### About the Competition

The 2009 ULI Gerald D. Hines Student Urban Design Competition is a graduate-level annual competition that is intended to provide an interdisciplinary learning experience for real estate and design students in the United States and Canada. Self-formed student teams are asked to provide an urban design and a financial feasibility strategy for a large-scale real life site that ULI has identified somewhere in the United States. Through the formation of multidisciplinary teams, the program encourages cooperation and teamwork among future real estate professionals and the many allied professions, such as architecture, landscape architecture, urban planning, historic preservation, engineering, real estate development, finance, psychology, law, and others.

Participating Schools: University of Miami School of Architecture and School of Business Programs: Master of Real Estate Development & Urbanism, Master of Architecture in Suburb & Town Design, Master of Architecture, and the Master of Business Administration

Team 5010: Warren Bane, Benyameen Ghareeb, Jeffrey Hall, Victor Santana, and Jared Sedam Faculty Advisors: Dr. Charles C. Bohl, Jaime Correa, and Stephen Nostrand

### SITE MAP



# **REGION CONTEXT**



#### ALAMEDA – A NEW SUSTAINABLE URBANISM

#### Site is surrounded by major transportation corridors

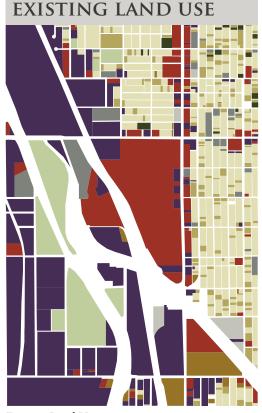
- Broadway connects directly with downtown Denver
- Alameda Avenue connecting to major urban parks and natural landscapes
- Alameda Station Light Rail connects Alameda Gardens to downtown Denver and its surrounding communities via one of the most extensive transit systems in the country
- I-25 links site to Northern and Southern Colorado

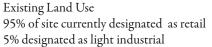
#### Self sustaining lifestyle is paramount in design

- Fourteen acres of public and semi private gardens
- On site water collection, filtration, retention and reuse
- Walkable neighborhood with daily necessities located within a quarter mile radius minimizes need to run errands by car

#### Providing for the needs of surrounding neighborhoods

- Incorporating current Broadway Market Place retailers into walkable medium density urban environment
- Alameda Farmers Market sells produce grown on site
- Incorporating entertainment, health and educational

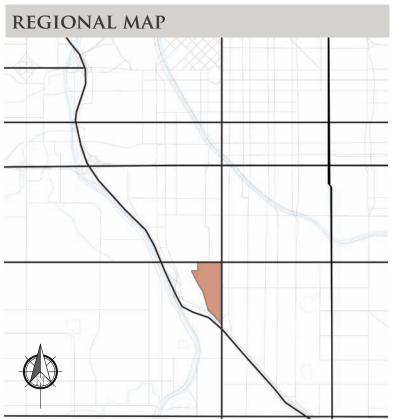


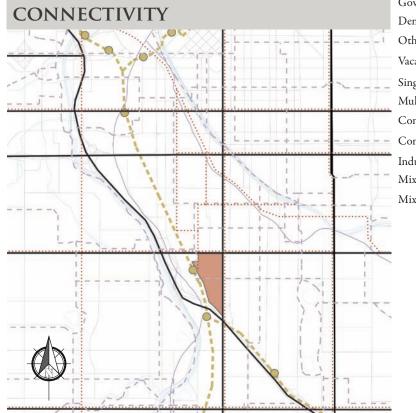




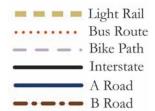
Regional Map An estimated million pe

An estimated million people will move to Denver in the next 20 years, underscoring the importance for sustainable housing

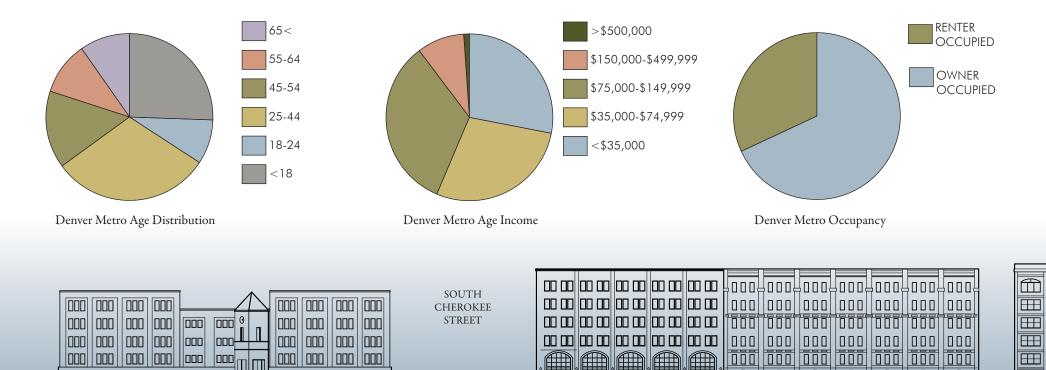








#### DEMOGRAPHICS

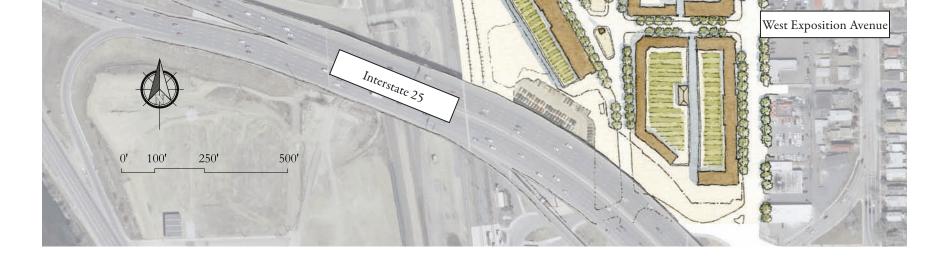


# MASTERPLAN



Building on Existing & Historic Grid
Balance of Public & Private Realms
Sustainable Density

## **DENVER MASTERPLAN** e ritter 479 3 THE R. West Alameda Avenue R 1 Strange off CE West Nevada Place R TREFERENCE West Dakota Avenue していたの ないためで いたの B X COLLECTOR Construction of West Alaska Place R なないが必 X Ø West Virginia Avenue THE OCO R C encounter and the 市民 X No. Contraction West Center Avenue S 見てないのの の日辺 0 王のでのな いたででである 100 ないのの





# URBAN DESIGN ELEMENTS

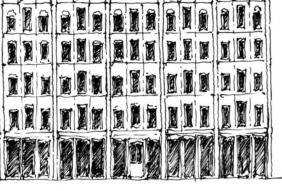


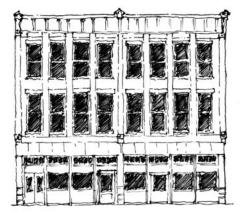
Flexible Design

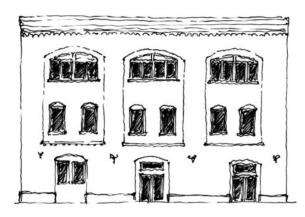
Contextual Design Strategies

## STUDY OF HISTORICAL PRECEDENTS IN DENVER







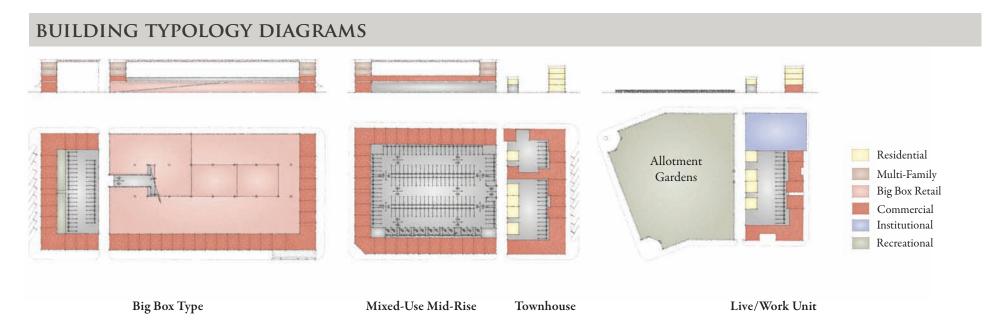


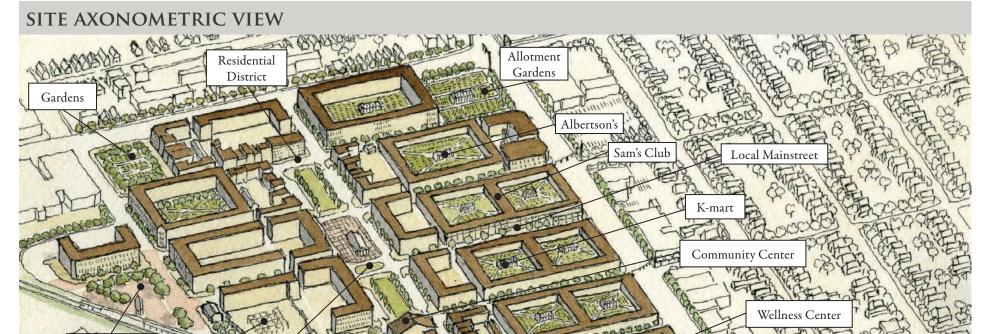
Live/Work Unit

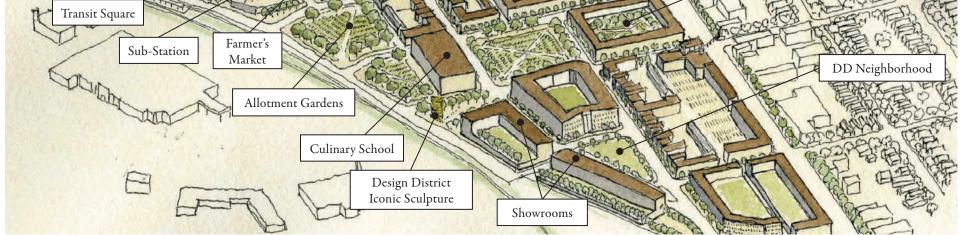
Mixed Use Building

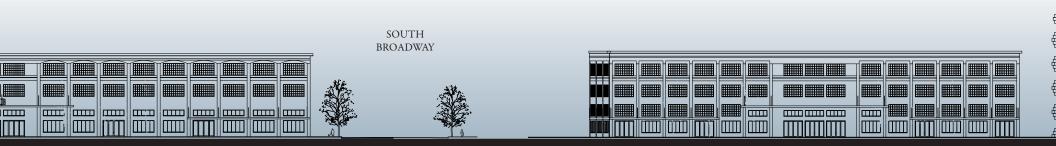
Mixed Use Building

Warehouse Building









# PUBLIC SPACE & PHASING



Sense of Place

Flexible Spaces (Agriculture, Street Fairs, Farmer's Market, Outdoor Living)

## PHASING DIAGRAMS



PHASE I





PHASE II

PHASE III



ALAMEDA STATION SQUARE





View Towards Culinary District Plaza

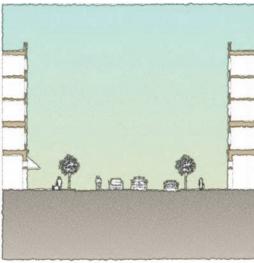


Culinary District Plaza

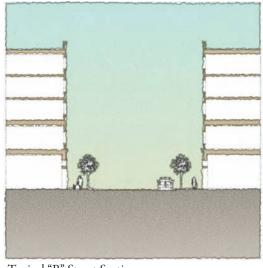


# DEVELOPMENT SITE

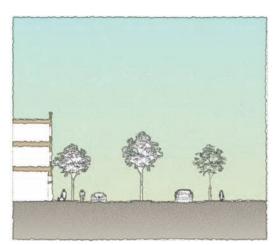
- Mainstreet Element
- Connectivity
- Daily Needs on Site



Typical "A" Street Section



Typical "B" Street Section



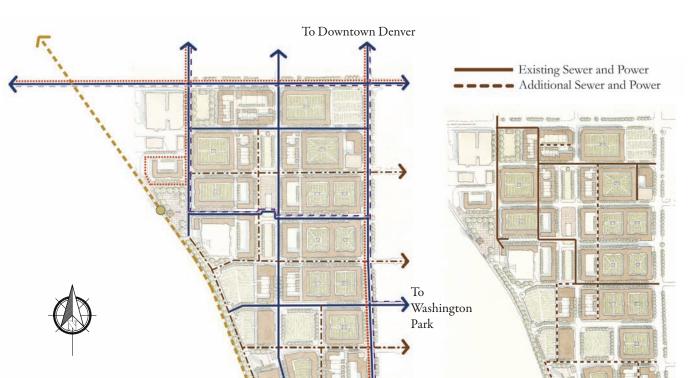
Alameda Avenue Section

# MAIN STREET (ALASKA AVENUE) LEASING PLAN

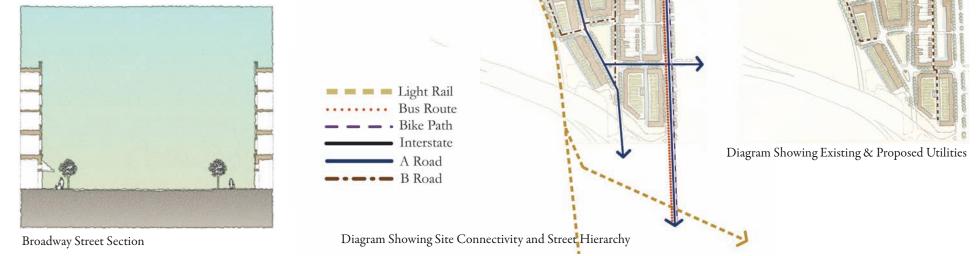




View Along the Local Main Street (Alaska Avenue)







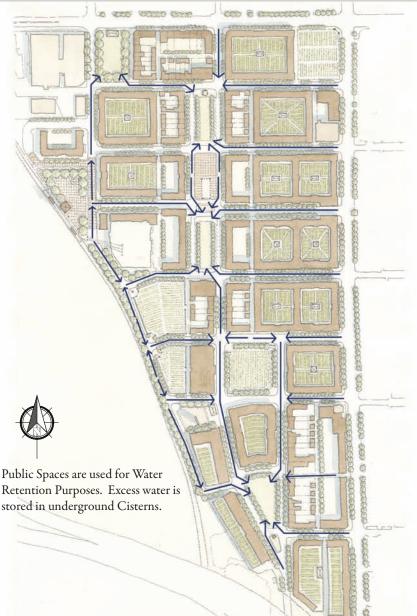


# **SUSTAINABILITY**

Strive for Self-Sufficiency

- Sustainable Densities
- Minimize Carbon Footprint

## WATER MANAGEMENT

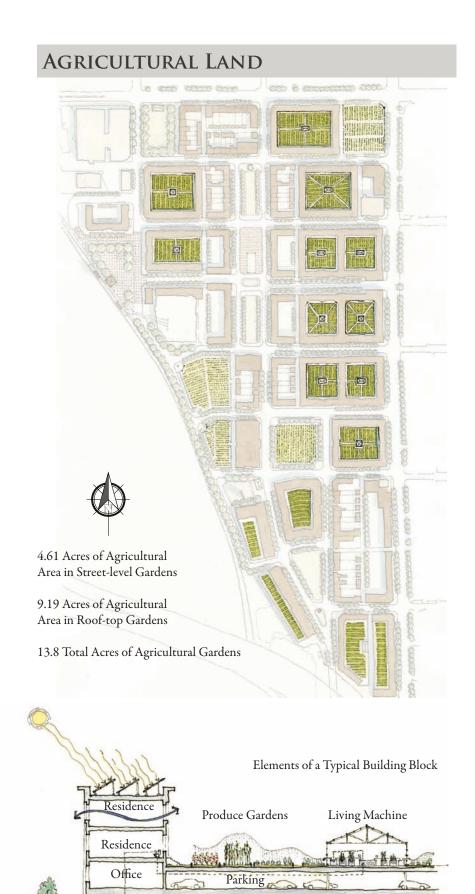


Food Production & Recycling (Composting)

Minimize Energy Usage (Natural Light & Cross Ventilation)

Energy Production (Photovoltaic Panels)

Water Harvesting & Recycling





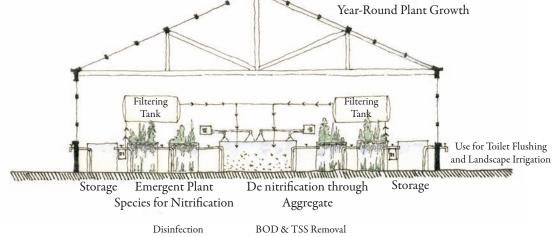
Greenhouse Enclosure for Sustained

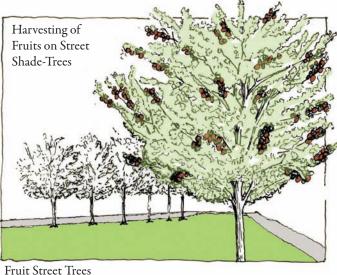
Permeable Road

Surface

Main Street

Retailer Cistern





**Big Box Retailer** 





ALAMEDA

# FINANCIAL

## TABLES & CHARTS

DEVELOPMENT TIMING Anchor Space In-line Retail Space Live Work Space Multi Family Space Office Space Showroom Space oral Rentable Area	3 years     3       90,637     24       99,303     4       0     11       631,860     44       297,080     17       395,000     9	hase 2     Phase 3       tyeas     1 year       54,310     0       2,410     54,750       55,212     154,000       19,500     138,800       74,410     146,750       0,000     88,000       35,842     582,300	Phase 3; 18.02% Phase 1; 46.84% Phase 2; 35.14%	17.7% 11.0% 6.1% 9.6% 19.1% 36.5%	DEVELOPMENT DISTRIBUTION BY SF (ABOVE) VS DEVELOPMENT DISTRIBUTION BY TOTAL COST (BELOW)
HARD & SOFT COSTS	Hard Costs Sol	ft Costs Total Costs	Parking	7.8% 4.0%	Anchor Space
Anchor	\$76.88 \$	20.91 \$97.79	Office	17.9%	In-line Retail Space
In-line Retail		19.26 \$90.08	Multi Family	9.9%	Live Work Space
Live Work		30.47 \$142.48	Live Work In-line Retail		Multi Family Space
Multi Family	AAD707179	30.47 \$142.48			Office Space
	8.000 CT	and the second		37.7%	
10.0 m H(7) / d 1	a second s	AL 1997 -	and the second se	0	Showroom Space
Nutit Famity Office Sbowroom Parking	\$101.46 \$ \$58.28 \$	30.47     \$142.45       27.60     \$129.06       15.85     \$74.13       \$7.64     \$35.73	Anchor	0 37.7%	

CONSTRUCTION COSTS	PHAS	E 1	Рна	se 2	Phase 3	Total		DEVELOPMENT
CONSTRUCTION COSTS	2011	2012	2013	2014	2015	5 years	2010	DEVELOPMENT TIMELINE,
Anchor Space	\$4,431,758	\$4,431,758	\$15,508,341	\$10,338,894	: \$0	\$34,710,750	2011	SF
In-line Retail Space	\$4,472,758	\$4,472,758	\$2,292,253	\$1,528,169	\$4,932,046	\$17,697,984	2011	1
Live Work Space	\$0	\$0	\$13,268,458	\$8,845,639	\$21,941,415	\$44,055,512	2012	Anchor Retail
Multi Family Space	\$45,012,670	\$45,012,670	\$35,006,530	\$23,337,687	\$19,775,769	\$168,145,326		In-Line Retail
Office Space	\$19,170,145	\$19,170,145	\$13,505,311	\$9,003,541	\$18,939,132	\$79,788,274	2013	Live Work
Showroom Space	\$14,641,102	\$14,641,102	\$4,003,137	\$2,668,758	\$6,523,630	\$42,477,728	2014	= Live Work
Parking Space	\$9,386,201	\$14,006,348	\$14,006,348	\$3,573,048	\$0	\$40,971,945		Multi Story Residential
Green Initiatives	\$3,347,500	\$3,320,617	\$2,480,490	\$2,419,844	\$4,683,467	\$16,251,918	2015	Office
Infastructure & Landscape	\$298,040	\$306,981	\$317,174	\$325,677	\$449,349	\$1,697,222	.00M 1.00M 2.00M 3.00M	
Total Development Costs	\$100,760,173	\$105,362,379	\$100,388,043	\$62,041,255	\$77,244,809	\$445,796,658	300M 130M 2300M 3300M	4.00M Showroom

Pro Forma	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Potential Gross Income	\$0	\$4,086,000	\$14,727,199	\$25,741,708	\$35,423,874	\$44,118,559	\$56,017,589	\$57,978,204	\$60,007,442	\$62,107,702	\$55,943,051	\$57,901,058
Vacancy & Collection Loss	\$0	\$0	\$2,592,970	\$4,567,842	\$5,263,809	\$5,086,291	\$4,995,161	\$4,300,319	\$4,450,830	\$4,606,609	\$4,350,920	\$4,503,202
Effective Gross Income	\$0	\$4,086,000	\$12,134,229	\$21,173,866	\$30,160,065	\$39,032,268	\$51,022,427	\$53,677,885	\$55,556,611	\$57,501,093	\$51,592,132	\$53,397,856
Operating Expenses	\$0	\$1,789,355	\$5,077,662	\$7,710,098	\$10,297,519	\$12,900,903	\$16,051,254	\$16,554,913	\$17,074,456	\$17,610,386	\$15,481,624	\$16,191,340
Net Operating Income	\$0	\$2,296,645	\$7,056,567	\$13,463,768	\$19,862,546	\$26,131,365	\$34,971,174	\$37,122,973	\$38,482,156	\$39,890,707	\$36,110,508	\$37,206,516
Annual Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,837,809	\$29,837,809	\$29,837,809	\$29,837,809	\$29,837,809
Operating Cash Flow	\$0	\$2,296,645	\$7,056,567	\$13,463,768	\$19,862,546	\$26,131,365	\$34,971,174	\$7,285,163	\$8,644,346	\$10,052,897	\$6,272,699	\$7,368,707
Reversion Cash Flow	\$0	\$0	\$0	\$0	\$0	\$0	\$0			\$65,234,811		\$114,533,974
Annual Cash Flow	\$0	\$2,296,645	\$7,056,567	\$13,463,768	\$19,862,546	\$26,131,365	\$34,971,174	\$7,285,163	\$8,644,346	\$78,171,589	\$6,272,699	\$127,869,227

(ield to Cost	Gross Rent	Expenses	NOI	Cost / Unit	Vield to Cost	Weighted Average 8.87%
Inchor	\$16.50	\$8.00	\$8.50	\$97.79	8.69%	
line Retail	\$30.00	\$8.00	\$22.00	\$90.08	24.42%	Office
ive Work	\$14.00	\$4.62	\$9.38	\$142.48	6.58%	Live Work
Inlti Family	\$14.00	\$4.62	\$9.38	\$142.48	6.58%	Lave work
ffice	\$24.00	\$8.50	\$15.50	\$129.06	12.01%	Anchor
bouroom	\$10.00	\$4.00	\$6.00	\$74.13	8.09%	
eighted Average	\$16.45	\$5.83	\$10.62	\$119.70	8.87%	0.00% 5.00% 10.00% 15.00% 20.00% 25.00% 30.00%

FINANCING	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Global Capped Value	\$0	\$88,207,093	\$168,297,097	\$248,281,822	\$326,642,060	\$437,139,669	\$464,037,159	\$481,026,948	\$498,633,835	\$451,381,349	\$465,081,455	\$484,873,842
Land Value	\$0	\$140,000,000	\$144,200,000	\$148,526,000	\$152,981,780	\$157,571,233	\$162,298,370	\$167,167,322	\$172,182,341	\$177,347,811	\$182,668,246	\$188,148,293
Total Estimated Value	\$0	\$228,207,093	\$312,497,097	\$396,807,822	\$479,623,840	\$594,710,902	\$626,335,529	\$648,194,270	\$670,816,176	\$628,729,160	\$647,749,701	\$673,022,136
Loan to Value	0.00%	4.11%	26.16%	41.27%	41.27%	50.28%	58.69%	59.99%	57.25%	60.26%	57.64%	54.60%

## ASSUMPTIONS

VACANCY FACTOR & RENT GROWTH	2010	2011	2012	2013	2014	2015	+2016
Anchor	7.50%	25.00%	19.50%	15.00%	11.50%		7.50%
In-line Retail	7.50%	25.00%	19.50%	15.00%	11.50%		7.50%
Multi Family/Live Work	6.00%	20.00%	15.00%	11.00%	8.50%		5.00%
Office	12.50%	30.00%	24.00%	19.00%	15.00%		10.00%
Sbouroom	6.00%	20.00%	15.00%	11.00%	8.50%		5.00%
Market Rent Growth	0.00%	5.50%	4.50%	4.00%	3.75%	3.50%	3.50%

#### Loan Information

Interest Rate (%)	1
Year 1-4	
Year +5	
Amortization (years)	
I/O Year 1-5	
Thereafter	
Unit Sales Release Rate	e

6.00% 6.50%

30

100%

MARKET INFORMATION	
80% of AMI during 2008	459
Housing Ratio	31.00
Maximum Affordable Rent	\$1,1
Maximum Home Price *	\$178,4
Market Rate Price	\$223,0
Minimum Affordable Units	13
Affordable Units Provided	1
* (0% down)	

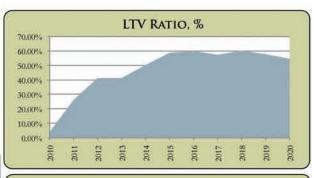
Several key assumptions were made during the estimate of expected potential cash flows. These assumptions are outlined below:

a) The majority of the NPV and IRR measurements are derived from the sale event. A going out cap rate between 7.5% and 7.75% was used to estimate the sale of the Showroom portion of the portfolio during 2018 and the remaining portfolio during 2020. Sales costs of 2.5% were also included.

b) An interest reserve was utilized to fund interest payments during the construction period. A 6 year interest only loan at 6% was used. The maximum loan to value was 60% throughout the construction period. It was assumed the loan would be refinanced at 6.5% with a 30 year amortization scheduled thereafter.

c)  $\Lambda$  50% reduction in the nominal cost of the Photovoltaic System was assumed. This rebate is currently (2009) provided by Holy Cross Solar.

d) Inflation would remain constant during the holding period at 3.00%





# **The City in '2050'**

Self Sufficiency

Energy & Food Production

Flexibility

## ADAPTABLE SPACES

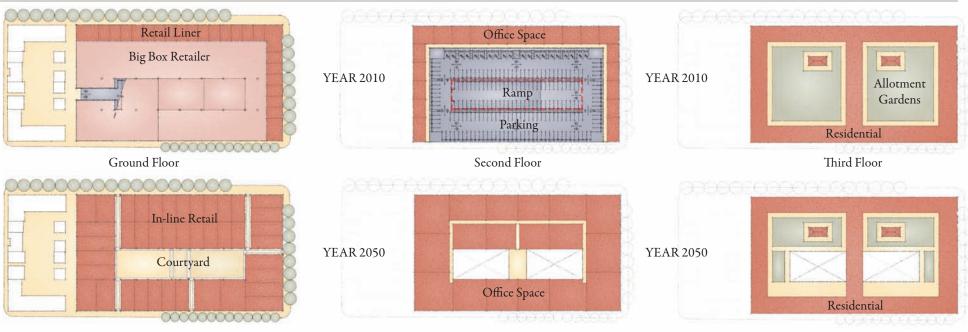
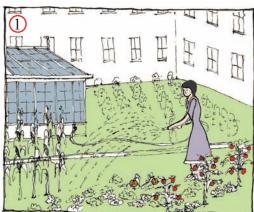


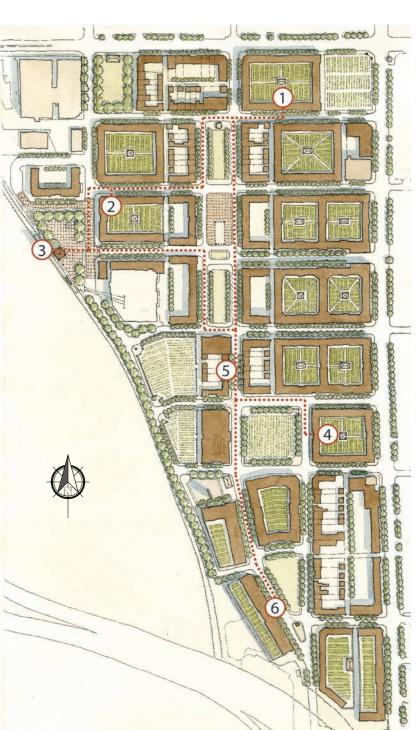
Diagram showing future use of a big box / parking structure converted to a usable courtyard in 2050.

## 'ONE DAY IN THE YEAR 2050'



She steps out at 7:30 into the communal allotment to water her vegetable garden, using water that comes from recycled brown water that has been run thru a "Living Machine," which uses specific plant species to filter the contaminants out of the water and prepare it for reuse in irrigation and toilet water.



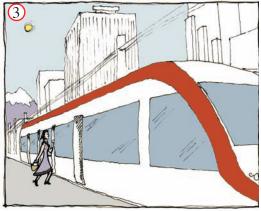




Her annual checkup at her doctor's office in the neighborhood Wellness Center is scheduled for 3:30. The Wellness Center is a five-minute walk from her office and on the way she picks a pear off one of the trees lining the street.



She steps out into the sun at 7:50 and walks to work, relishing the fact that she has not needed a car for the past twenty years. After a four-minute walk, she arrives early at her office, which is powered by the photovoltaic system on the building's roof.



Her business lunch is scheduled at12:00. At 11:45 she steps out of her office and within two minutes is waiting for the next light train heading into downtown Denver. The train arrives promptly at 11:50 and deposits her at 11:56 two blocks from the restaurant. She plans on harvesting some fresh vegetables from her garden and bringing them to her friend's house for dinner at 7:00, after which they will attend a neighborhood art gallery opening just down the street from his house.



The opening at the gallery is a perfect finish to a stress free day, a day without traffic jams, a day powered by the sun not by oil and a day when the food she grows herself sustains her.