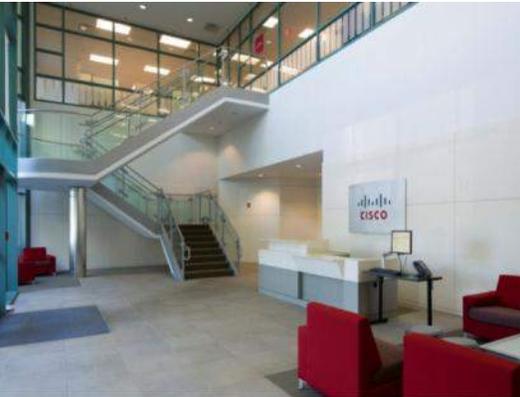


Existing Conditions



Existing Conditions



Existing Conditions



It works as an office project.

Improvements

- Typical HQ office/research and development finishes.
- Tilt-up concrete construction with aluminum storefront window entries and glazing.

Parking

- The 40 acre site contains 2,629 parking spaces (3.25/1,000 SF), 90% of which are shared.

Power

- Private Power Agreement with Constellation Energy provides power at 85% of PG&E rates.
- 3,000 amps supply a 277/480-volt main switchboard in each building.

HVAC

- Packaged rooftop units with per building capacity from 60 to 125 tons. Direct digital controls by Automated Logic.

Elevators

- Each building has one, 2,500-pound capacity elevator.

Fire Life Safety and Security

- Addressable fire alarm system and automatic wet-pipe fire sprinkler. Access control system and a security camera.

Restrooms

- Men's and women's restrooms on each floor with one set of lockers and showers per building.

Dining Areas

- Full cafeteria in 180 West Tasman and 250 West Tasman has a secondary food service area.

A New Vision



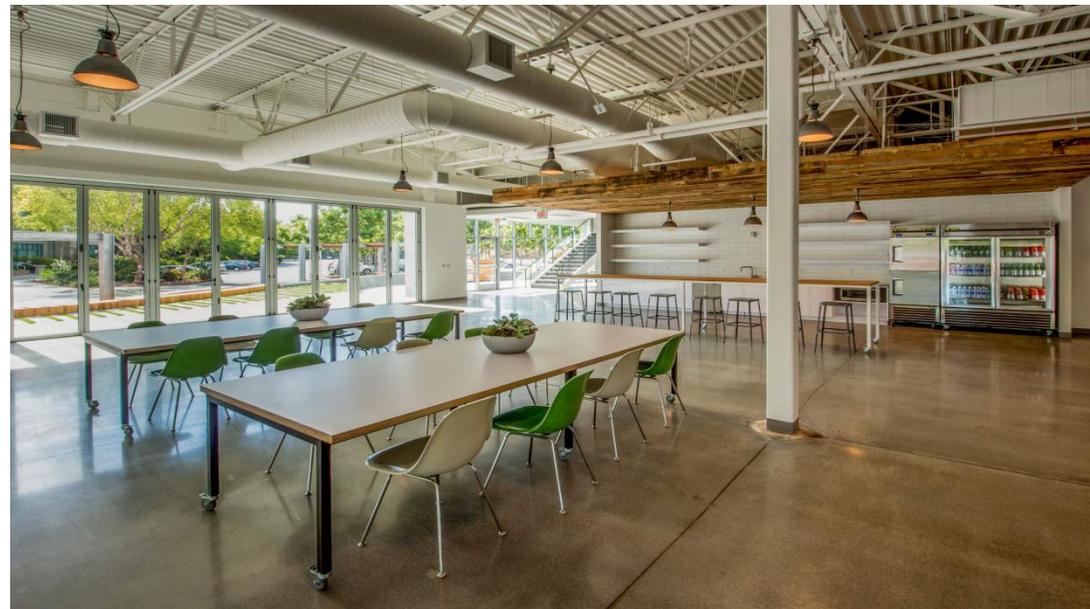
A New Vision



A New Vision



A New Vision



A New Vision



The LEED Conundrum

1. Champion Station is not LEED eligible, so far...
2. Champion Station is not a new planned project.

So then how do we show the market this campus is a healthy alternative to a traditional business park?

What is a Healthy Campus?

Location

- Walkable, mixed use neighborhood
- Adjacent housing
- Neighborhood retail
- Park/Entertainment options

Site

- Outdoor plazas with seating
- Dining options
- Pear orchard
- Drought-tolerant landscaping

Architecture

- Maximize light and air
- Open plan
- Collaborative spaces
- Authentic materials
- Wood, Galvanized metal, Concrete

Indoor/Outdoor

- All hands meeting areas
- Private patios and meeting spaces
- Operable glazing/fresh air

Transportation

- Light Rail
- Amtrak
- Bus
- Bike
- Car

Healthy Amenities

- EV charging stations
- Branded bicycles with storage
- Amenity maps to jogging/walking trails
- Par course
- Community garden
- Ride/walk to shopping
- Exercise/Amenity building(s)

Concierge

- Facebook/Google services for smaller users
- On campus amenities



Champion Station



THE ENVISION™ RATING SYSTEM



What Types Of Infrastructure Will Envision™ Rate?



ENERGY

- Geothermal
- Hydroelectric
- Nuclear
- Coal
- Natural Gas
- Oil/Refinery
- Wind
- Solar
- Biomass



WATER

- Potable water distribution
- Capture/Storage
- Water Reuse
- Storm Water Management
- Flood Control



WASTE

- Solid waste
- Recycling
- Hazardous Waste
- Collection & Transfer



TRANSPORT

- Airports
- Roads
- Highways
- Bikes
- Pedestrians
- Railways
- Public Transit
- Ports
- Waterways



LANDSCAPE

- Public Realm
- Parks
- Ecosystem Services



INFORMATION

- Telecommunications
- Internet
- Phones
- Satellites
- Data Centers
- Sensors





60 Credits in 5 Categories



**QUALITY
OF LIFE**

Purpose, Community, Wellbeing



LEADERSHIP

Collaboration, Management, Planning



**RESOURCE
ALLOCATION**

Materials, Energy, Water



**NATURAL
WORLD**

Siting, Land & Water, Biodiversity



**CLIMATE
AND RISK**

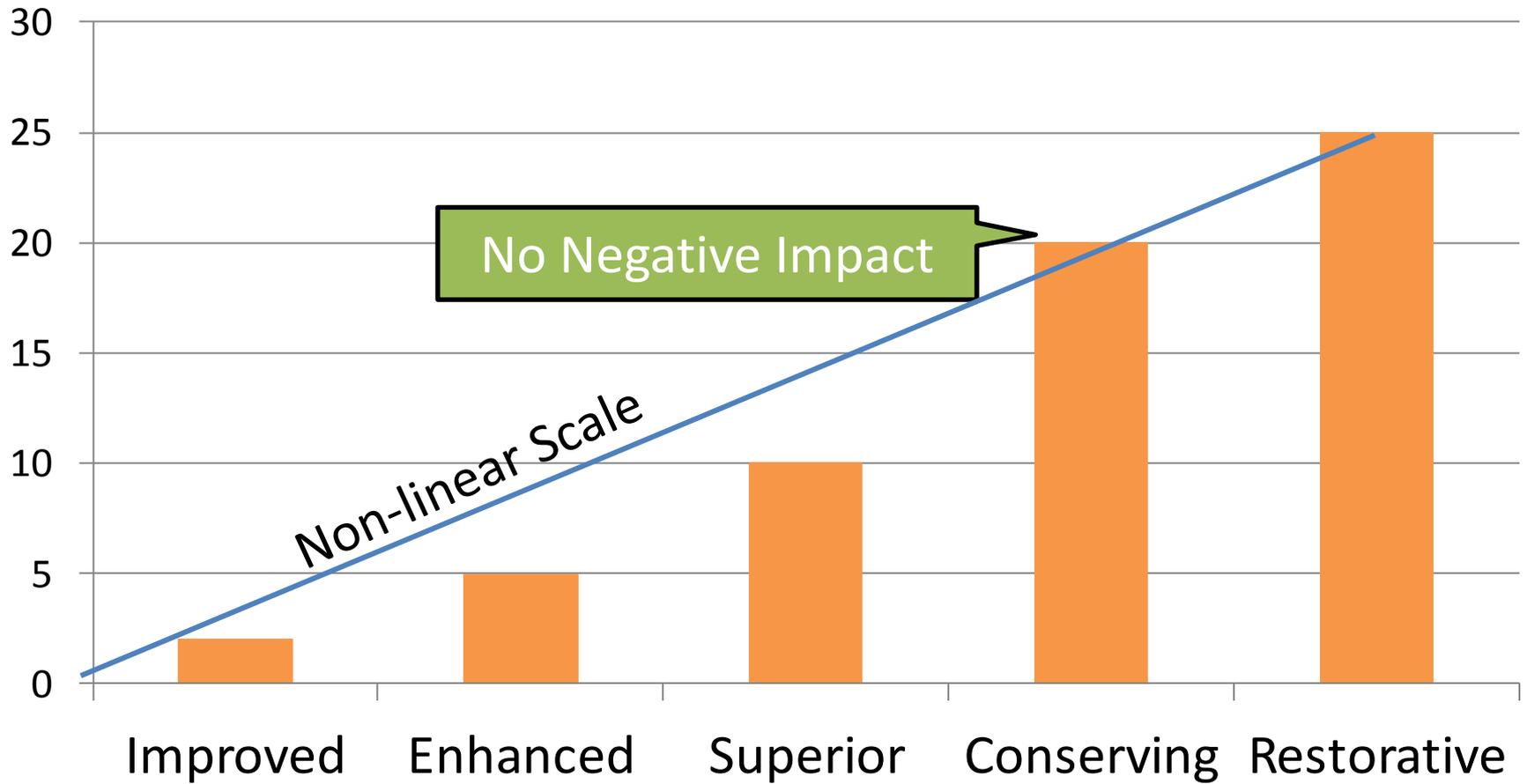
Emission, Resilience





Levels of Achievement

QL1.1 IMPROVE COMMUNITY QUALITY OF LIFE





Input Portal

[News](#)[FAQs](#)[Rating System](#)[ISI Credentials](#)[Project Application](#)[Education & Training](#)[Case Studies](#)[Comments](#)

Project Application

Envision™ Sustainable Infrastructure Rating System

[Instructions](#)[Projects](#)[Section Menu](#)[QL](#)[LD](#)[RA](#)[NW](#)[CR](#)[Section Totals Summary](#)[Report](#)

Section Menu

Please click on the links to take you to the relevant sections:



QUALITY
OF LIFE



LEADERSHIP



RESOURCE
ALLOCATION



NATURAL
WORLD



CLIMATE
AND RISK

[< Previous Page](#)[Next Page >](#)

Rating System

	Section and Objective Numbers	Objectives	Required for Project	Level Of Achievement	Score	Objective Available Points
QUALITY OF LIFE						
QL1	QL1.1	Improve community quality of life. Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities. details / guidance	YES	Restorative <input type="text"/>	25	25
			Notes: <input type="text"/>			
	QL1.2	Stimulate sustainable growth and development. Support and stimulate sustainable growth and development, including improvements in job growth, capacity building, productivity, business attractiveness and livability. details / guidance	YES	Superior <input type="text"/>	5	16
		Notes: <input type="text"/>				
QL1.3	Develop local skills and capabilities. Expand the knowledge, skills and capacity of the community workforce to improve their ability to grow and develop. details / guidance	Assessor Decision Include <input type="text"/>	Improved <input type="text"/>	1	15	
		Notes: <input type="text"/>				



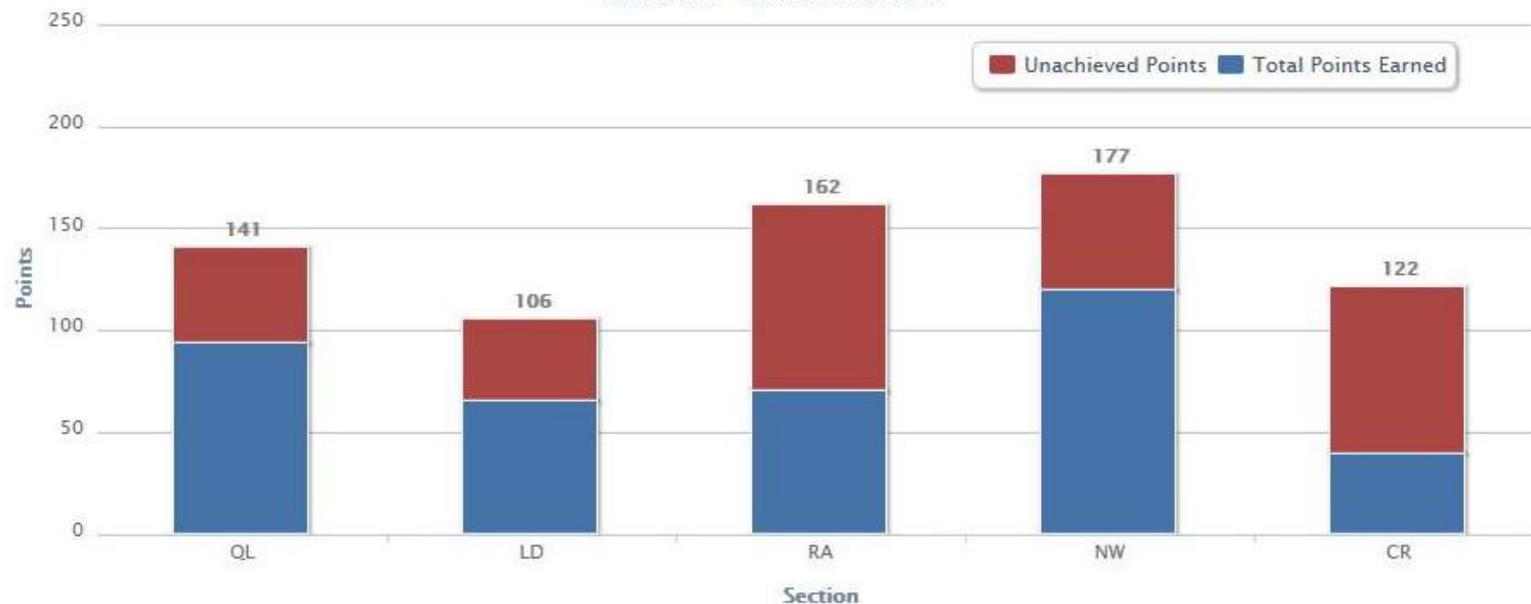


Scoring Summary

Section Totals Summary

Section	Maximum Possible Score	Section Points	Innovation Points	Total Points Earned
QL	141	91	3	94
LD	106	66	0	66
RA	162	71	0	71
NW	177	118	2	120
CR	122	40	0	40
Total Project Points	708	386	5	391

Envision™ Section Scores





Award Levels

Recognition Level	Minimum Applicable Points	Minimum in Each Category
Bronze	 20%	No minimum category percentage required
Silver Award	 30%	
Gold Award	 40%	
Platinum Award	 50%	



Fee Schedule

Registration Fee: \$1000

Verification Fee

Project Size (\$)	Non-Member Price	ISI Member Price
Up to 2M	\$3000	\$2400
2-5M	\$8500	\$7000
5-25M	\$17,000	\$14,000
25-100M	\$25,000	\$21,000
100-250M	\$33,000	\$28,000
Over 250M	\$5000 per 100M above base price of \$20,000	

Appeals Fee: \$500 per credit



www.sustainableinfrastructure.org



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Building Tomorrow's Infrastructure Today

Envision™ Rating System

[Click Here](#)

Envision™ Checklist

[Click Here to Download Checklist](#)

ISI Credential Application

Register here for the ISI Credential and Training Program. You must be registered and your application accepted to participate.

Accepted Applicants

If your ENV SP application has been accepted, login to the Portal to view the education modules and take the test. [Click here](#)

Envision Credentialed Professionals

[Click here to search for a credentialed ENV SP.](#)

Latest News

- [ISI has Large Presence at Ecobuild America...details](#)
- [Recognizing a Founder...details](#)
- [Easy Updating of Your ISI Information...details](#)
- [Faculty Discounts for Credentialing...details](#)
- [New Envision™ Presentation Templates...details](#)
- [Envision™ Checklist Now Available...details](#)
- [First Class of Verifiers Graduate...details](#)
- [Rebuilding America's Infrastructure...details](#)

ISI provides third-party project **VERIFICATION** for the **Envision™ Sustainable Infrastructure Rating System**

[Click here to find out more ▶](#)





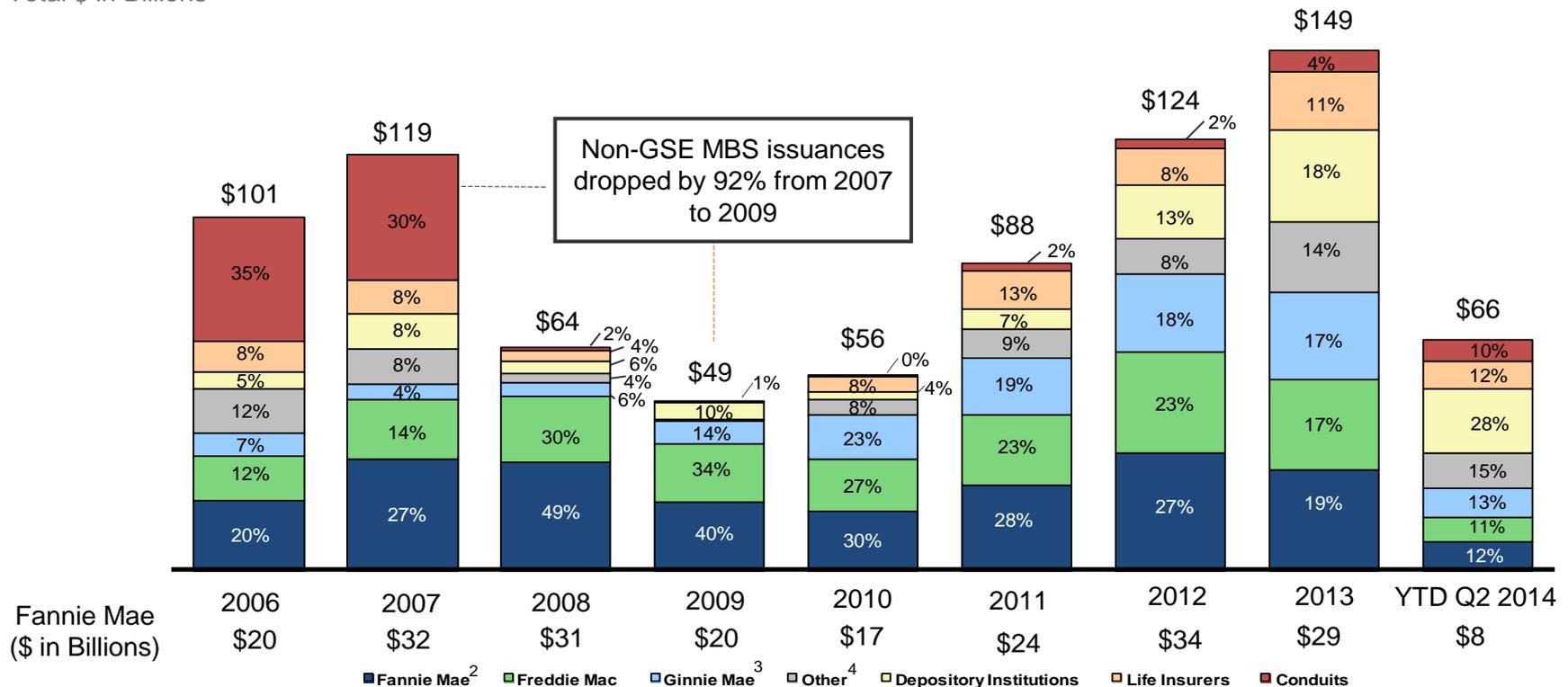
Fannie Mae Multifamily Green Initiative

ULI Fall Meeting

October 22, 2014

Estimated Competitive Multifamily Debt Market Acquisitions by Participant¹

Total \$ in Billions



Diversified participation exists in the multifamily market today and competition is increasing.

Source: Fannie Mae and Freddie Mac 10-K and 10-Q financial statements, ACLI, FDIC, Trepp & Mortgage Bankers Association, Fannie Mae Multifamily Economic Research

Notes:
¹ Estimated competitive market size is an estimated subset of MF originations activity. It is not meant to be all-inclusive of total MF originations during a specific timeframe.
² Excludes purchases of loans from others' portfolios and Treasury HFA New Issue Bond program volume in 2009 and 2010.
³ Loans securitized by Ginnie Mae include non-dedicated multifamily housing e.g. ,healthcare and new construction.
⁴ Other includes state and local credit agencies, FHLB and other financial institutions.

Multifamily Green Initiative Mission

The mission of the Fannie Mae Green Initiative is to raise the quality and to increase the affordability of Multifamily Housing in the U.S. while reducing its impact on the natural environment.

Strategy

Resolve Barriers
& Friction Points

Provide Financing
for Smart
Improvements

Lead & Educate
Market

The Green Initiative creates value for all multifamily stakeholders: owners, tenants, equity and MBS investors, and lenders.

Milestones Achieved: 2010-2014

- Conducted national survey of 1,000+ multifamily properties and created ENERGY STAR® for Multifamily Score
 - Created the Multifamily Energy Audit Protocol
- Launched two innovative Green Financing Loan Products:
Green Preservation Plus & M-PIRE
 - Created the industry standard for Green MBS
 - Delivered \$130M+ in Green MBS to the market
- Became the first Lender to connect financial and energy performance
 - Redesigned underwriting processes to include a portion of owners and tenants' energy and water projected cost savings in M-PIRE loans

Green Preservation Plus for Affordable Housing: 5% more

CASE STUDY: LINC TRANSFORMS AFFORDABLE HOUSING AND CUTS COSTS WITH GREEN PRESERVATION PLUS

CHALLENGE: REFINANCE AND TACKLE EXPENSE RISK

LINC Housing was ready to reduce rising energy, water and operating expenses and to refinance existing debt at City Gardens Apartments. A 274-unit Affordable Housing property, City Gardens primarily serves family and children.

SOLUTION: GREEN PRESERVATION PLUS

- » \$19.4M loan
- » \$1.5M for property improvements
- » Tax-exempt bonds retired
- » LIHTC equity partner bought out

ACTION: SMART INVESTMENTS FOR HIGH PERFORMANCE, LOWER OPERATING COSTS

 Reduced natural gas costs	 Reduced water costs	 Reduced electric costs	 Safeguarded long-term value by improving:
ENERGY STAR®-rated furnaces	Low-flow plumbing fixtures	Energy-efficient lighting in common areas and resident units	Roofing and siding
Passive solar domestic hot water heating system	New irrigation system		Storm water drainage
			Balconies

Green Preservation Plus provides up to an 85% LTV to support investment in smart property improvements.

NYC M-PIRE: Underwrites Projected Cost Savings

\$9.6m M-PIRE Loan vs. \$9.2m Conventional Loan

M-PIRE UNDERWRITES PROJECTED TENANT AND OWNER ENERGY AND WATER SAVINGS



\$26,815

Owner's underwritten projected energy & water cost savings



\$12,480

Tenants' portion of underwritten projected electricity cost savings

	Standard	M-PIRE
Resulting Pro Forma NOI	\$765,000	\$801,175
Total Loan Proceeds	\$9,200,000	\$9,680,000
DSCR	1.25	1.25

M-PIRE provides \$480k in additional loan proceeds while maintaining DSCR.

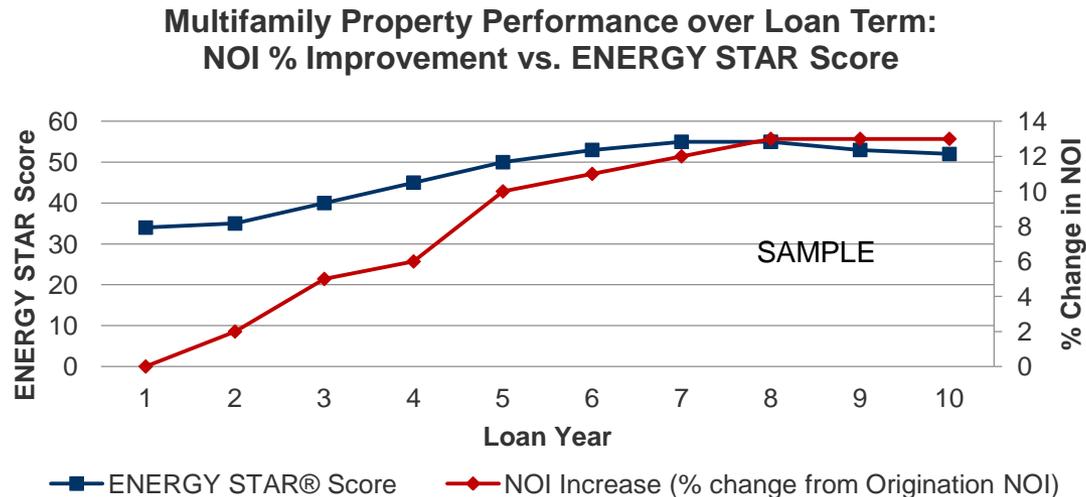
M-PIRE increases pro forma NOI by including a portion of the owner's and tenants' projected energy and water savings.

Note: Total projected savings at the property are \$78,590

M-PIRE assists owners overcome the split incentive by crediting the Owner's NOI with a portion of the Tenant's projected cost savings.

Multifamily’s critical knowledge barrier: Performance Data

- There is little to no national data on the long-term relationship between a multifamily property/portfolio’s financial performance and its energy and water performance.



Fannie Mae is actively working to address and resolve these knowledge barriers for the Multifamily industry.

Delivering the ENERGY STAR® Score for Multifamily

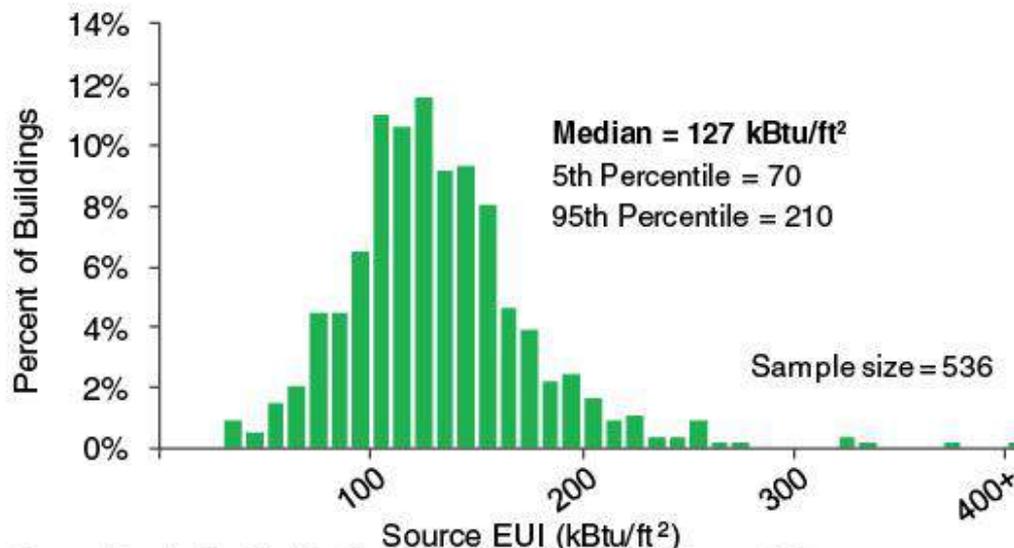
- DOE's CBECS did not collect multifamily data as needed by EPA.
- In 2012 and 2013, Fannie Mae collected data from multifamily properties for the EPA to create the ENERGY STAR Score for Multifamily.
 - 1,000+ multifamily properties nationwide
 - High-rise to garden style, 5 units to 300+ units
 - Market Rate to Affordable to Seniors
- Score released Sept. 16, 2014.



Multifamily owners now have a simple energy metric, and can receive a nationally recognized certification if the score is 75 or more.

Fannie Mae Survey: Insights into Multifamily performance

FIGURE 2: DISTRIBUTION OF WHOLE PROPERTY ENERGY USE (PER SQUARE FOOT)



Source: Fannie Mae Multifamily Energy and Water Market Research Survey.

The least efficient properties use over three times as much energy and six times as much water per square foot as the most efficient properties.

*Calculation based on the difference between the 5th and 95th percentile values of energy cost per square foot (\$0.62/ft² and \$2.27/ft²) from the Fannie Mae Survey, applied to a 100,000 square foot property (\$227,000 - \$62,000 = \$165,000).

\$165K Difference between Worst & Best Energy Performers

- The least efficient property may end up spending \$165,000 more in annual energy costs than a similar property operating the most efficiently.
- On average, a 100,000 square foot property spends \$125,000 on energy and \$33,000 on water annually.
- If this property saved 15% on energy and water costs, it would increase asset value by almost \$400,000, assuming a 6% cap rate.

Fannie Mae's white paper
 "Transforming Multifamily Housing"
 has additional key findings.
www.fanniemaegreeninitiative.com



Contact

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Chrissa_Pagitsas@fanniemae.com

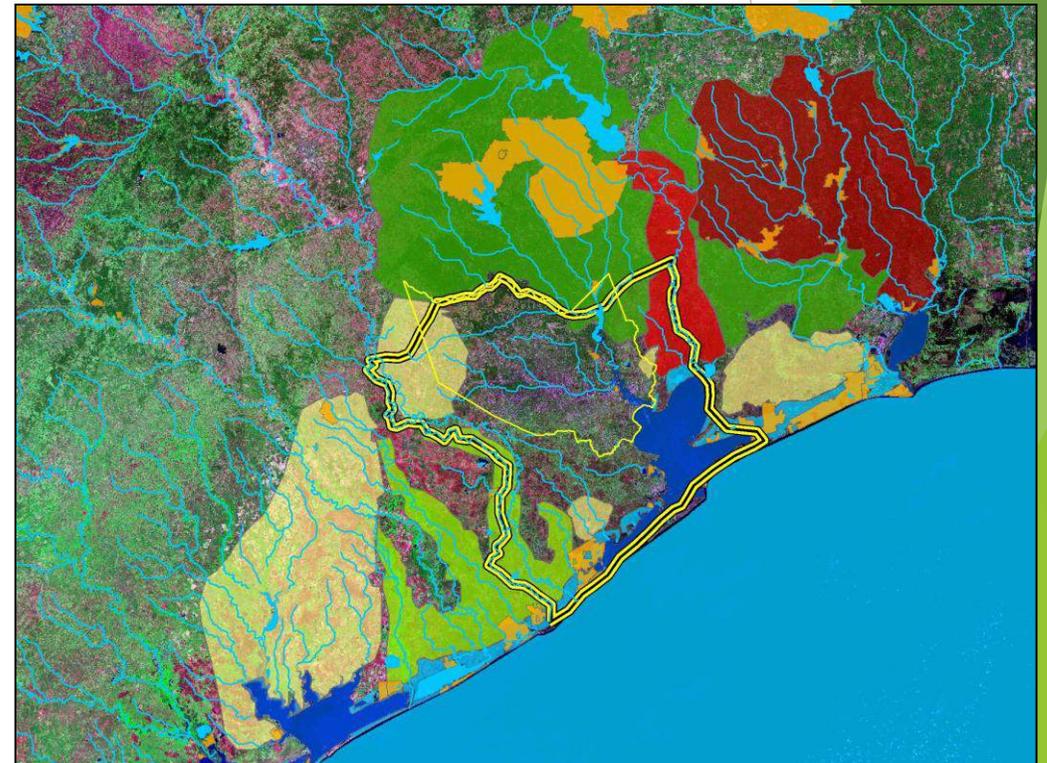
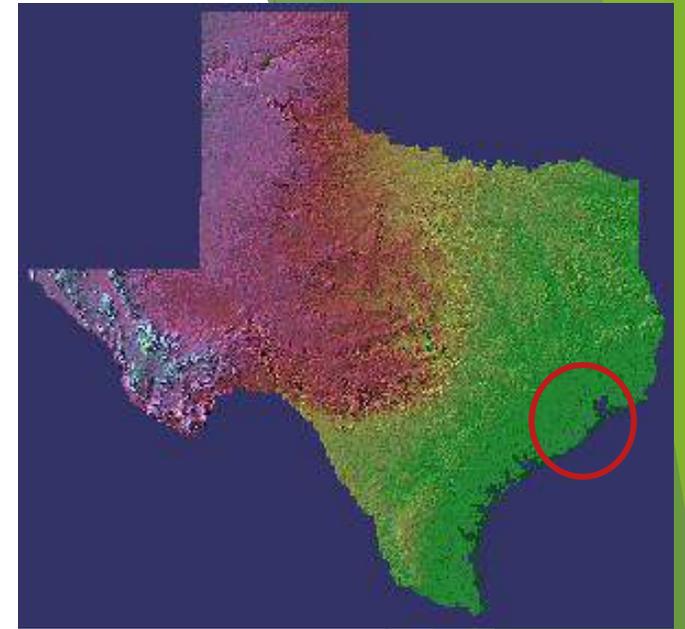
www.FannieMaeGreenInitiative.com

“Houston Exploding”

A “lab” for rapid growth
sustainable scenarios...
SDC Opportunities?

Rives T Taylor FAIA, LEED BD+C

Gensler



The Region Context : The Sustainable Challenge

Geography:

Largest land area of the Big-4 cities

Population Sprawl:

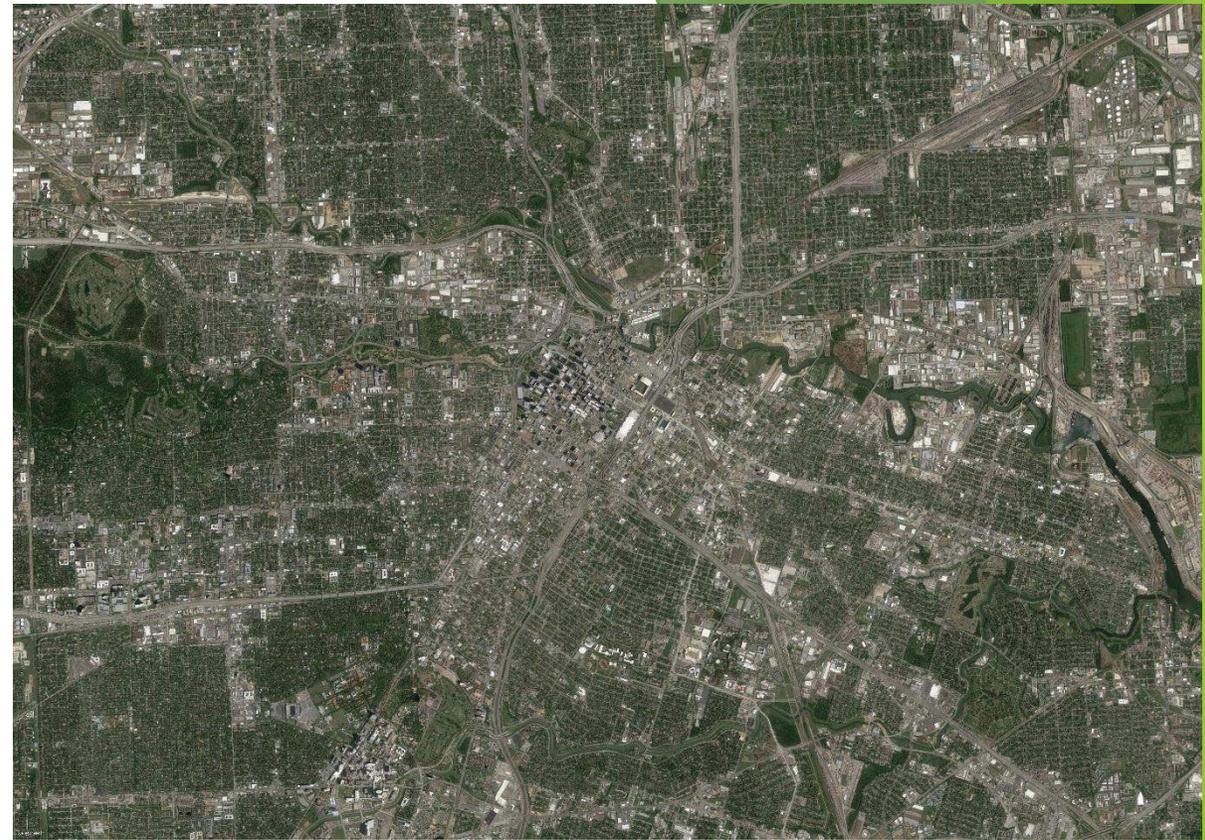
2.1 M(2010 census) in 600 square miles

Pop density of 3,553 persons/square mile

Economic Strength :

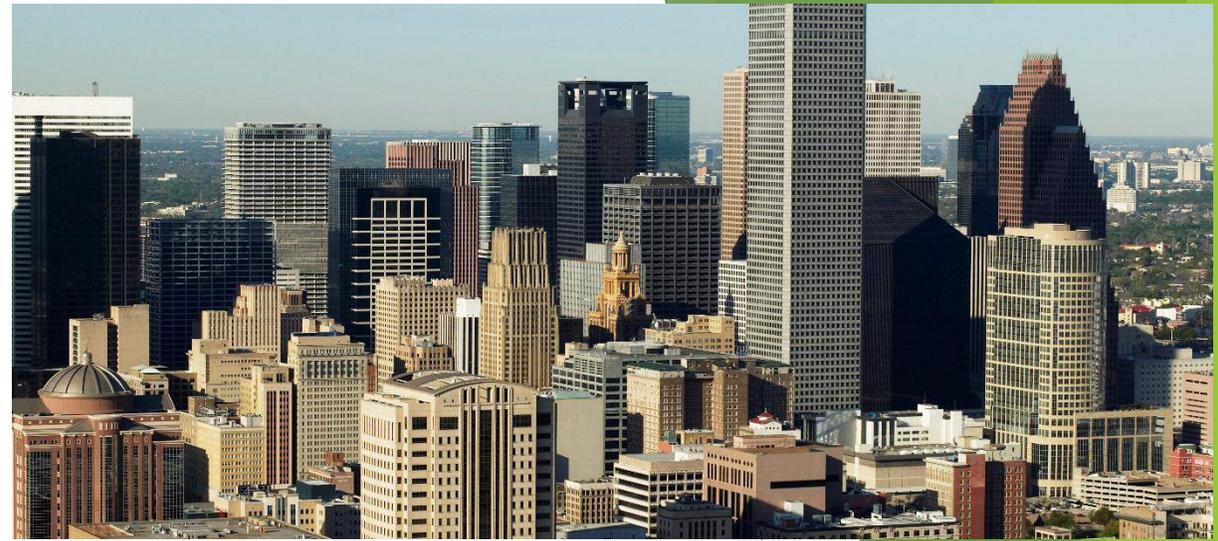
Gross Area Product (GAP) in 2006 was **\$325.5 billion**

*The City of Houston permitted **\$7.3 billion in construction** over the 12 months from 2nd Quarter 2013 to 2nd Quarter 2014*



The Energy Capital – Long Term Growth

- 5,000 energy related companies;
- *Growth will accelerate with foreign companies buying up energy firms:*
- Added 10+ percent more jobs since 2008, since 2000 has shot up 32 percent;
- Most ethnically diverse region in the country - foreign-born population 400,000 increase in last 10 years.



5 Districts



1. Downtown and Wards
2. Energy Corridor + Memorial City
3. Generation Park
4. Springwoods Village
5. The Woodlands

<http://www.visithoustontexas.com/mapexplorer>

5. The Woodlands

- “The Benchmark” by Mitchell and McHarg
- Planned Development now realized
- Open/ Green space, walkability and the car
- Again, expanding rapidly with infrastructure challenges

Sustainable community designed in tune with nature

- **Opened in 1974**
- **Preservation of the environment**



Environmentally Sensitive Practices

- **Value of Nature – Celebrate Diversity of Forest/Native Species**

Energy Conservation

Storm Water Reduction

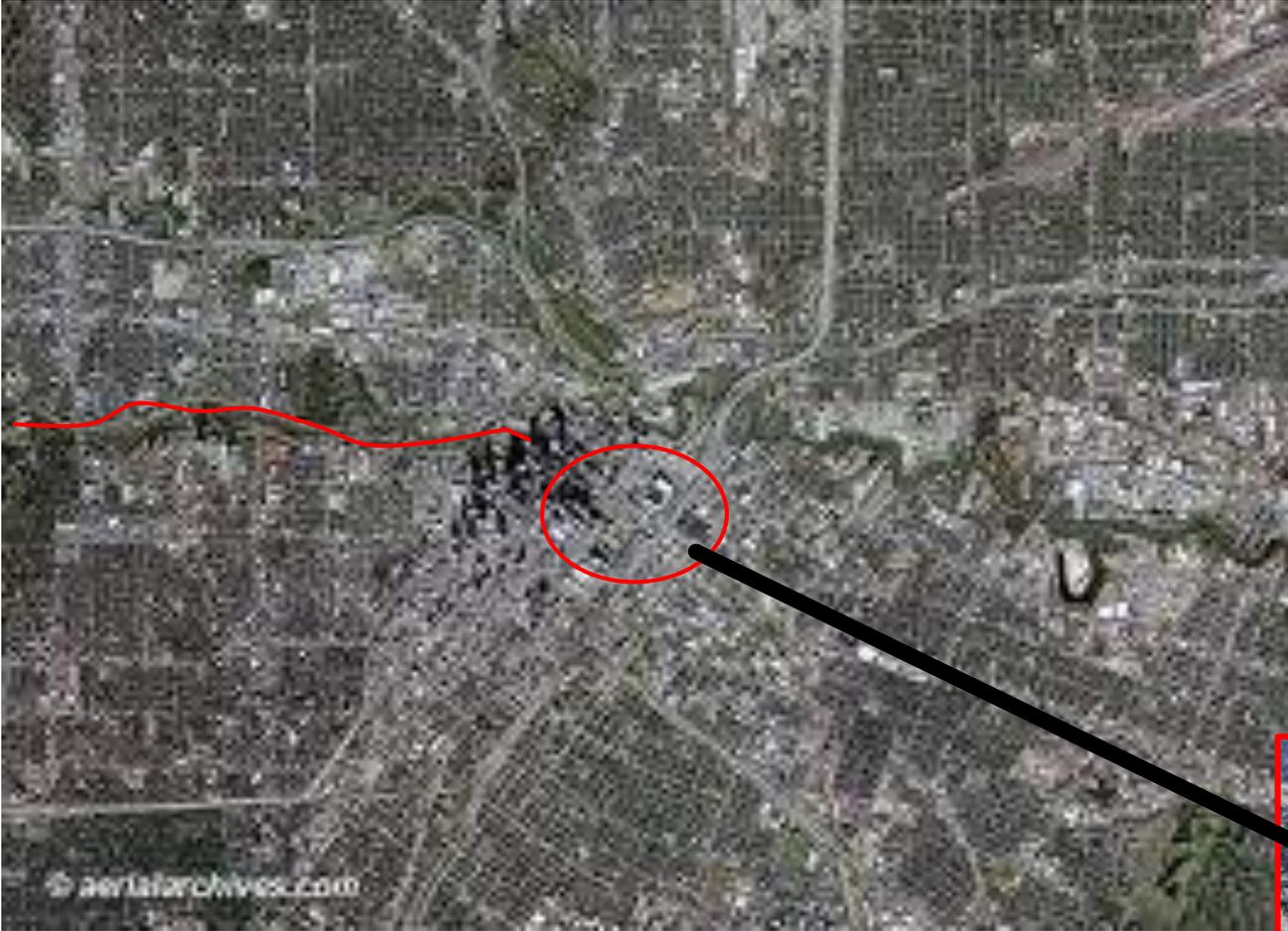
Wildlife Habitat



- **Shared parking is standard with schools, churches and parks**
- **Natural area preserves – uplands, natural and created wetlands**

38 Environmental Awards in 30 Years

1. Downtown



- Downtown Residential
- Downtown Convention and Hotel – New Convention Dis
- Downtown Green Space –Bayou Infrastructure Investment
- Light Rail Transit Oriented Development

Convention District



The Downtown Houston convention- six properties and 2,000 rooms by 2016.

<http://www.houstonconventionctr.com/HomePage/PressRoom/TheNewHoustonConventionDistrict.aspx>

Bayou as urban Resource



Likened to Houston's own Central Park, the ambitious \$58 million project

<http://buffalobayoupark.org/home/>

<http://buffalobayoupark.org/about-the-project/#overview>