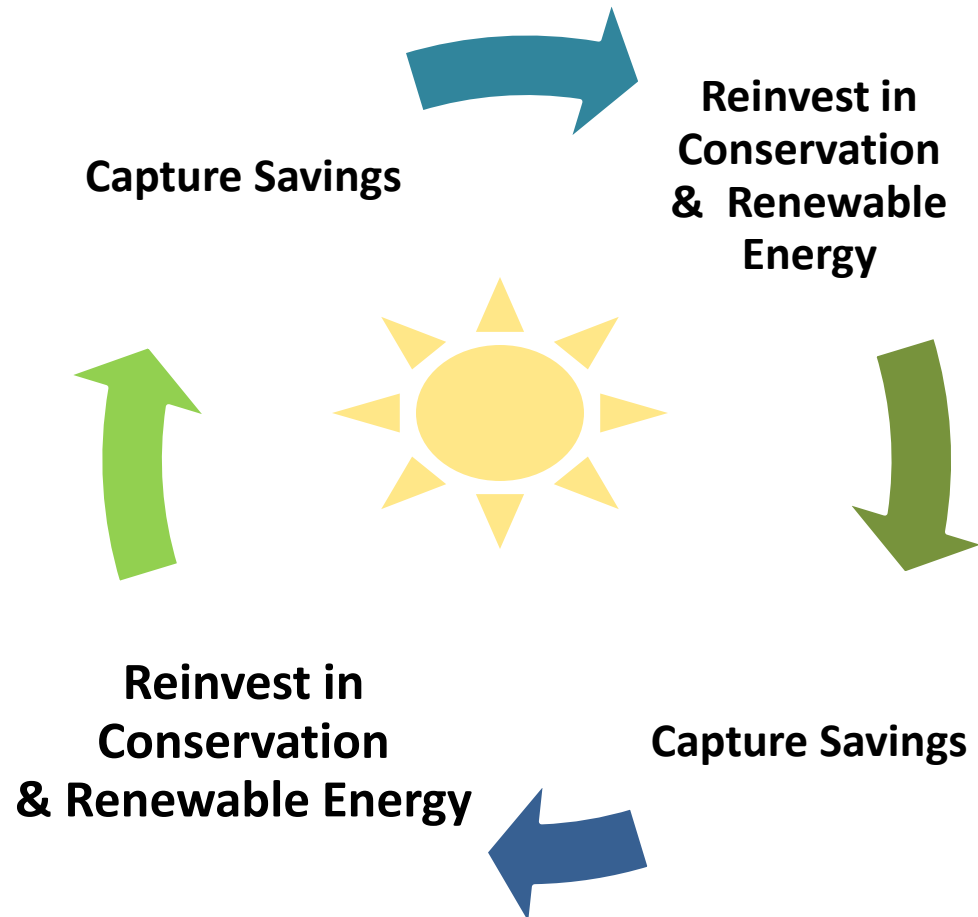
Sustainability Initiative

- U.S. Mayor's Climate Protection Agreement (2005)
- Climate Protection Resolution (R-57-2006)
- Green Building Resolution (R-81-2006)
- Energy code, Wind/solar ordinance, PC-CC Workshop (2007)
- Urban Forestry Resolution (R-26-2008)
- **Sustainable Energy Strategy (R-50-2008)**
- Sustainability Office organized (2010)
- Conservation Element of the 2020 Las Vegas Master Plan



Sustainability Investment Strategy

- Federal
 - EECBG: \$5.4 million
 - NCREB: \$4.9 million
 - QECB: \$5.8 million
- State
 - Utility Rebates: \$10 million
 - NGOE Loan: \$2 million
- Local
 - General obligation bond: \$17 million
 - Sewer fund: \$14 million
 - Other: \$1 million



Sustainability Renewable Energy

Solar Covered Parking (2.8 MW)



Sustainability Renewable Energy

RENEWABLE ENERGY – WPCF Solar Ground Mounted (3.33 MW)



Sustainability Energy Efficiency Projects

Over 45,000 LED Streetlights have been upgraded to LED



Sustainability Energy Efficient Buildings

Building Energy Upgrades



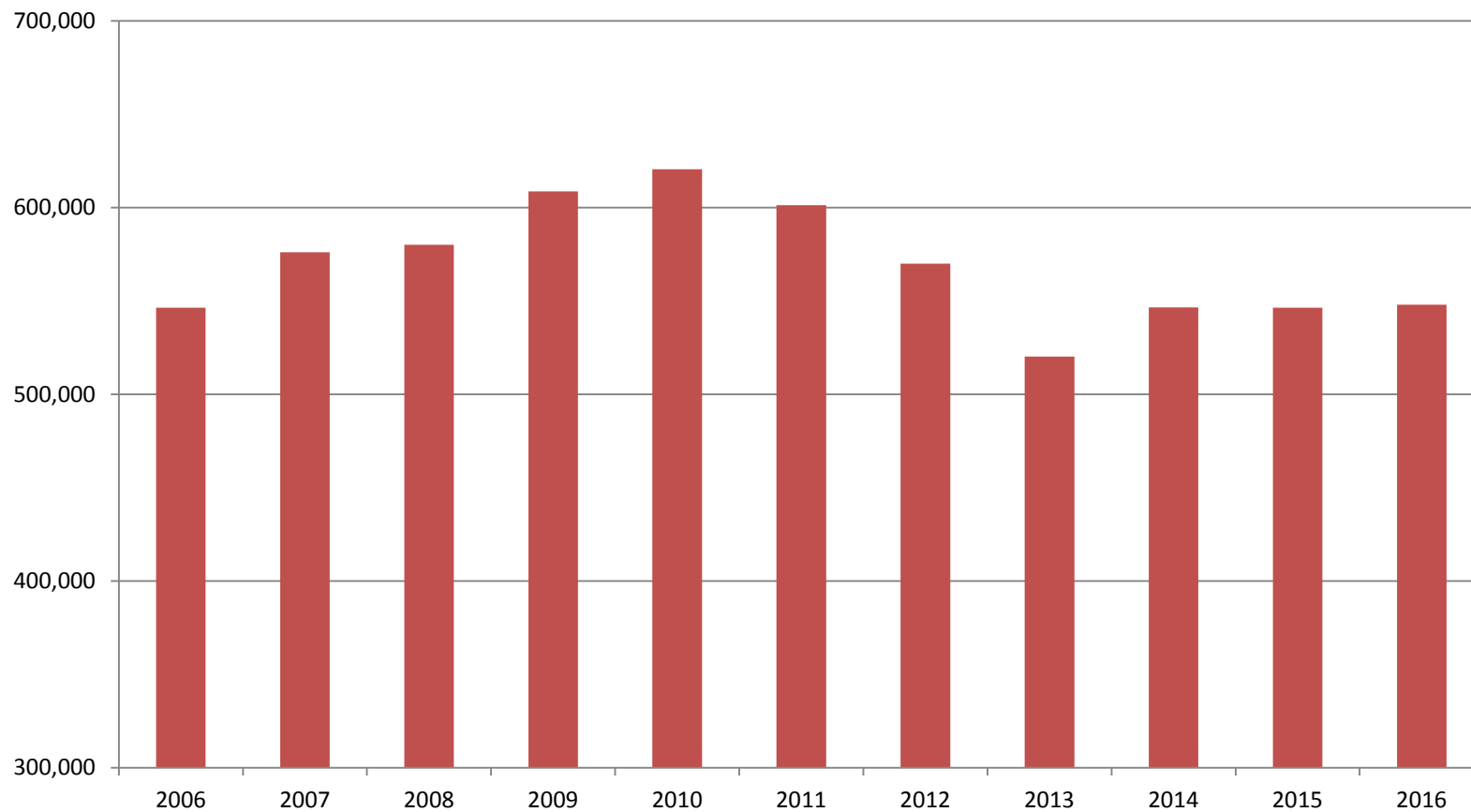
Sustainability Energy Efficient Buildings

LEED Green Buildings



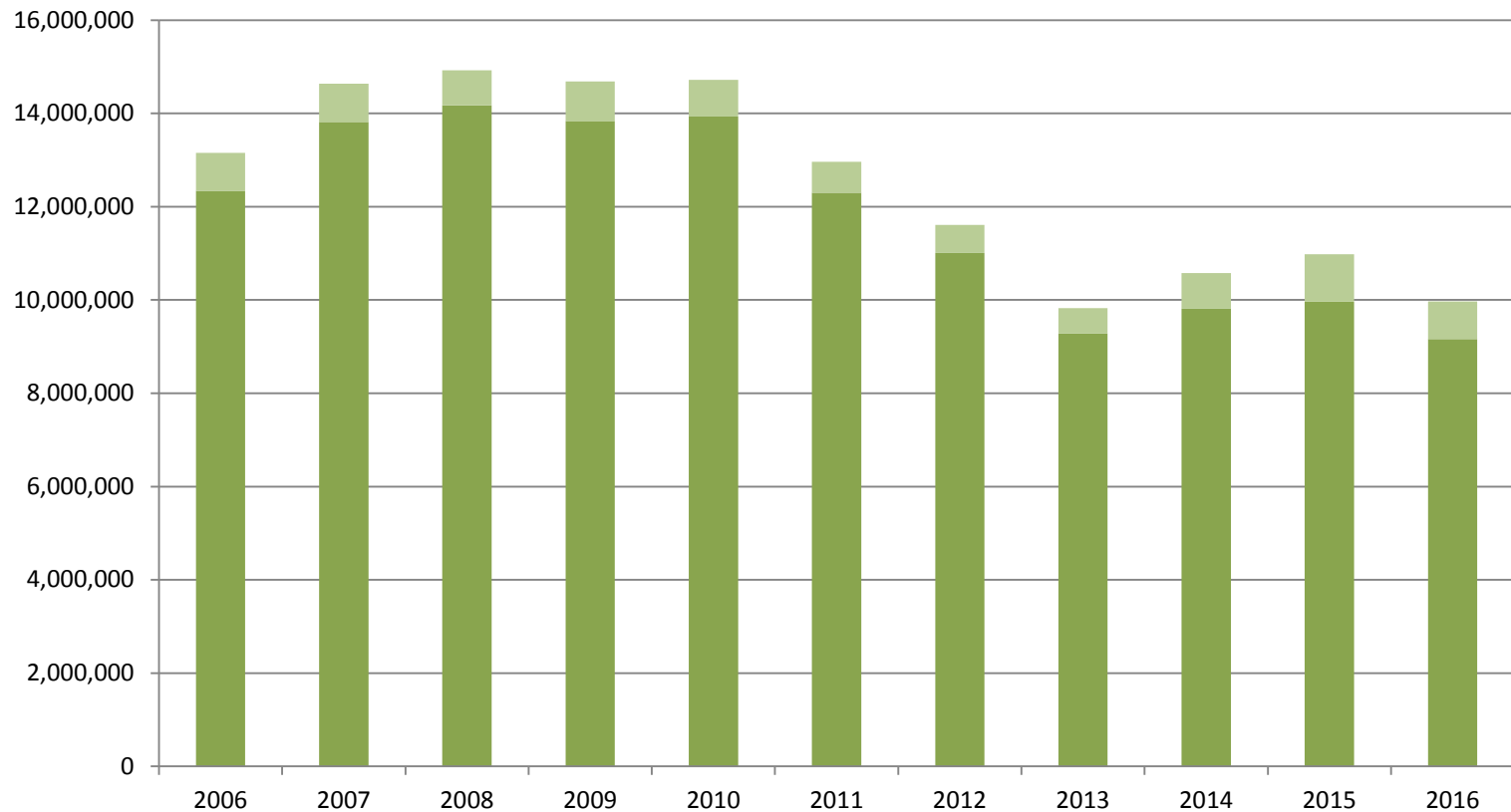
Sustainability Energy Efficiency

Total Energy Consumption - MMBTU



Sustainability Energy Efficiency

Total Energy Costs

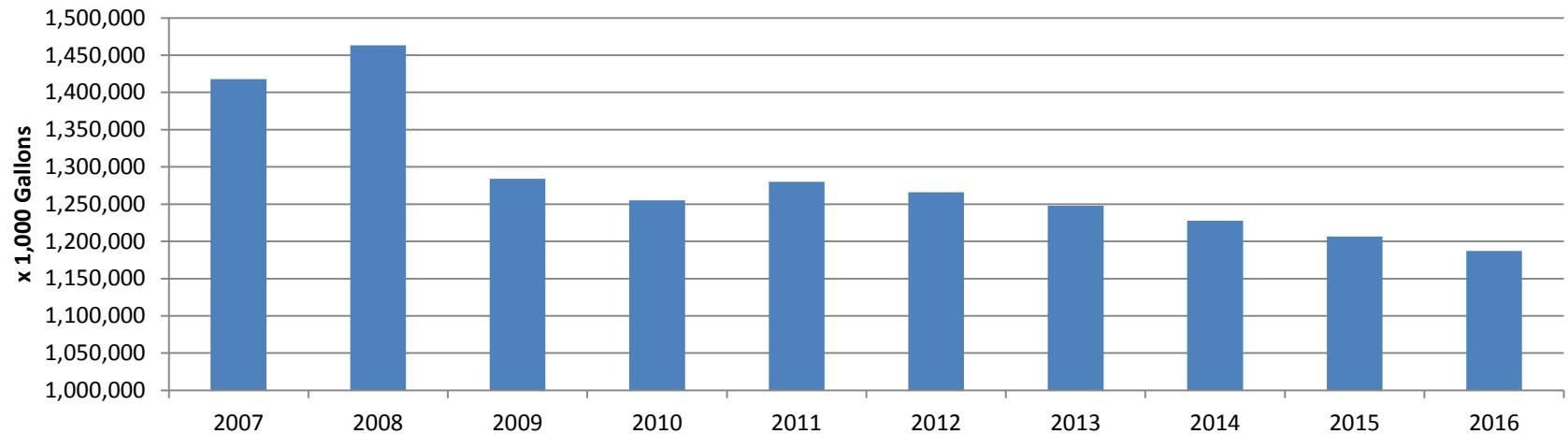


Sustainability Water Conservation

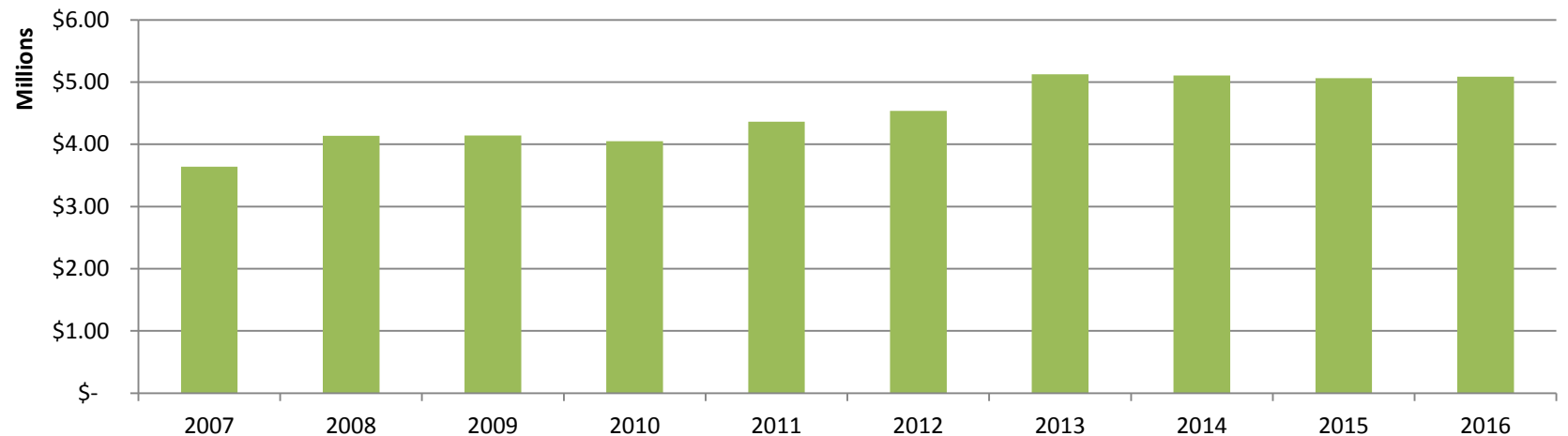


Sustainability Water Conservation

Total Water Consumption



Total Cost - Water

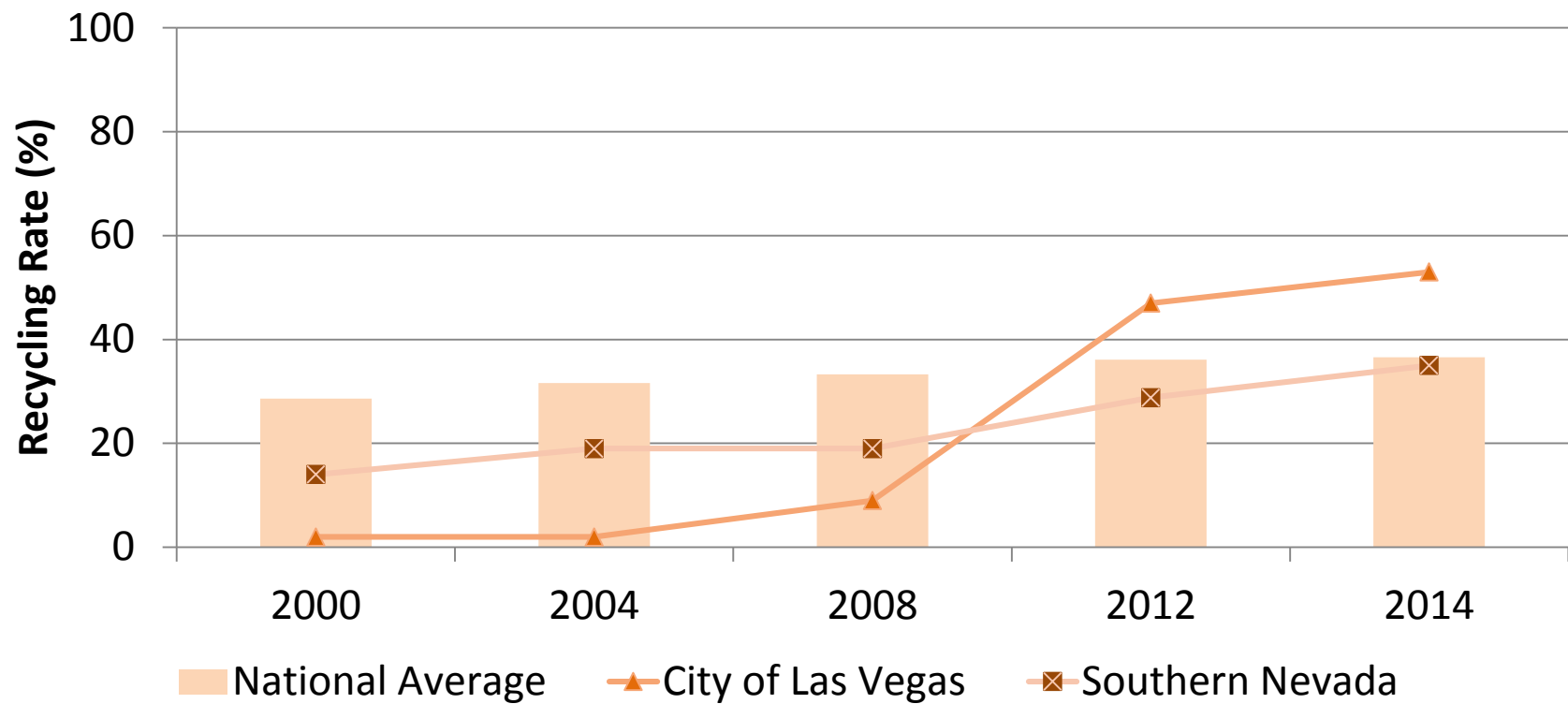


Sustainability Recycling



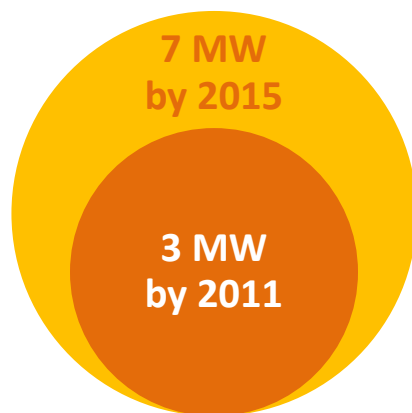
Sustainability Recycling

Recycling Rates



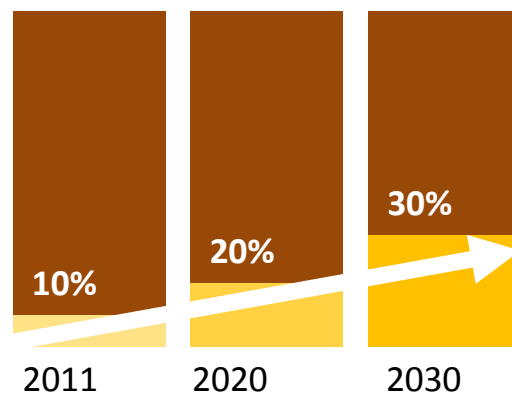
Sustainability Energy Targets

Renewable Energy



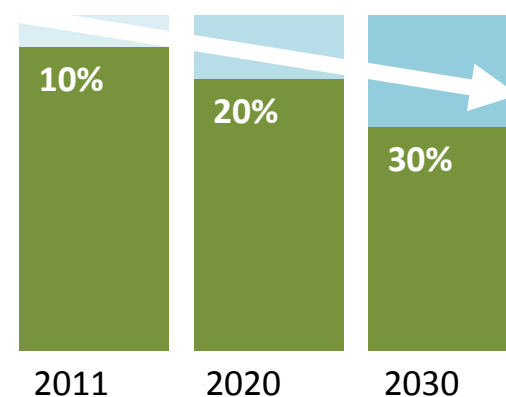
STATUS: 6.1
MW Installed

Renewable Energy Portfolio Standard



STATUS: 20%

Carbon Footprint Reduction



STATUS: 33% Reduction

Sustainability Next Steps



GOAL: Net-Zero

Sustainability Net Zero



**2 Megawatts of
Hoover Dam
hydropower**

Sustainability Net Zero



**2017: 100%
Renewable
Energy**

Sustainability Net Zero



**2017: 100%
Renewable
Energy**

Sustainability National Recognition



- 2016 ICMA Program Innovation Award - Sustainability
- STAR Communities – 4 STAR National Excellence in Sustainability
- 2014 EPA Green Power Leadership Award
- 2014 US Conference of Mayors Climate Protection Awards
- 2012 Sustainable Community Awards – Large Community Finalist
- Project of the Year: City Hall
- Las Vegas Solar program
- Crown Communities Award for Sustainability
- The League of American Bicyclists – Bronze Bicycle Friendly Business

Sustainability in the Community

The City of Las Vegas works on community-wide sustainability issues with a variety of public, private, and non-profit stakeholders



Sustainability in the Community

Single-Family Residential Meter Sizes

Meter Size (inches)	Daily Service Charge	Tier	Threshold X 1,000 gallons	Rate per 1,000 gallons
5/8	\$0.3355 X 30 days = \$10.06	1	0 - 5	\$1.16
		2	5.01 - 10	\$2.08
		3	10.01 - 20	\$3.09
		4	20.01 and over	\$4.58
3/4	\$0.3963 X 30 days = \$11.59	1	0 - 6.8	\$1.16
		2	6.81 - 13.5	\$2.08
		3	13.51 - 27.0	\$3.09
		4	27.01 and over	\$4.58
1	\$0.4880 X 30 days = \$14.64	1	0 - 10.1	\$1.16
		2	10.11 - 20.32	\$2.08
		3	20.33 - 57.5	\$3.09
		4	57.51 and over	\$4.58
1.5	\$0.7419 X 30 days = \$22.26	1	0 - 18.6	\$1.16
		2	18.61 - 37.2	\$2.08
		3	37.21 - 175.7	\$3.09
		4	175.71 and over	\$4.58
2	\$1.0472 X 30 days = \$31.42	1	0 - 28.71	\$1.16
		2	28.72 - 57.43	\$2.08
		3	57.44 - 385.26	\$3.09
		4	385.27 and over	\$4.58

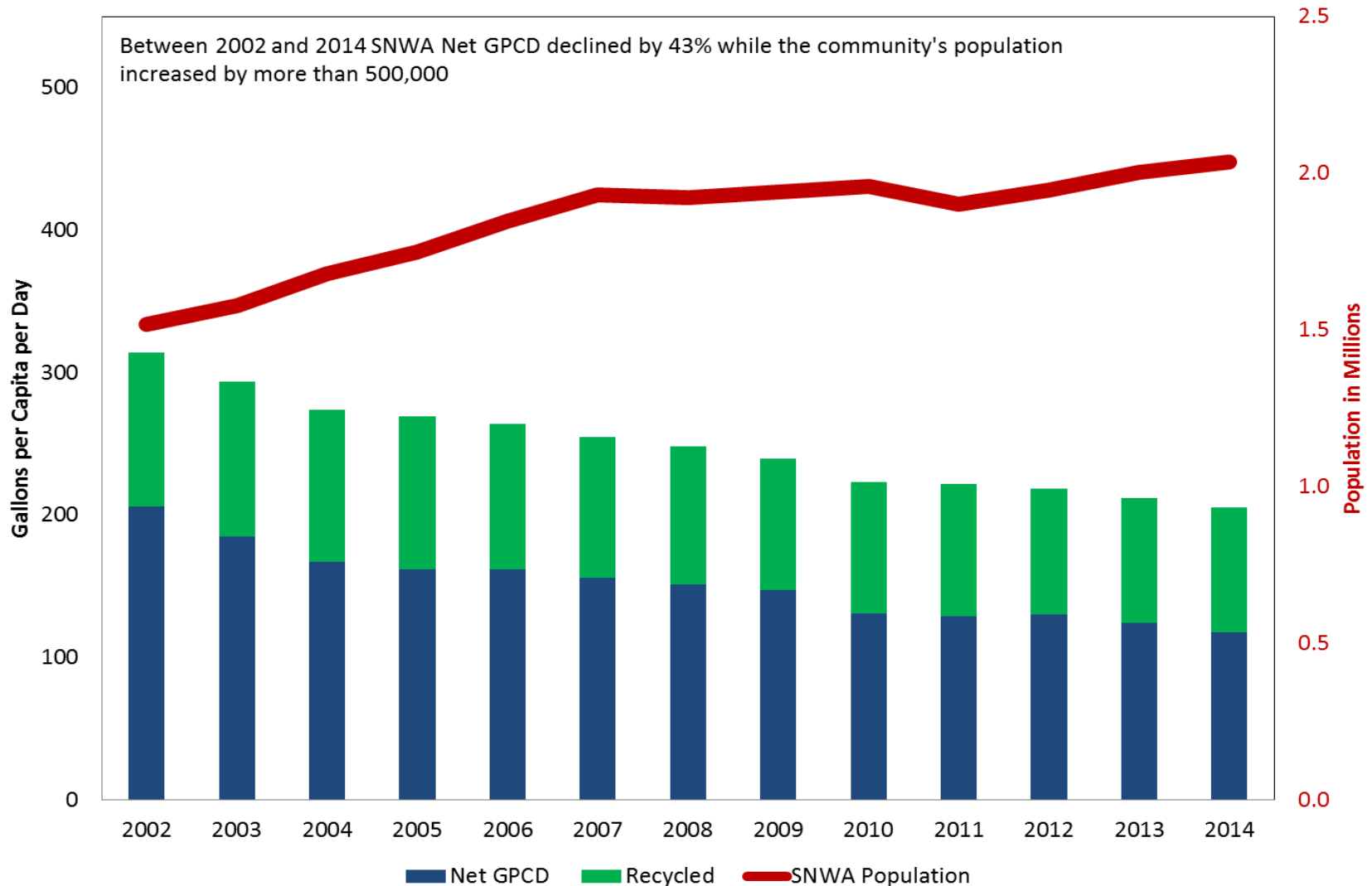


SNWA continues to lead in water usage and conservation through:

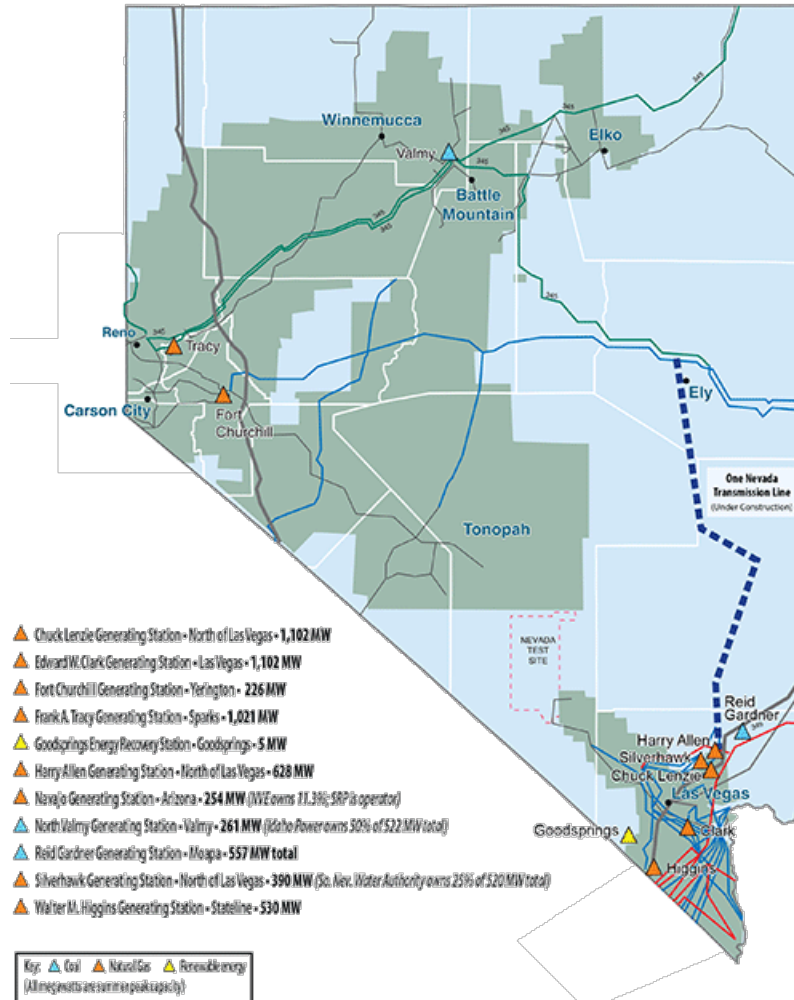
- Pricing
- Regulation
- Incentives
- Education

Sustainability in the Community

SNWA GPCD and Population

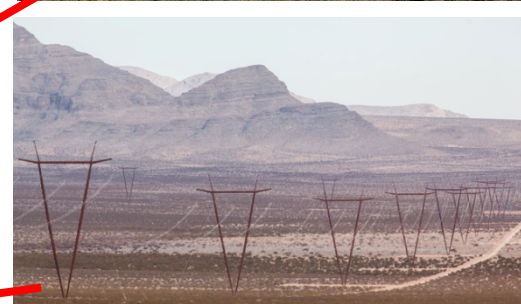


Sustainability in the Community



Soon, Nevada will no longer be generating power from coal

Sustainability in the Community



Today, 25% of all power delivered is from renewable sources



Sustainability in the Community



**Las Vegas is
home to the
largest green
resorts
(including this
one)**

Sustainability in the Community



**It is also
home to the
nation's
largest
recycling
center**

Sustainability in the Community

**There are
hundreds of
miles of trails
and bike lanes
as Las Vegas
expands
transportation
options**



Sustainability in the Community



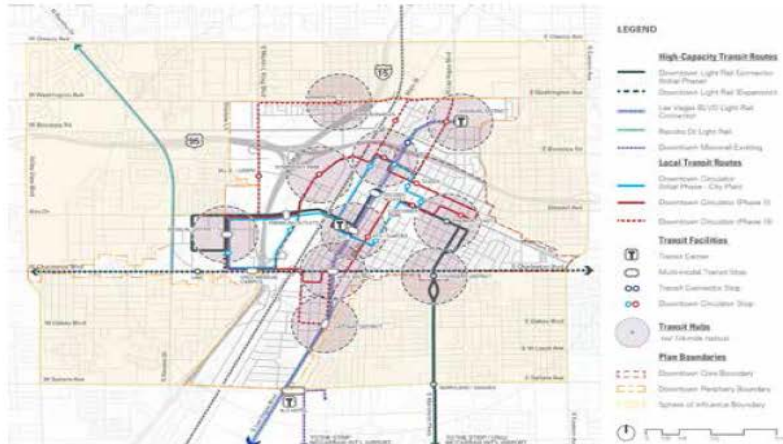
The City recently adopted a new vision for Downtown Las Vegas



FIG 725: FOUNDERS DISTRICT CONCEPTUAL PROPOSAL
LOOKING TOWARD HUNTRIDGE PARK ** DRAWINGS ARE CONCEPTUAL AND NOT INTENDED TO BE INTERPRETED AS DEFINITIVE PROPOSALS

Sustainability in the Community

EXECUTIVE SUMMARY



PROPOSED EXPANDED TRANSIT NETWORK CONCEPT



PROPOSED LAYERED STREET CONCEPT

(* DRAWINGS ARE CONCEPTUAL AND NOT INTENDED TO BE INTERPRETED AS DEFINITIVE PROPOSALS.)



BIKE EMPHASIS STREET STREETScape IMPROVEMENT - MAIN STREET (AFTER)



TRANSIT EMPHASIS STREET STREETScape IMPROVEMENT - CHARLESTON BOULEVARD (AFTER)



PEDESTRIAN EMPHASIS STREET STREETScape IMPROVEMENT - FREMONT STREET (AFTER)

Sustainability in the Community

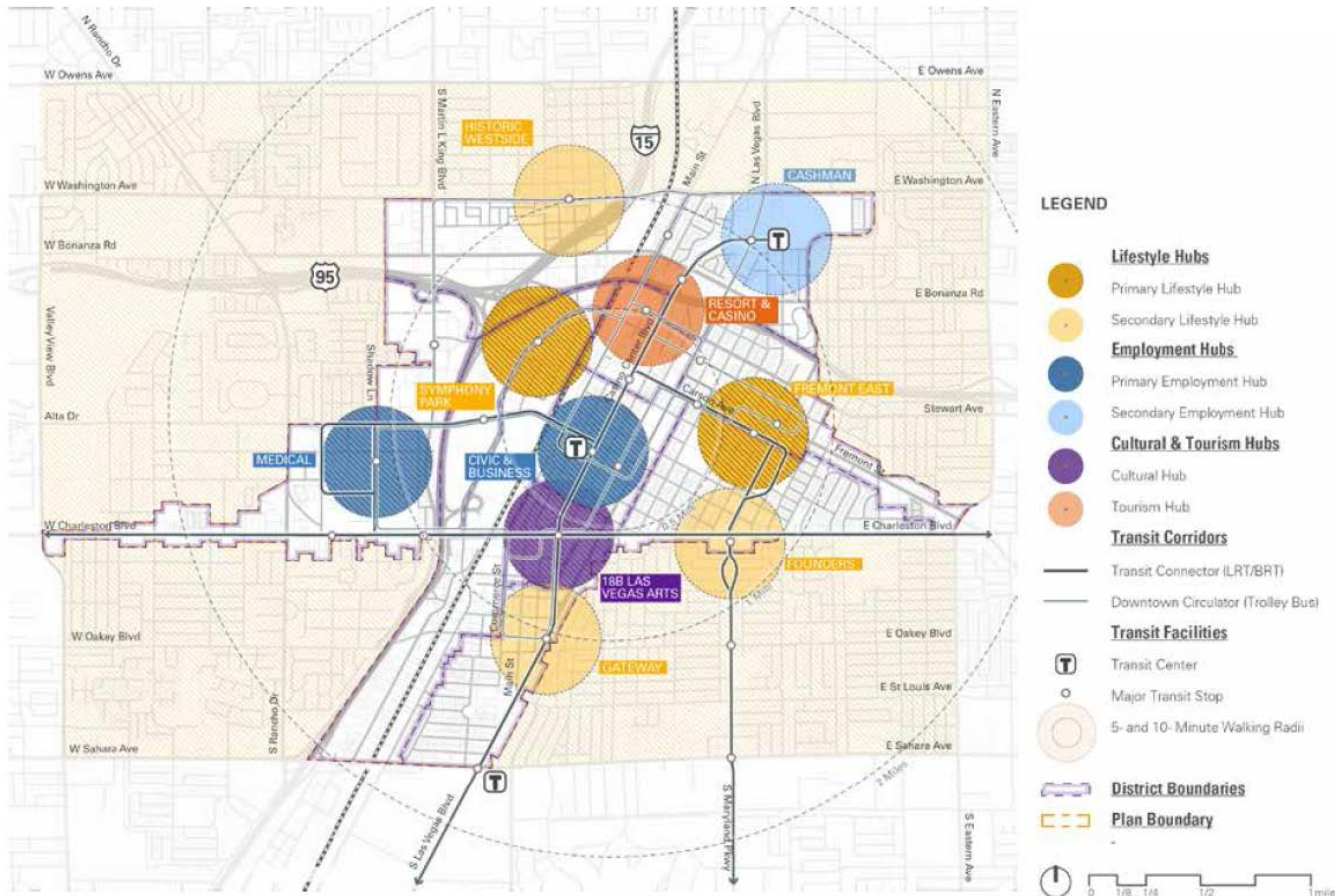


FIG 4.2: PROPOSED TRANSIT HUB CONCEPT

(* DRAWINGS ARE CONCEPTUAL AND NOT INTENDED TO BE INTERPRETED AS DEFINITIVE PROPOSALS.)



Thank you

Tom Perrigo, AICP

City of Las Vegas

Planning Department

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Lasvegasnevada.gov/sustainability