

APPENDIX 4

PowerPoint Slides from the DJUSD Project
Graphs, Illustrations, Presentations

Davis Joint Unified School District 5Th & B Streets Site: Development Concepts & Market Feasibility Project



A project of the Urban Sustainability Accelerator at
Portland State University



Funding and staff support from the
Sacramento Area Council of Governments

Table of Contents

- **Slides 3-43:** Presentation at brainstorming workshops
- **Slides 45-59:** Scenario Assumptions & Results for Best Development Options Analysis
- **Slides 60-79:** Best-Performing Development Options
- **Slide 79:** Conclusions

PowerPoint Used as Workshop Introduction:

Davis Joint Unified School District Property Brainstorming Workshop

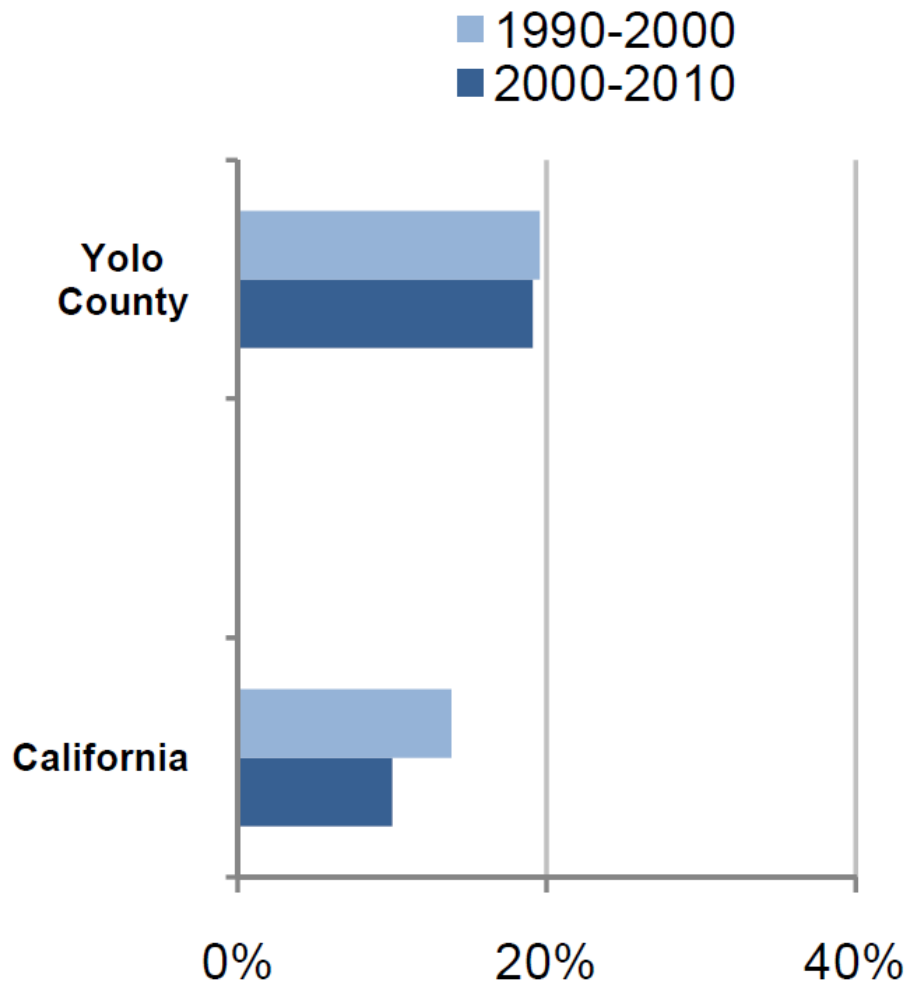


Brainstorming Workshop Agenda

- | | |
|----------|---|
| 12:00 PM | Welcome and Introductions |
| 12:05 PM | Context: Davis' Future |
| 12:10 PM | Workshop background & goals |
| 12:15 PM | How the brainstorming is done;
ground rules, questions & answers |
| 12:20 PM | Some materials to help you;
images, illustrations |
| 12:25 PM | Brainstorming |
| 1:25 PM | Teams share their results |
| 1:55 PM | Evaluation of the workshop |
| 2:00 PM | End |

Context: The Davis of the Future

5. 10-Year Population Change



The region is growing...

Source: Yolo County



baby boomers (55-64) will constitute a senior population unprecedented in size;



Generation Y (20s-early 30s), may be renting housing far longer than did past generations and will be looking for walkable neighborhoods

Growing Up, Not Out

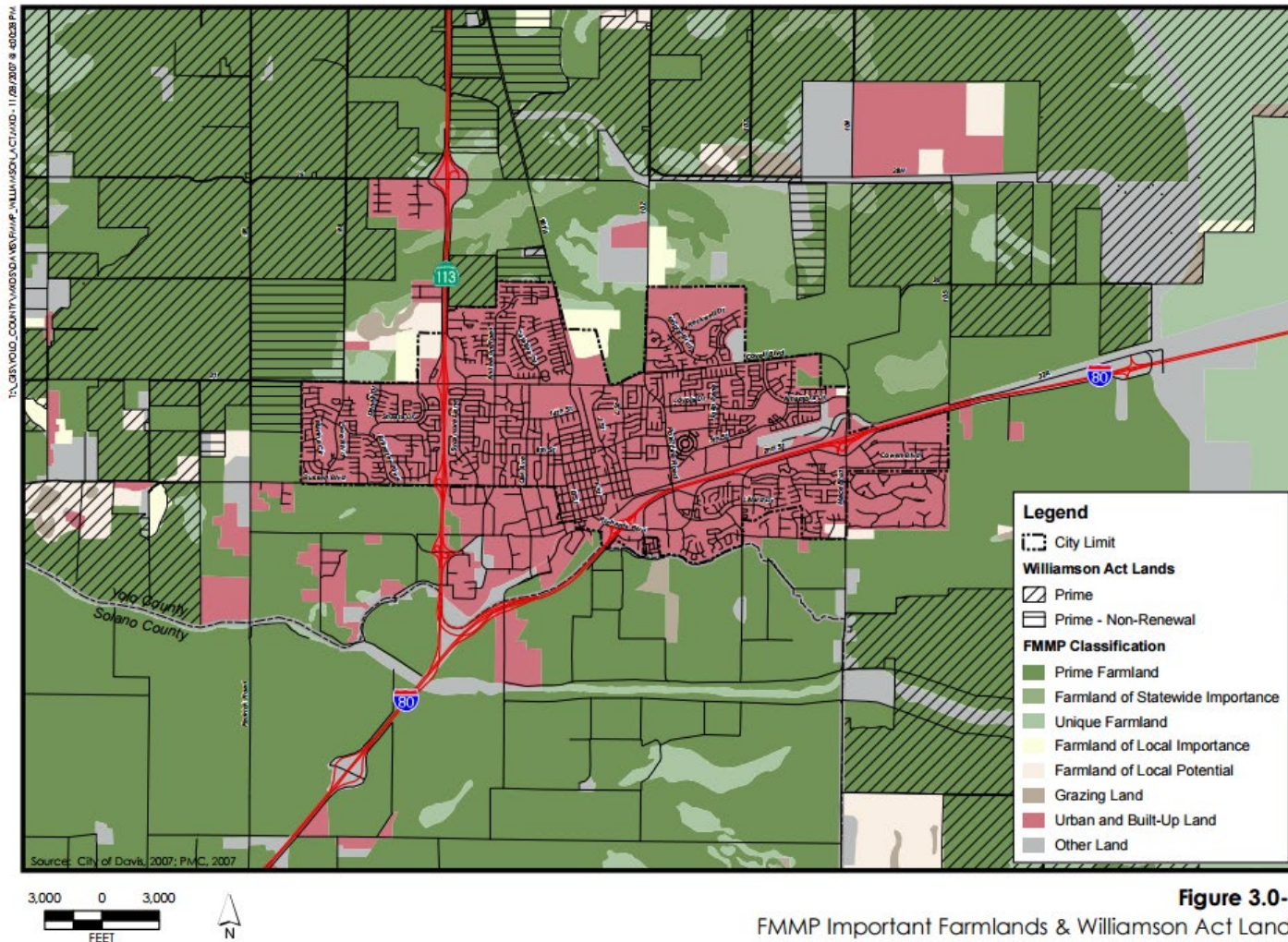
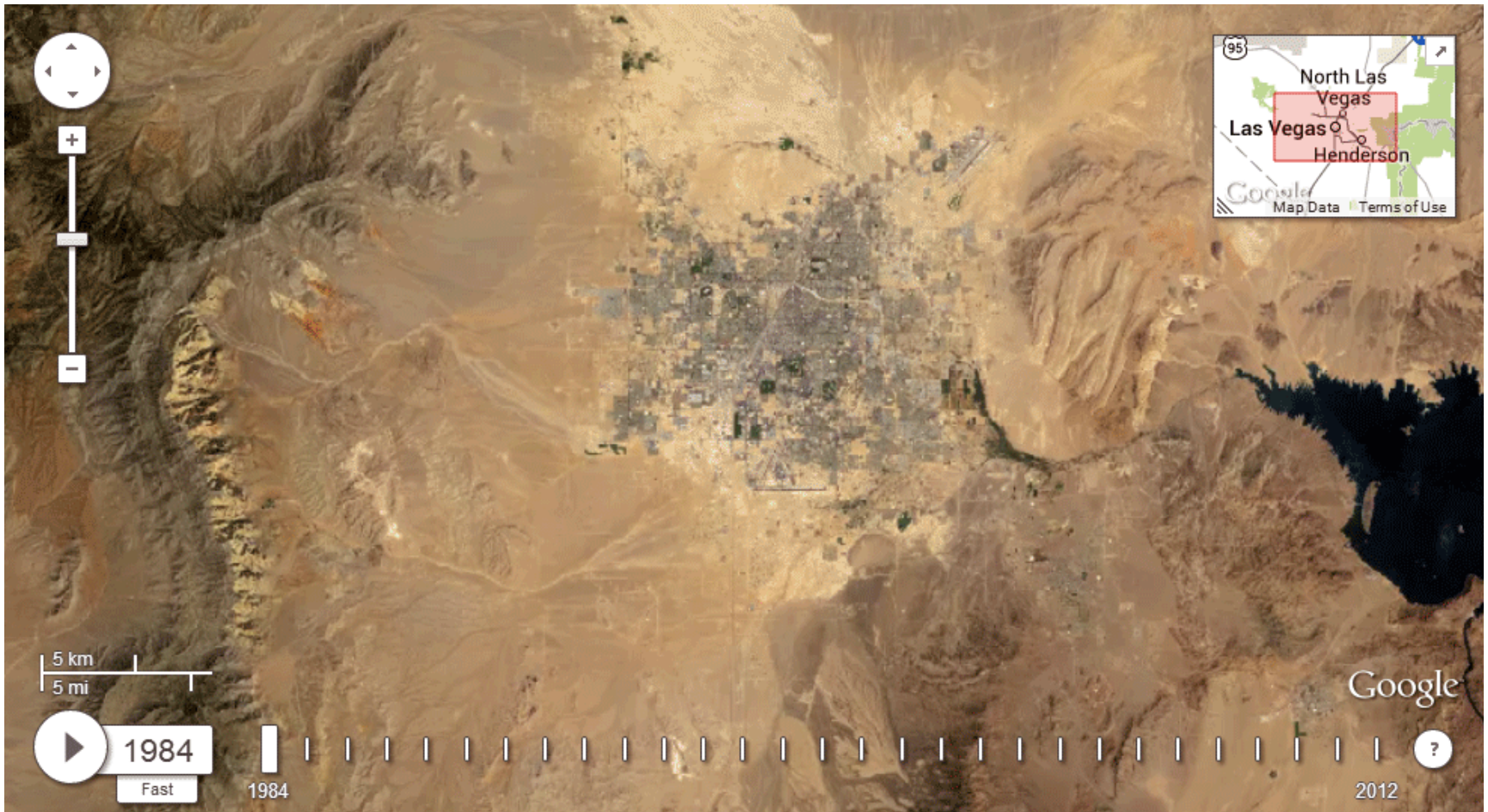


Figure 3.0-1
FMP Important Farmlands & Williamson Act Lands

Las Vegas, NV





Background for the brainstorming

- No decision made yet about the property.
- PSU USA has done more than 20 interviews of 30 minutes to 2 hours about the property with a variety of people. We have made four site visits as well as many walks around different parts of Davis, including downtown, surrounding neighborhoods, The Cannery, etc.
- Change to involve a spectrum of people very, very early

Goals

Primary Goals:

- Help the District to focus its resources on the educational needs of the District's students.
- Help the District provide optimal facilities for the District Office activities and the Davis School of Independent Studies.

Secondary Goal:

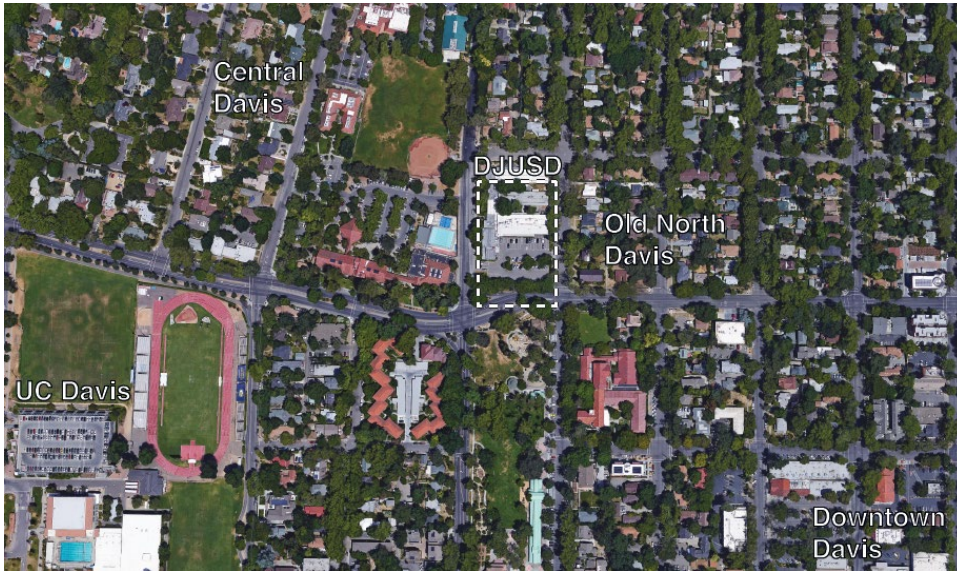
- Help the District think of ways in which development of the property could benefit the residents of Davis and the people who work, shop, study or recreate in Davis.

How the brainstorming works

- Use the map, blocks and other materials to create a development concept for the property.
- Blocks are scaled to fit on the grid on the aerial view, units of 20 x 20 x 10 feet or multiples of that.
- Reference blocks for Newman Center & City Hall
- Use roof colors to indicate types of uses
- Images and reference aids
- Facilitators can provide information and will track your development

How the brainstorming works: ground rules

- Don't worry about zoning
- Don't worry about parking ratios; Alex Steinberger will come to your table to advise you on parking
- We will assume parking for offices or multifamily housing can be underground
- Davis Joint USD Offices 26,000 square feet
- Davis School Independent Studies & Adult Education 10,000 square feet
- Project must be market plausible



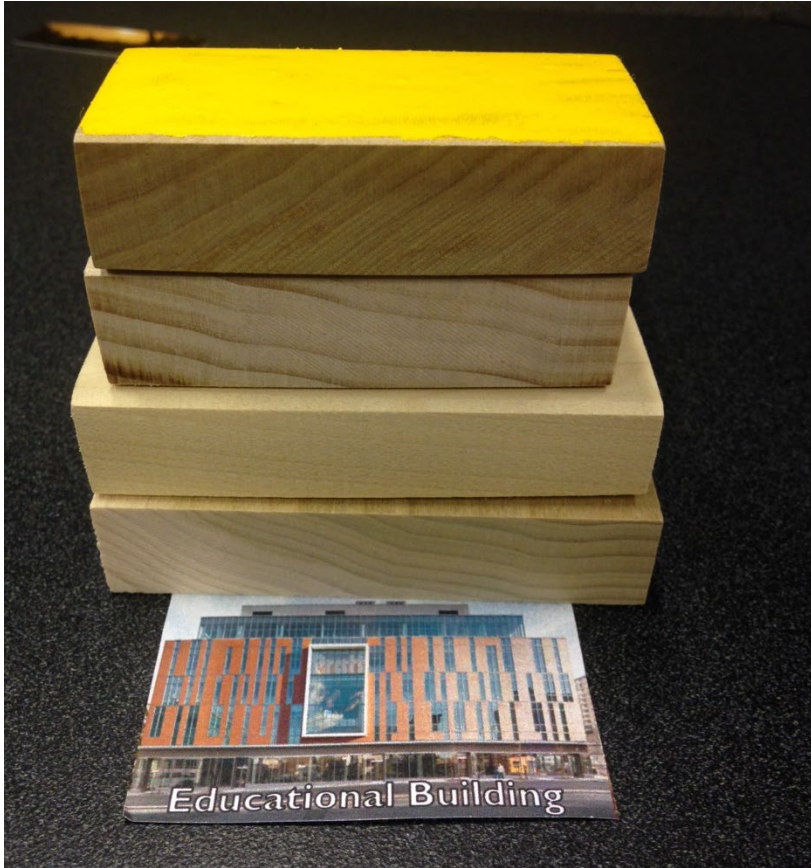
CONSIDER
THE
CONTEXT



CHOOSE
HEIGHT
AND MASS



CHOOSE
LAND USE



CHOOSE
HOW IT
MIGHT
LOOK



THINK OF
DEVELOPMENT
AS A WHOLE

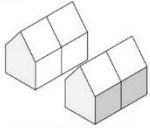


INCORPORATE
LANDSCAPE
ELEMENTS

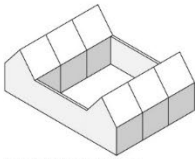
● **HOUSES**



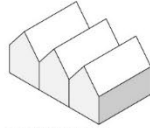
INDIVIDUAL HOUSE



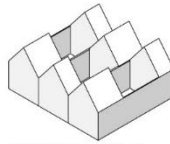
ATTACHED HOUSES



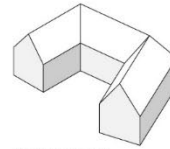
ATTACHED HOUSES AROUND A COURTYARD



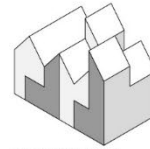
ROW HOUSES



ROW HOUSES WITH COURTYARD



FOLDED ROW HOUSES

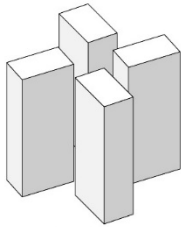


STEPPED ROW HOUSES

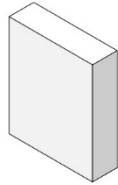
● **HIGH-RISE BUILDINGS**



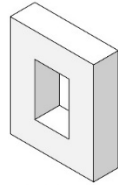
ISOLATED BLOCK



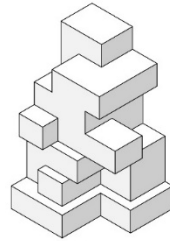
GROUPED BLOCKS



ELONGATED BLOCK



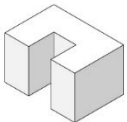
PERFORATED BLOCK



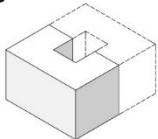
STACKED UNITS BLOCK

BE
CREATIVE

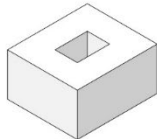
● **CITY BLOCKS**



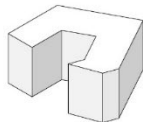
U-SHAPED CITY BLOCK



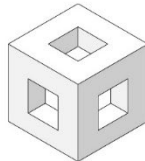
HALF CITY BLOCK



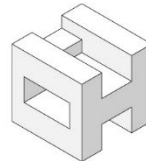
CLOSED CITY BLOCK



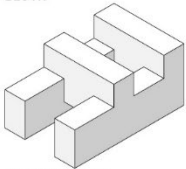
FOLDED CITY BLOCK



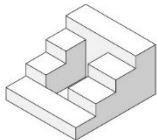
PERFORATED CITY BLOCK



SEMI-OPEN CITY BLOCK



OPEN CITY BLOCK



STEPPED CITY BLOCK

LIBRARY OF IMAGES AND PROJECT INFORMATION:

Illustrations of Different Types and Intensities of Residential and Commercial Development and Landscape Designs

Prepared by the Urban Sustainability Accelerator:
Robert Liberty, Program Director
Judy Walton, Program Administrator
Santiago Mendez, Graduate Student Assistant

With contributions from:
Stephanie Lau, UC Davis Landscape Architecture
Megan Ma, UC Davis Landscape Architecture
Alex Steinberger, Fregonese Associates



RESIDENTIAL | Single Family Homes in Old North Neighborhood

EXAMPLE 1 Single family home

Location: 503 E Street, Davis CA

Lot: 6,000 square feet

Height: 1 story

Units: 1; 1,368 square feet



EXAMPLE 2 Single family home

Location: 601 E Street, Davis CA

Lot: 5,600 square feet

Height: 2 stories

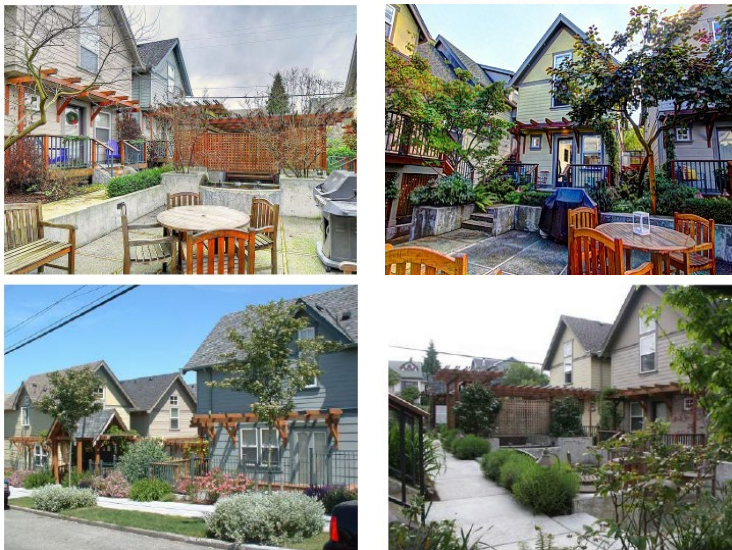
Units: 1; 1,943 square feet



RESIDENTIAL | CLUSTERED COTTAGE HOUSING

EXAMPLE 3 RAVENNA COTTAGES

Location: 6318 5th Ave NE #D Greenlake, Seattle, WA
Developer: Threshold Housing, nonprofit
Architect: Marcia Gamble Hadley
Lot: 0.25 acre
Height: 2 stories
Units: 6 detached two-bedroom, one-and-a-half-bath houses. 3 one-bedroom houses atop the development's nine-car garage.
840–970 sq ft each



Source:
<http://community.seattletimes.nwsources.com/archive/?date=20010225&slug=ravenna25>
<http://www.landcast.com/development/42902/ravenna-cottages-seattle-wa>

EXAMPLE 4 FOREST PARK COTTAGE CLUSTER

Location: NW Edgewood & NW Miller, Portland, OR
Developer: Edgewood LLC
Architect: Patrick Schmitt
Lot: 2.25 acre
Height: 2 stories
Units: 33 units, 1355–1587 SF each



Source: <https://www.portlandoregon.gov/bps/article/97530>

RESIDENTIAL | FOUR-PLEX HOUSING

EXAMPLE 1

NW FOUR-PLEX

Location: NW Quimby St. Portland, Or

Lot: 5,000 SF

Height: 2 stories

Units: 4 units; approx. 700 square feet each



EXAMPLE 2

DAVIS FIVEPLEX (Condos)

Location: 444 4th Street, Davis, CA

Owner: 4th D LLC

Designer: Michael Corbett

Lot: approx. 7,000 SF

Height: 2 stories

Units: 4 units ?????



RESIDENTIAL | AFFORDABLE HOUSING

EXAMPLE 3

PARADISE CREEK AFFORDABLE HOUSING

Location: Unbuilt, National City, CA

Architect: Michael Pyatok

Lot: 13 acres including park

Height: 3–4 stories

Units: 201 units



Source: <http://www.pyatok.com/work/project/121/PARADISE-CREEK>

EXAMPLE 4

FAIR OAKS COURT

Location: 588–608 N. Fair Oaks Avenue, Pasadena, CA

Architect: Moule & Polyzoides

Lot: ~ 1 acre

Height: 3 stories

Units: 33 low- and moderate-income units, three workforce homes, four market-rate homes, and one commercial unit



Source: <http://www.mparchitects.com/site/projects/fair-oaks-court>

RESIDENTIAL | MULTI-FAMILY HOUSING

EXAMPLE 3

WHEELER PLAZA

Location: Unbuilt, 657 Walnut St, San Carlos, CA

Developer: Yackzan Group

Architect: KTG Group, Inc.

Architecture+Planning

Lot: 2.65 acres

Height: 4 stories

Units: 109 housing units



Source:
<http://www.cityofsancarlos.org/civicax/filebank/blobdload.aspx?blobid=11612>

EXAMPLE 4

MARCUS APARTMENTS

Location: 1099 NE Schuyler St., Portland, OR

Developer: n/a

Architect: bkl/a architecture

Lot: ~ 3,500 SF

Height: 4 stories

Units: 12 units



Source: <http://www.nextportland.com/2015/11/16/the-marcus/>

COMMERCIAL USE | OFFICE BUILDINGS

EXAMPLE 3 THE BULLITT CENTER

Location: 1501 East Madison Street
Seattle, WA

Developer: The Bullitt Foundation

Architect:: PAE

Lot: 10,000 SF

Height: 6 stories

Use: office space and ground floor retail

Highlights: certified as a Living Building a structure. Required to produce as much energy as it uses in a years – See more at: <http://living-future.org/>



Source: <http://www.bullittcenter.org/>

EXAMPLE 4 747 NORTH CLARK

Location: 747 North Clark, Chicago, IL

Developer: Ranquist Development Group

Architect: Miller Hull Partnership

Lot: 4,000 SF

Height: 7 stories

Use: 6 residential units



Source: <http://www.millerhull.com/html/residential/747NClark.htm>

EDUCATION | SCHOOLS/EDUCATION BUILDINGS

EXAMPLE 1 PAVE K- 7 SCHOOL

Location: 732 Henry St, Red Hook, Brooklyn, NY

Architect: Mitchell | Giurgola Architects

Lot: ~ 0.60 acre

Space: ~ 40,000 SF

Height: 3 stories



EXAMPLE 2 LA School Prototype

Location: LA School District prototype

Architect: Gonzales Goodale

Space: 30,000 square feet

Height: 3.5 stories



Source: <http://paveacademy.org/>

Hotel

EXAMPLE 3

Location: h3 Guest House, Healdsburg, CA

Developer: ?

Architect: David Baker Architects

Lot: approx. 25,576 square feet



EXAMPLE 2

Location: h2hotel, Healdsburg, CA

Architect: David Baker Architects

Lot: approx. 17,000 square feet



LANDSCAPE | URBAN GARDENS & ORCHARDS

EXAMPLE 5 CULLY GROVE

Location: Portland, Oregon

Designer:

Developer: Eli Spevak, Orange Splot

Development

Defining features: Shared greenspace, private garden plots and orchard tended by residents.



EXAMPLE 6

Location: De Zeeheldentuin, The Hague, Netherlands

Designer:

Client:

Defining features: Fruit and vegetable gardens, children play space, artificial brook and pond, tea house, communal greenspace

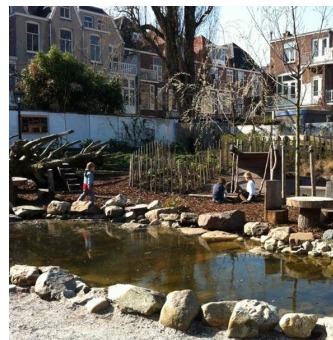


ILLUSTRATION B

School district offices and DSIS classroom buildings surrounding corner plaza, with minor professional offices and retail on ground floor. Condos, townhomes with central shared garden. Shared underground parking (not shown).

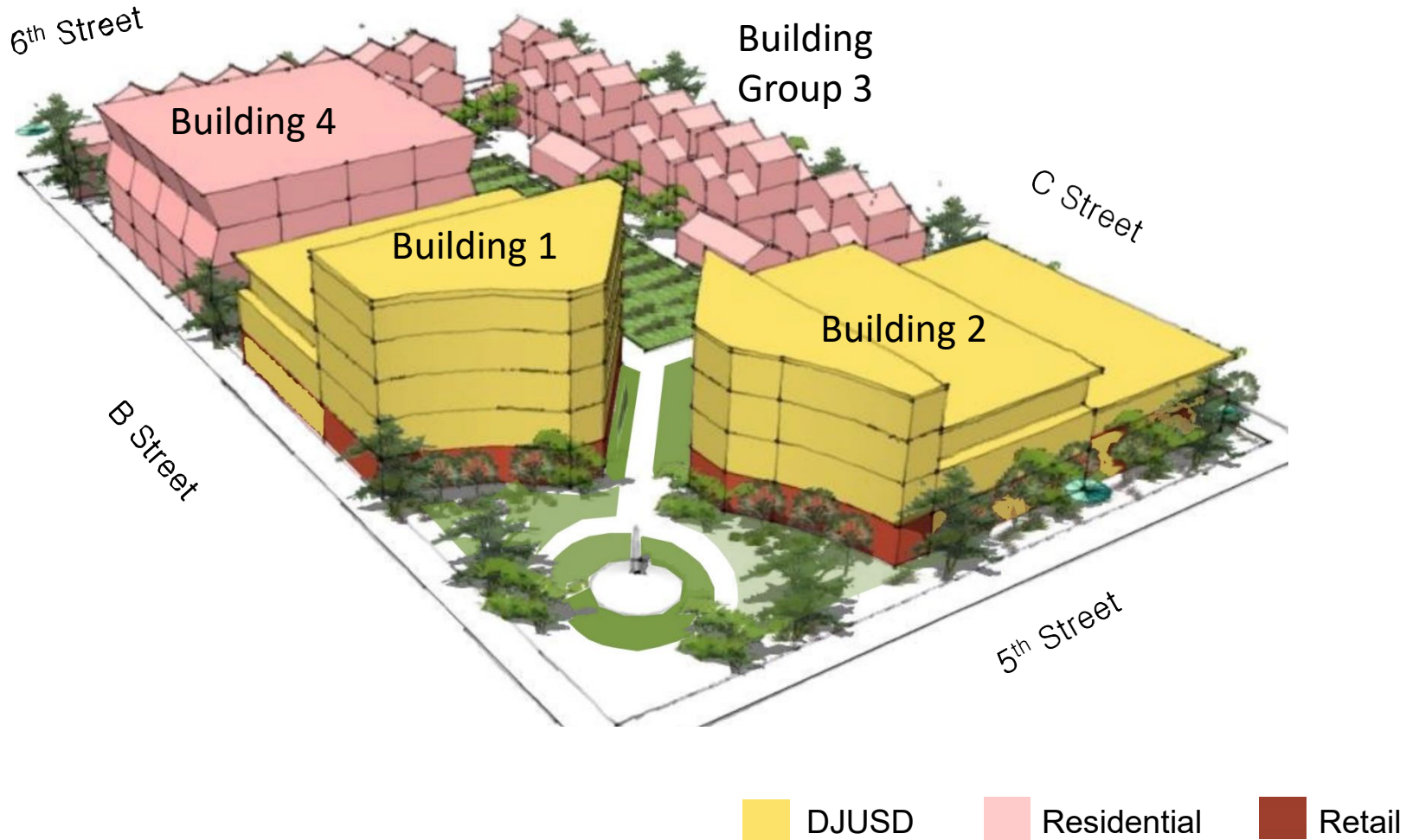
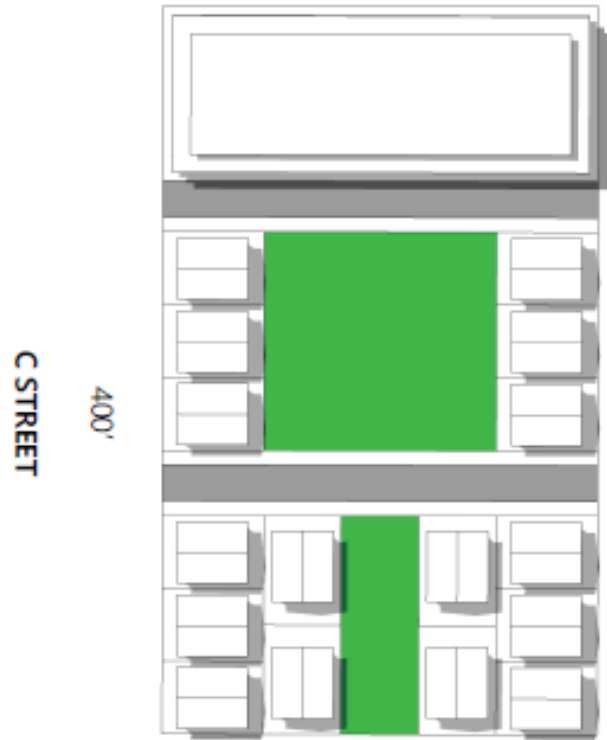


ILLUSTRATION A

5TH STREET



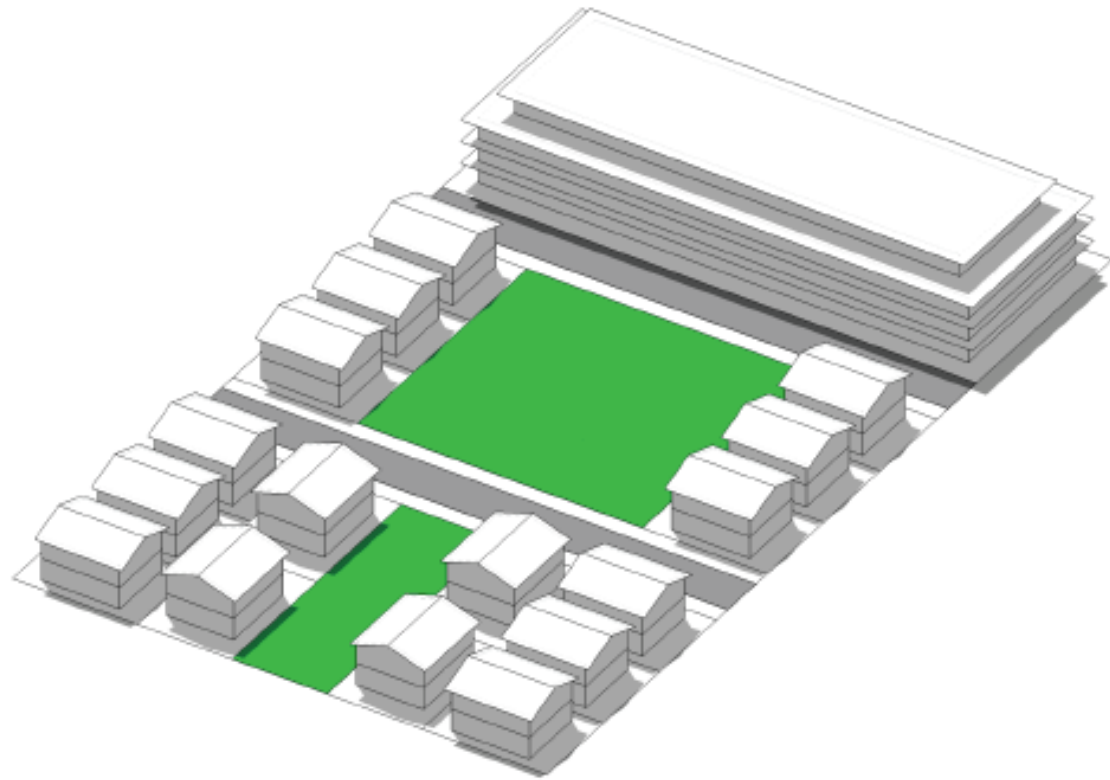
400'

6TH STREET

240'

B STREET

3D VIEW



LEGEND

□ BUILDINGS ■ PLAZA ■ DRIVE

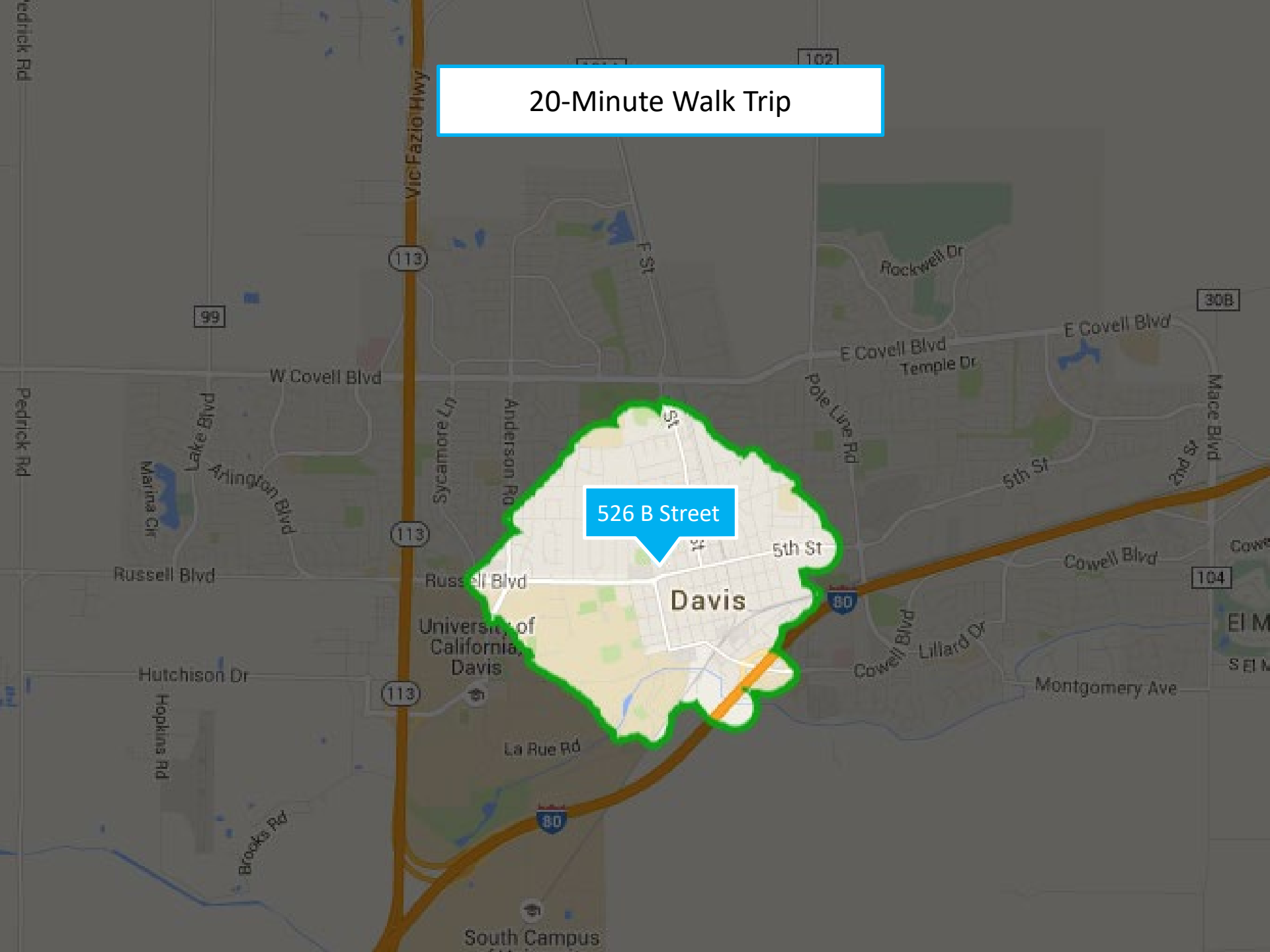
1" = 100'

0 100 200 300

N
▼

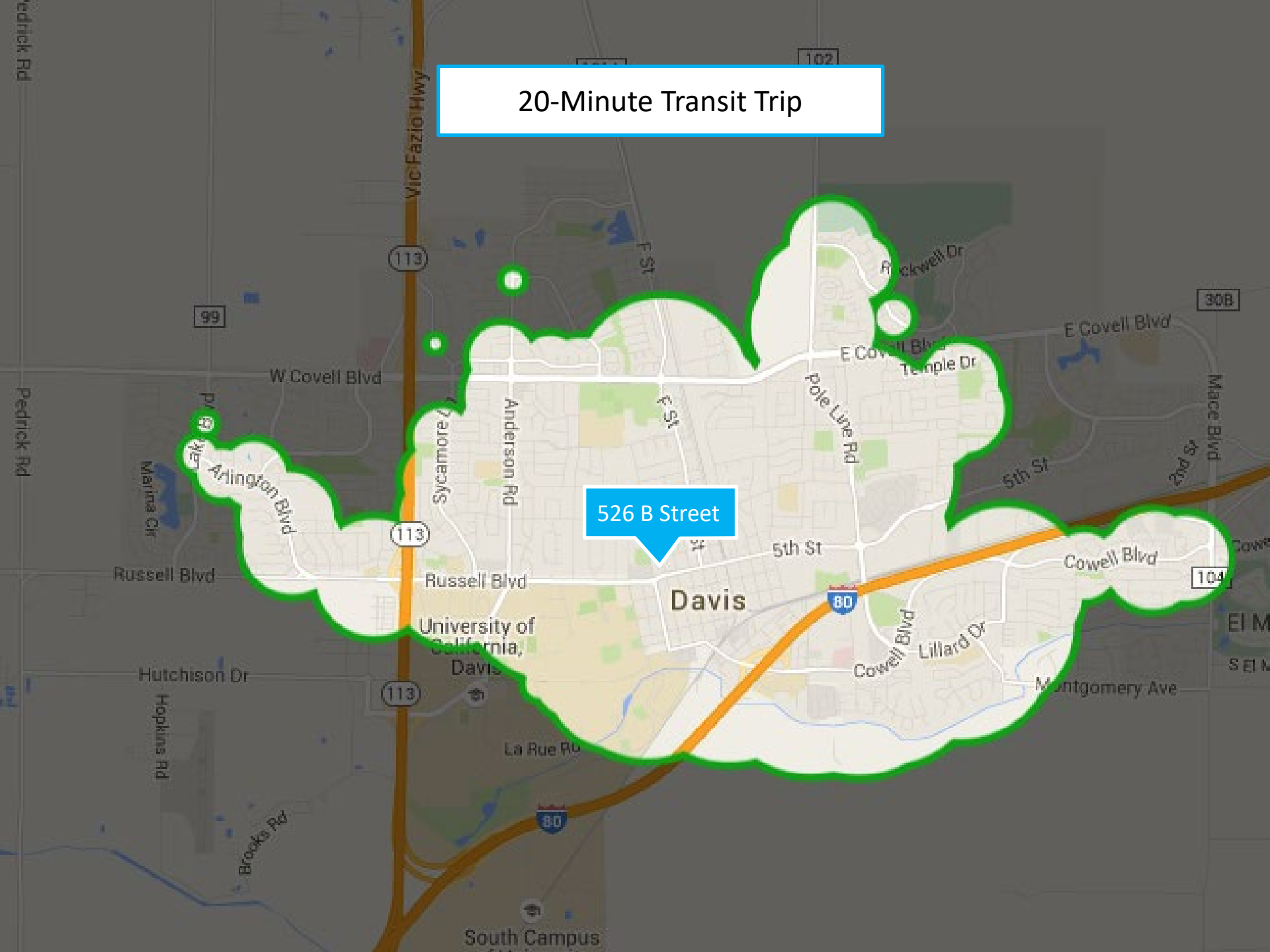
20-Minute Walk Trip

526 B Street



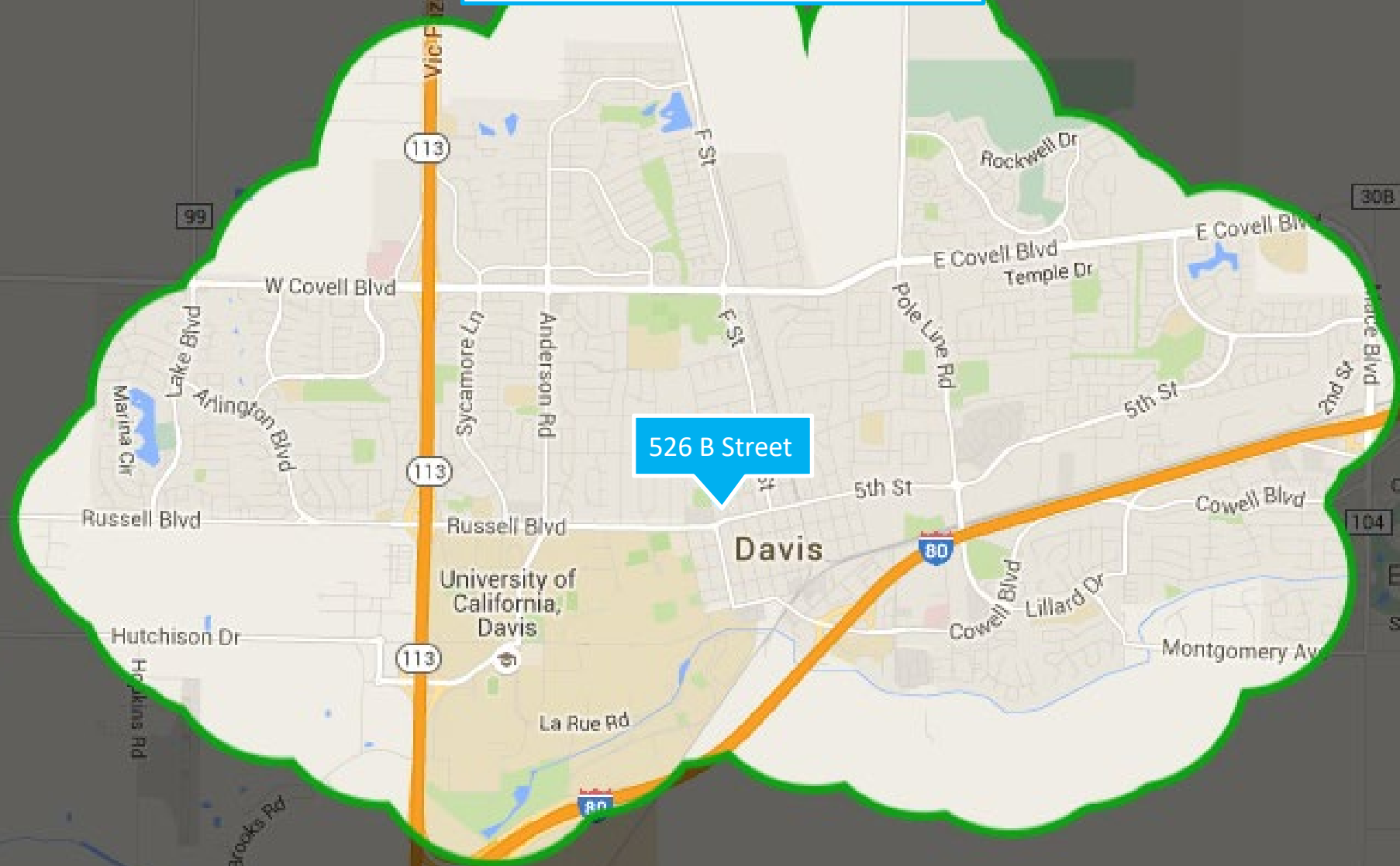
20-Minute Transit Trip

526 B Street



20-Minute Bicycle Trip

526 B Street



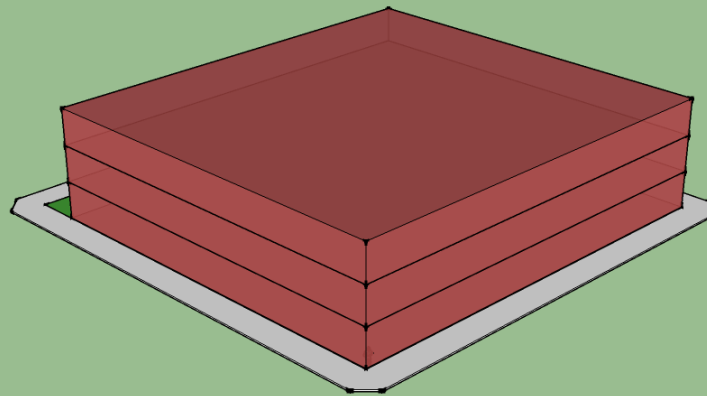
Parking

- Surface parking = approx. \$5,000 /space
- Inside the building parking = \$25,000 /space
- Underground parking = \$50,000/space

For example, 2 underground parking spaces for a two-bedroom condominium = \$100,000 extra in cost.

No On-Site Parking

AUSTIN, TX
PARKING SPACES PER UNIT: 0
AVERAGE MONTHLY RENT (1BR): \$993

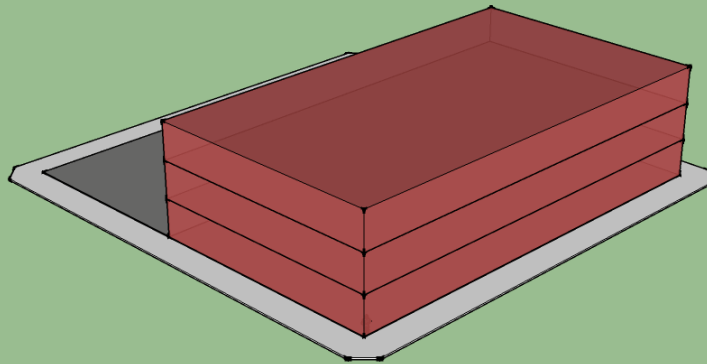


Income required for affordability: \$36,000

Not allowed under current code for multifamily construction

.5 Space / Unit

AUSTIN, TX
PARKING SPACES PER UNIT: 0.5
AVERAGE MONTHLY RENT (1BR): \$1,094

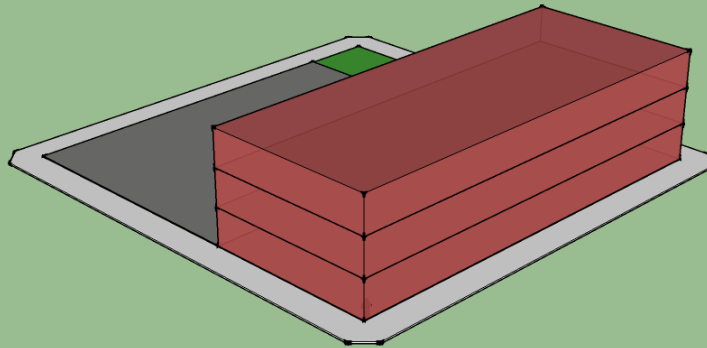


Income required for affordability: \$39,000

Not allowed under current code for multifamily construction

1 Space / Unit

AUSTIN, TX
PARKING SPACES PER UNIT: 1
AVERAGE MONTHLY RENT (1BR): \$1,195

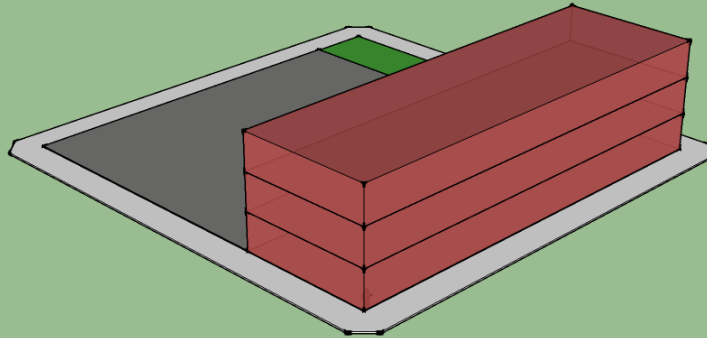


Income required for affordability: \$43,000

Minimum requirement in Davis (if 1 bedroom apartments or smaller)

1.5 Spaces / Unit

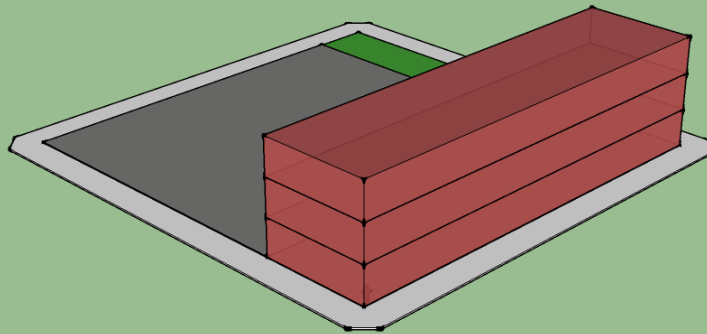
AUSTIN, TX
PARKING SPACES PER UNIT: 1.5
AVERAGE MONTHLY RENT (1BR): \$1,296



Income required for affordability: \$47,000

2 Spaces / Unit

AUSTIN, TX
PARKING SPACES PER UNIT: 2
AVERAGE MONTHLY RENT (1BR): \$1,404



Income required for affordability: \$51,000

2 spaces per unit is Davis standard for a 3+ bedroom apartment

Please begin your design.

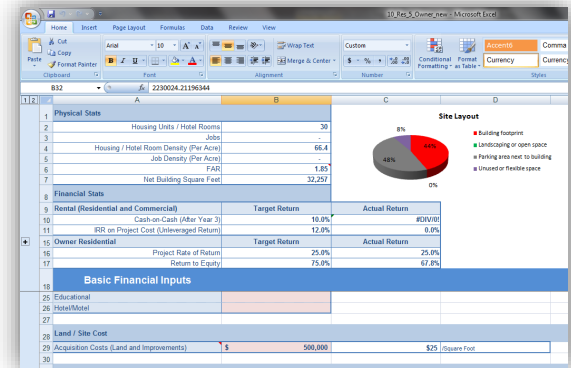
Davis Joint Unified School District 5Th & B Streets Site: Development Concepts & Market Feasibility Project

APPENDIX: Scenario Assumptions and Results for Best Development Options Analysis



Building-Level Financial Analysis

- Envision Tomorrow Prototype Builder
- **Planners step into developer's shoes**
- Estimate ROI (Return on Investment) based on local costs and rents/sales prices



Feasible?

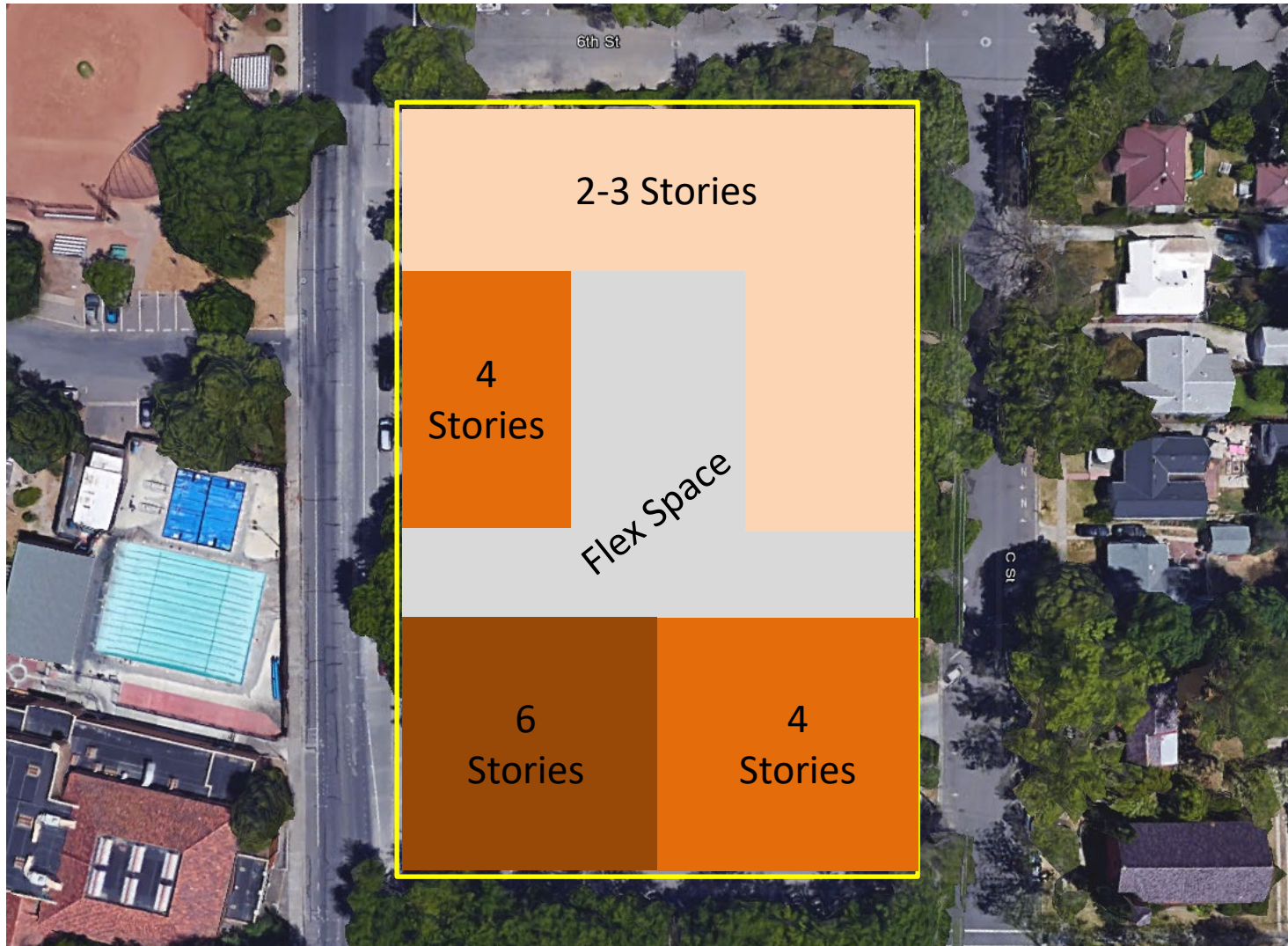


Used Envision Tomorrow ROI model to explore the District's return in three entitlement and sale scenarios for the SIS site.

Overarching Scenario Assumptions

- We are attempting to maximize the residual value of the land (potential sales price)
- While we are accounting for achievable rents / sales prices, absorption potential for commercial floor space should be verified through a market study.
- Current zoning regulations are not being adhered to (particularly parking ratios)
- Assumptions about development intensity are based on conversations with project stakeholders and anticipated feedback from local residents.
 - i.e. need to step down height near single family neighborhood

Site Assumptions – Max Entitlement



Parking Ratios

- Office (per 1000 sqft) - 1.25
- Senior Housing (per DU) - 0.75
- Townhomes (per DU) – 2

With the exception of the townhome product, all ratios are below-market and not compliant with current zoning regulations in Davis.

This has implications for the value of the site. We acknowledge that pushing forward entitlements that adhere to the above parking minimums will be politically challenging.

Parking Type

- We explored surface, tuck-under, and underground parking
- While underground parking is potentially feasible, the expense of excavation and construction is not offset by the potential increase in development square footage.
- A mix of surface and tuck-under parking (at relatively low parking ratios) maximizes the residual value of the site.



Lease Rate / Sales Price Assumptions

- Office
 - \$28/sf NNN
- Retail
 - \$26/sf NNN
- Senior Housing
 - \$2.30/sf (ex: \$1,500/mo for 650 sqft apartment)
- Townhomes
 - \$280/sf (ex: 450k for 1,600 sqft rowhouse)

Data Source: Third-party data for the region and interviews with persons knowledgeable about the Davis real estate market.

Construction Cost Assumptions*

Building Type	Shell Costs** (\$/sqft)
Apartment 1-3 Story	\$ 152.36
Apartment 4-7 Story	\$ 162.33
Assisted Living – Senior	\$ 205.78
Office 1 Story (Green)	\$ 200.45
Office 2-4 Story (green)	\$ 172.78
School - Vocational	\$ 164.39
Store, Retail	\$ 141.54

**Core, shell, and improvements only – does not include soft costs*

***Data source – RS Means Construction Cost Estimates – 4th qtr 2015*

Scenario Themes

1. DJUSD receives maximum entitlement for the entire site and uses the proceeds from its sale to re-build their offices elsewhere.
2. DJUSD entitles and sells most of the site but retains ~20ksf of the site for a 37ksf 4 story building which it finances with the proceeds.
3. DJUSD retains roughly 20ksf of their existing space and entitles and sells the rest, uses proceeds to rehabilitate their remaining square footage.

Scenario 1



Parking for each use contained within each parcel

Scenario 1

DJUSD receives maximum entitlement for the entire site and uses the proceeds from its sale to re-build their offices elsewhere.

Program	
<i>Townhome Units</i>	24
<i>Senior Housing Units</i>	50
<i>Private Office Sqft</i>	47,300
<i>Public Office Sqft</i>	-

Residual Land Value	
4-6 Story Office	\$3,609,109
4 Story Senior Housing	\$ 2,138,284
3 Story Townhomes	\$2,685,450
DJUSD SIS	n/a
Total Site Value	\$ 8,432,844

Net proceeds: \$ 8,432,844 (less construction of new DJUSD facility)

Question: Is \$8.4 million enough to finance the purchase of land and construction of a new 37,000 square foot facility?

Scenario 2



Parking for each use contained within each parcel

Scenario 2

DJUSD entitles and sells most of the site but retains ~20ksf of the site for a 37ksf 4 story building which it finances with the proceeds.

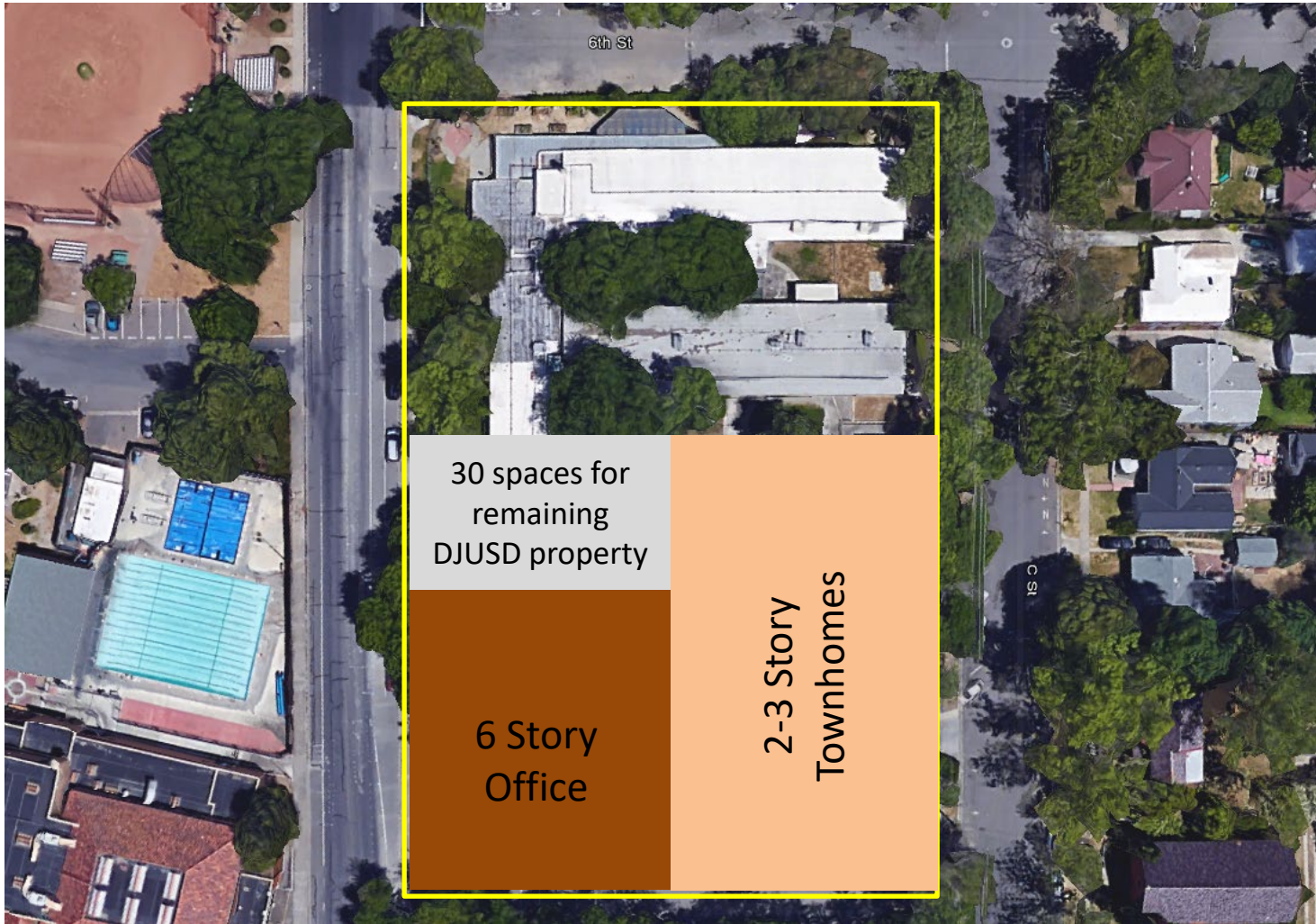
Program	
<i>Townhome Units</i>	20
<i>Senior Housing Units</i>	50
<i>Private Office Sqft</i>	26,079
<i>Public Office Sqft</i>	36,813

	Residual Land Value	Project Cost (To DJUSD)
4-6 Story Office	\$2,026,188	
4 Story Senior Housing	\$2,138,284	
3 Story Townhomes	\$2,153,678	
DJUSD SIS		-\$9,397,709
Total	\$6,318,151	-\$9,397,709

Net proceeds: - \$3,079,558

Question: Can DJUSD finance the \$3m gap required to re-build their offices and SIS on-site?

Scenario 3



Parking for each use contained within each parcel

Scenario 3

DJUSD retains roughly 20ksf of their existing space and entitles and sells the rest, uses proceeds to rehabilitate their remaining square footage.

Program	
<i>Townhome Units</i>	16
<i>Senior Housing Units</i>	
<i>Private Office Sqft</i>	25,466
<i>Public Office Sqft</i>	~20,000

Residual Land Value	
4-6 Story Office	\$2,007,548
4 Story Senior Housing	n/a
3 Story Townhomes	\$1,342,081
DJUSD SIS	n/a
Total Site Value	\$3,349,629

Net proceeds: \$ 3,349,629 (less remodel of existing smaller DJUSD facility)

Question: Is \$3.3 million enough to make renovation of a smaller facility worth it?



Davis Joint Unified School District 5Th & B Streets Site: Development Concepts & Market Feasibility Project

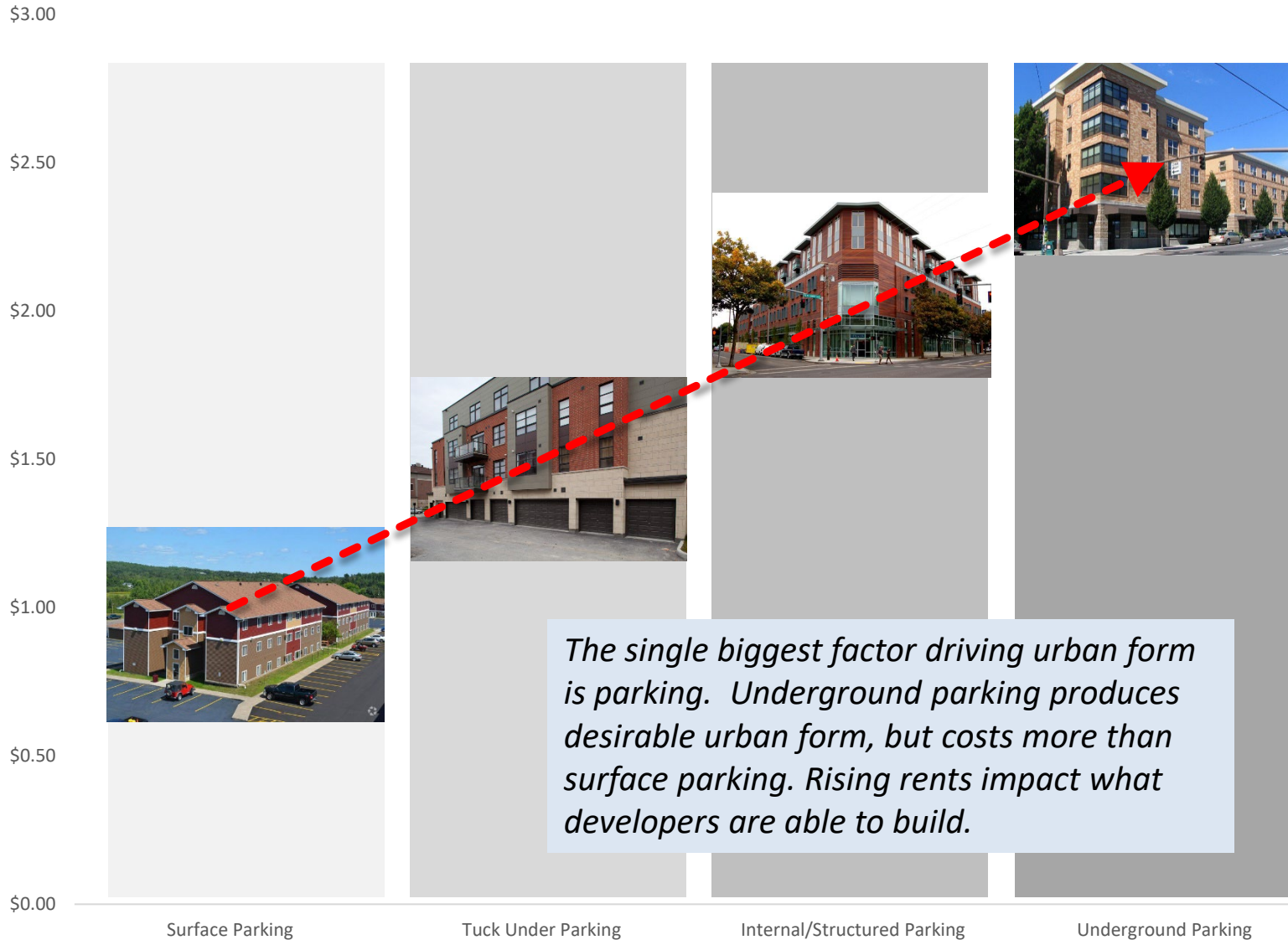
APPENDIX

Best-Performing Development Options

Pro Forma Results

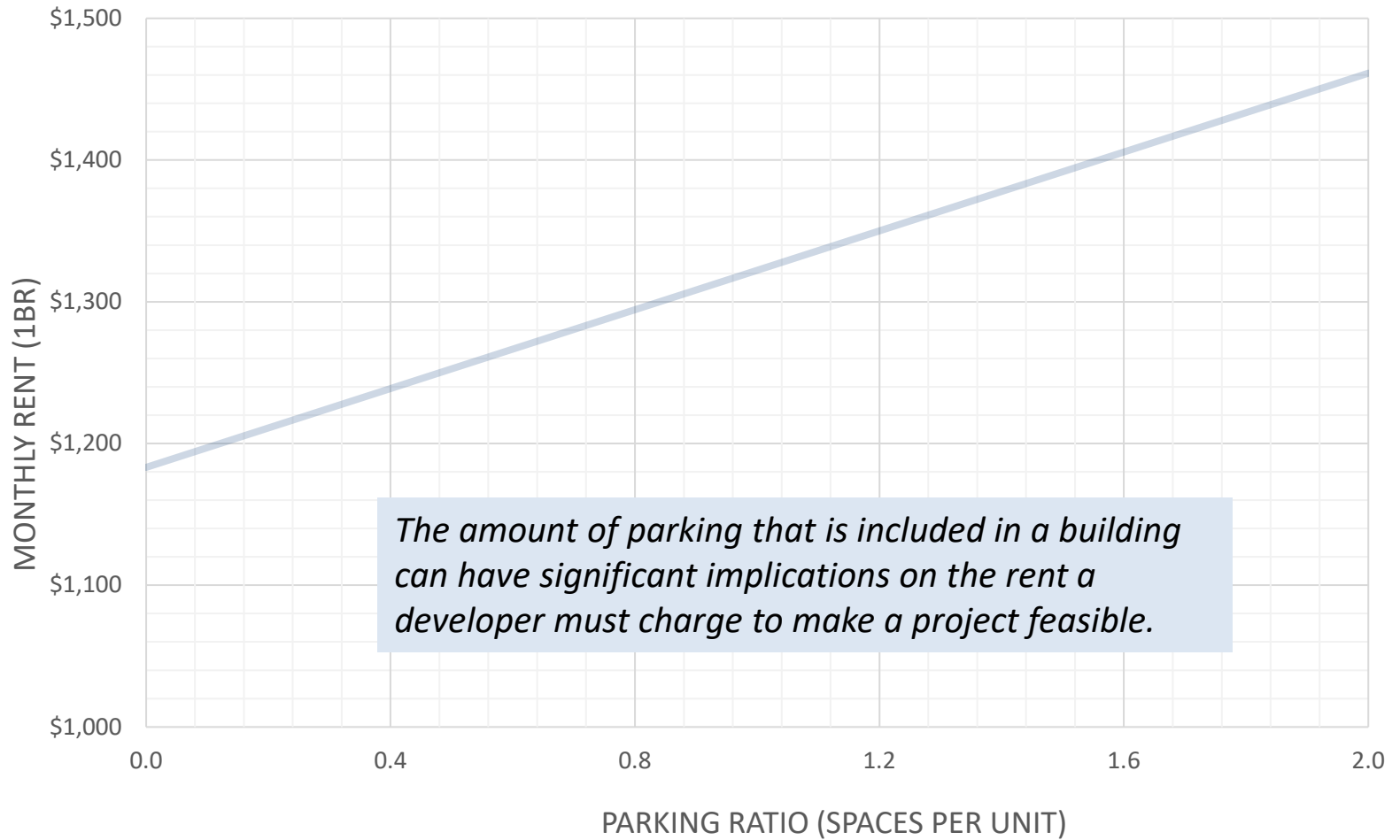


Increasing Rents and Urban Form



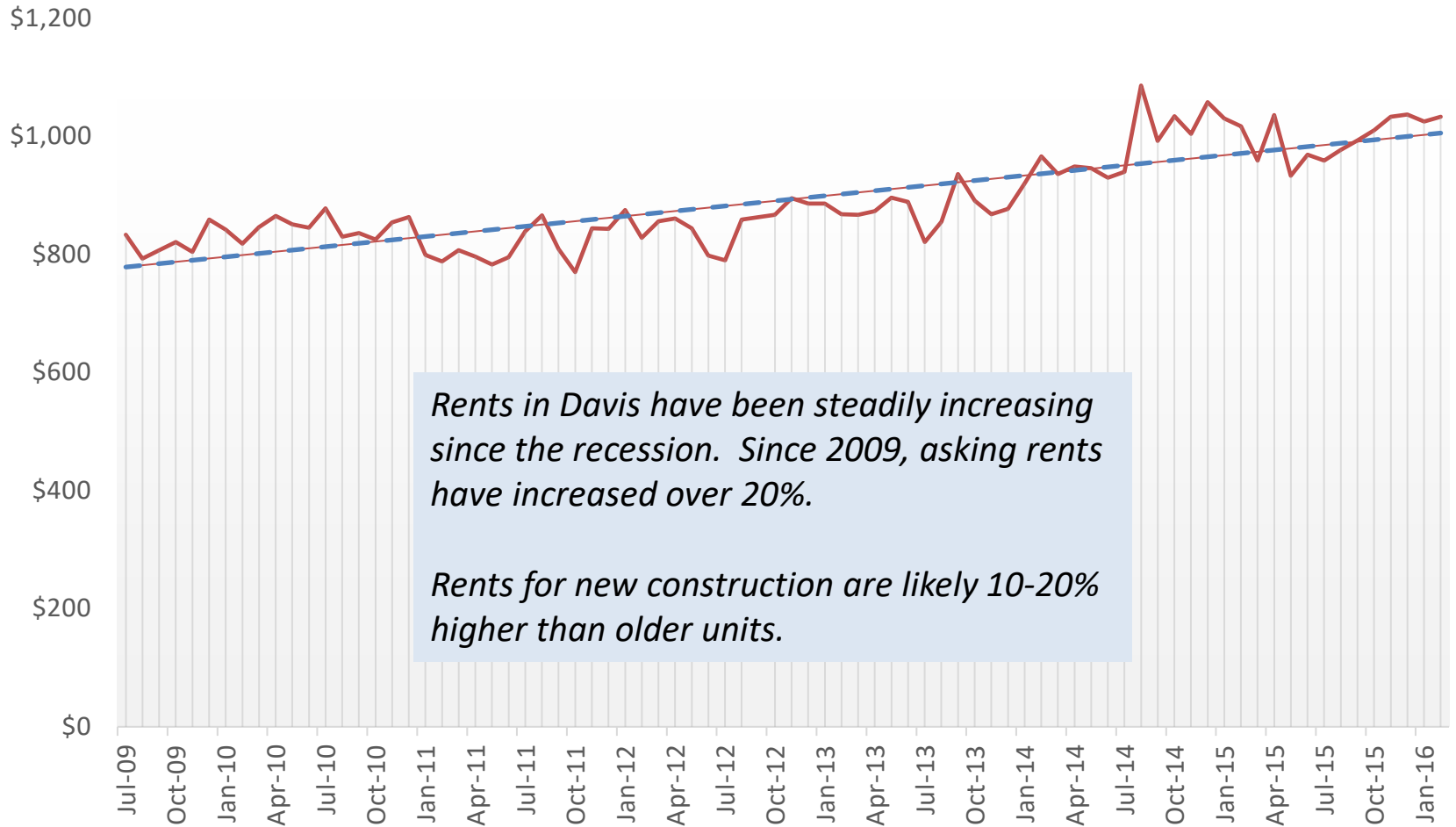
Source: Fregonese Associates, 2016

Rental Housing Affordability and Parking



Source: Fregonese Associates, 2016

Average Rent, 1 Bedroom Apartment, Davis, CA



Source: RainMaker Insights, 2016

Three Development Scenarios (Based on Workshop Results)

Development Scenarios Overview

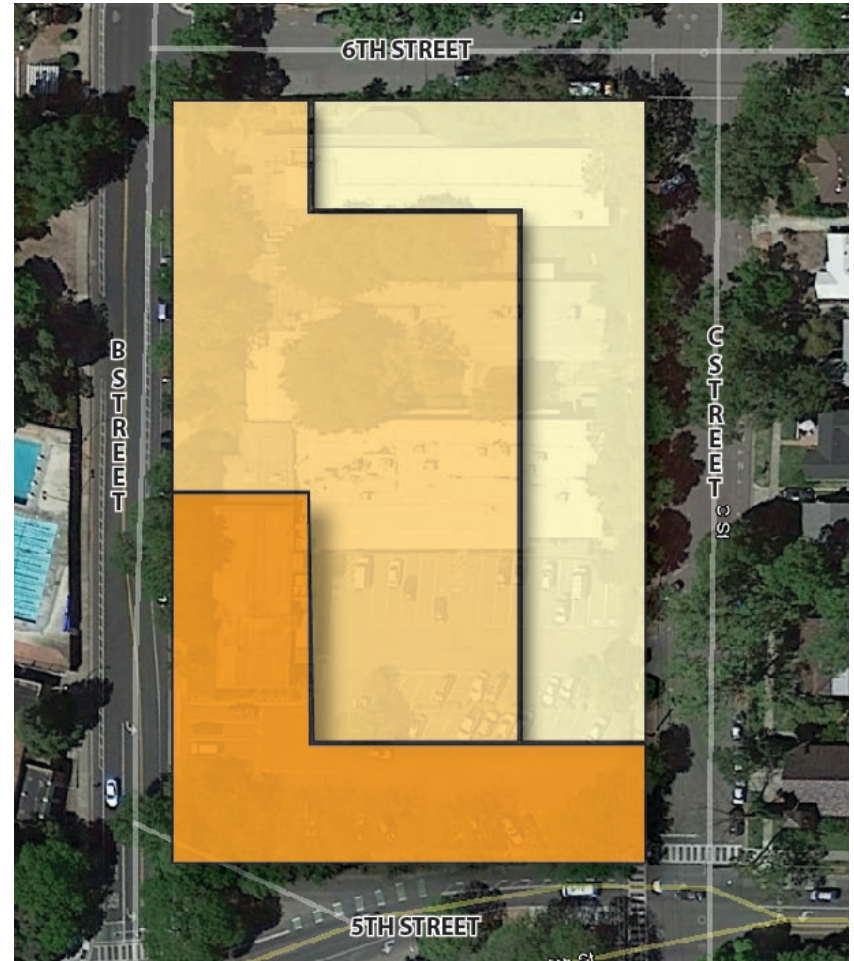
- Three scenarios based on themes extracted from workshop results:
- Scenario 1: “Neighborhood-Sensitive Development”
 - Relatively low intensity
 - Development intensity responds to surrounding residential uses
 - Does not include DJUSD on-site
- Scenario 2: “Maximum ROI if DJUSD Remains On-Site”
 - Higher intensity
 - Employment-focused
 - DJUSD remains on-site
- Scenario 3: “Maximum ROI if DJUSD Goes Off-site”
 - Higher intensity
 - Residential-focused
 - DJUSD goes off-site

Site Massing Concept



Across nearly every scenario, a recurring massing concept emerged. In general, participants felt that the potential for highest intensity development exists on the south-west corner of the site.

Participants also expressed the idea that building height and mass should step down toward the north and east portions of the site, where it interfaces with surrounding single-family homes.



BUILDING HEIGHT



LOW

HIGH

Scenario 1: “Neighborhood-Sensitive Development”



This scenario was adapted from workshop groups who were comprised mostly of local residents. The primary goal of these residents was to preserve neighborhood character while still trying to maximize the value of the site.



Scenario 2: “Maximum ROI if DJUSD Remains On-Site”



Scenario 2 took inspiration from those workshop groups that sought to maximize site value while incorporating all or part of the school district’s space requirements. The majority of groups who sought to keep DJUSD on-site focused more on employment uses than multi-family residential.



Scenario 3: “Best Case: DJUSD Off-site”



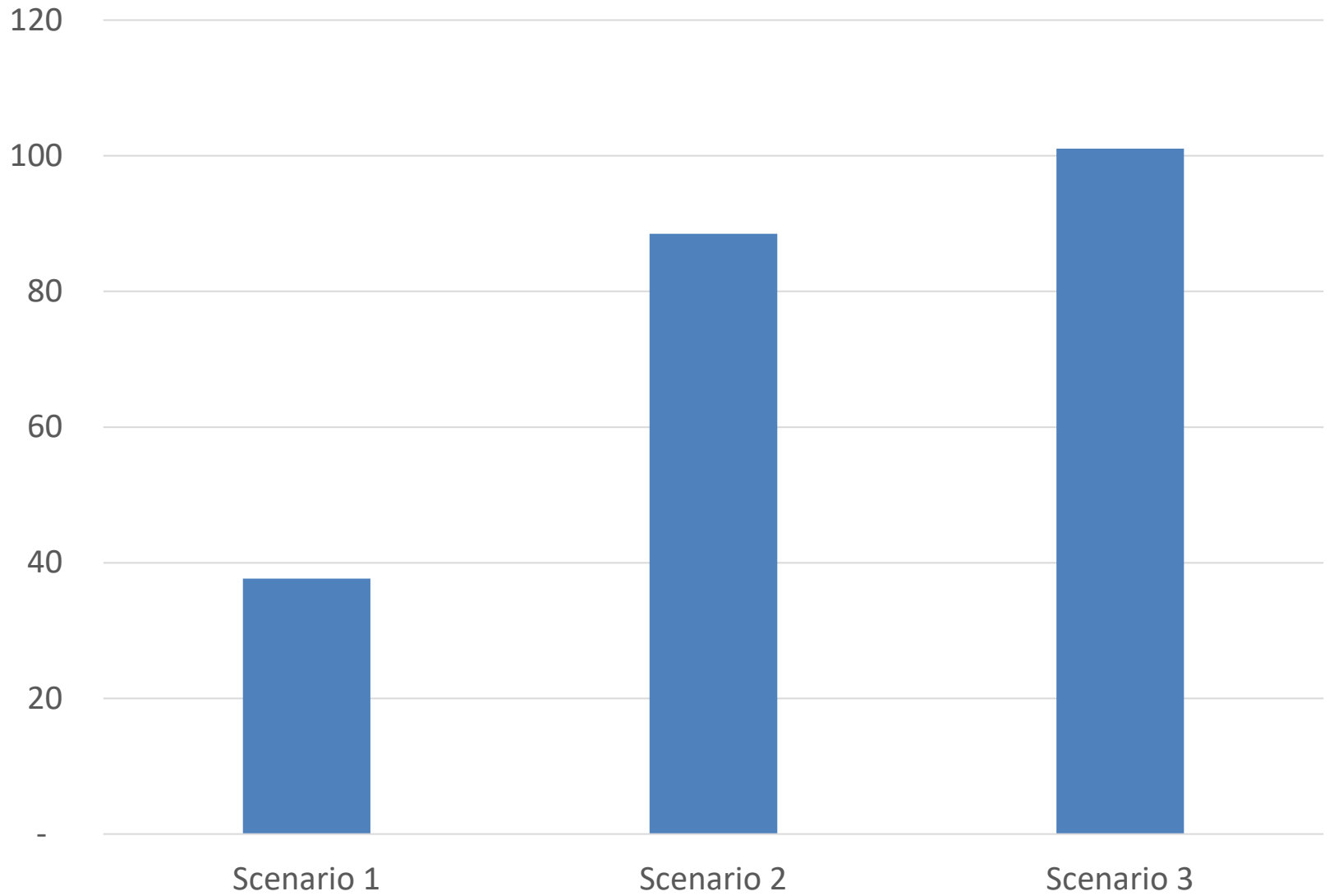
Scenario 3 is based on workshop groups that sought to maximize the entire site's value without retaining DJUSD. The majority of such groups focused on higher density, multi-family uses with some neighborhood-serving commercial uses.



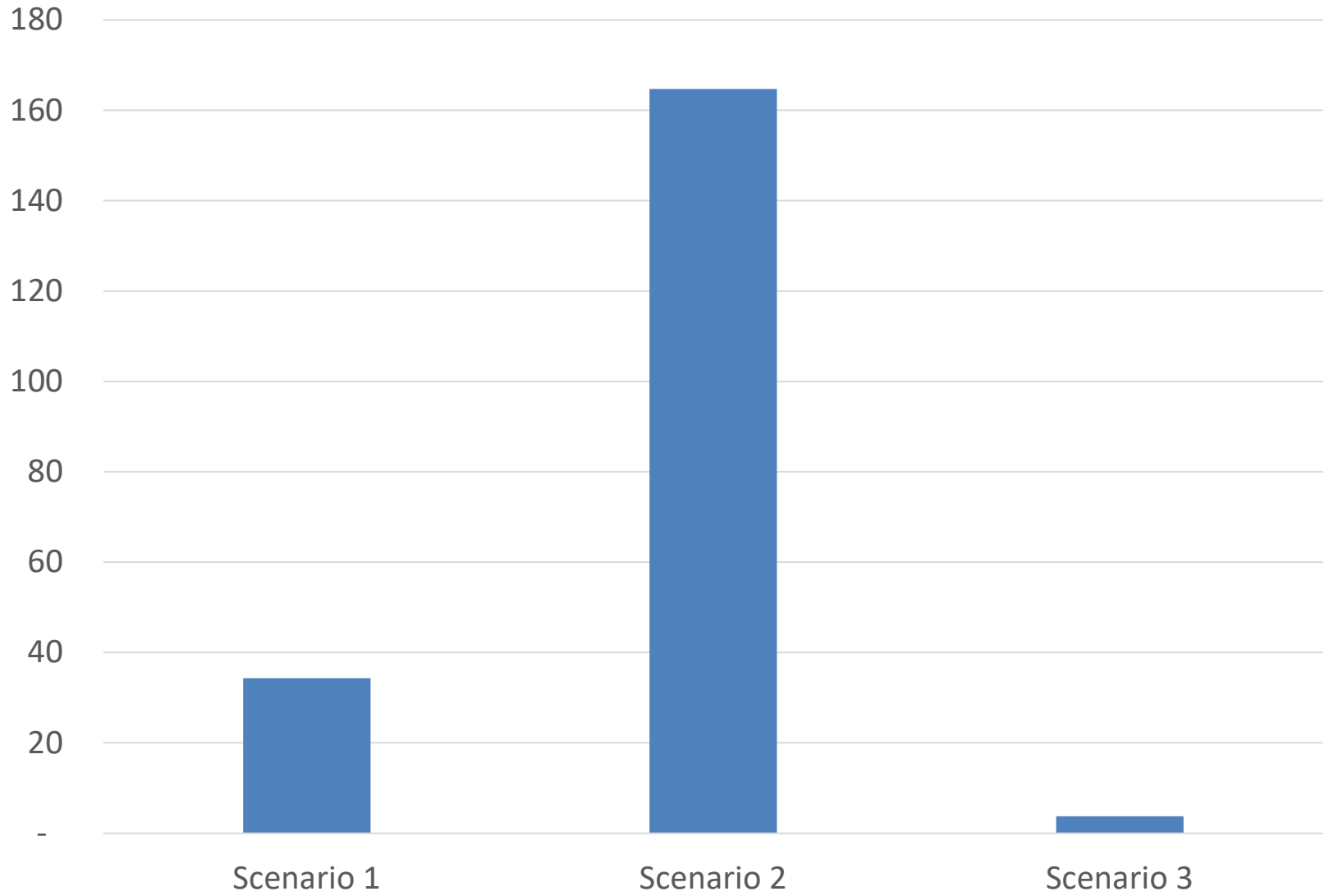
Results

Variable	Scenario 1	Scenario 2	Scenario 3
Dwelling Units	38	87	101
Jobs	34	166	4
Parcel Area	61,000	88,000	76,500
Commercial Space (ksf)	16,848	64,194	3,519
Gross Floor Area	74,851	160,519	142,183
Floor-Area Ratio (FAR)	0.78	1.67	1.48
Maximum Height (Floors)	4	6	5
Average Height (Floors)	2.3	3.9	3.7
Parking/Dwelling Unit	0.90	0.75	0.78
Parking/Ksf Commercial	1.25	1.25	1.25
Parking Spaces	55	153	84
Residual Land Value	\$4,753,299	\$6,244,538	\$9,411,895
Estimated DJUSD Cost	\$(9,412,706)	\$(6,685,267)	\$(9,412,706)
10-Year Tax Revenue	\$2,291,238	\$3,641,040	\$5,290,124
Daily Total Trips Generated (ITE)	626	1,127	701
PM Peak Trips Generated (ITE)	62	120	64

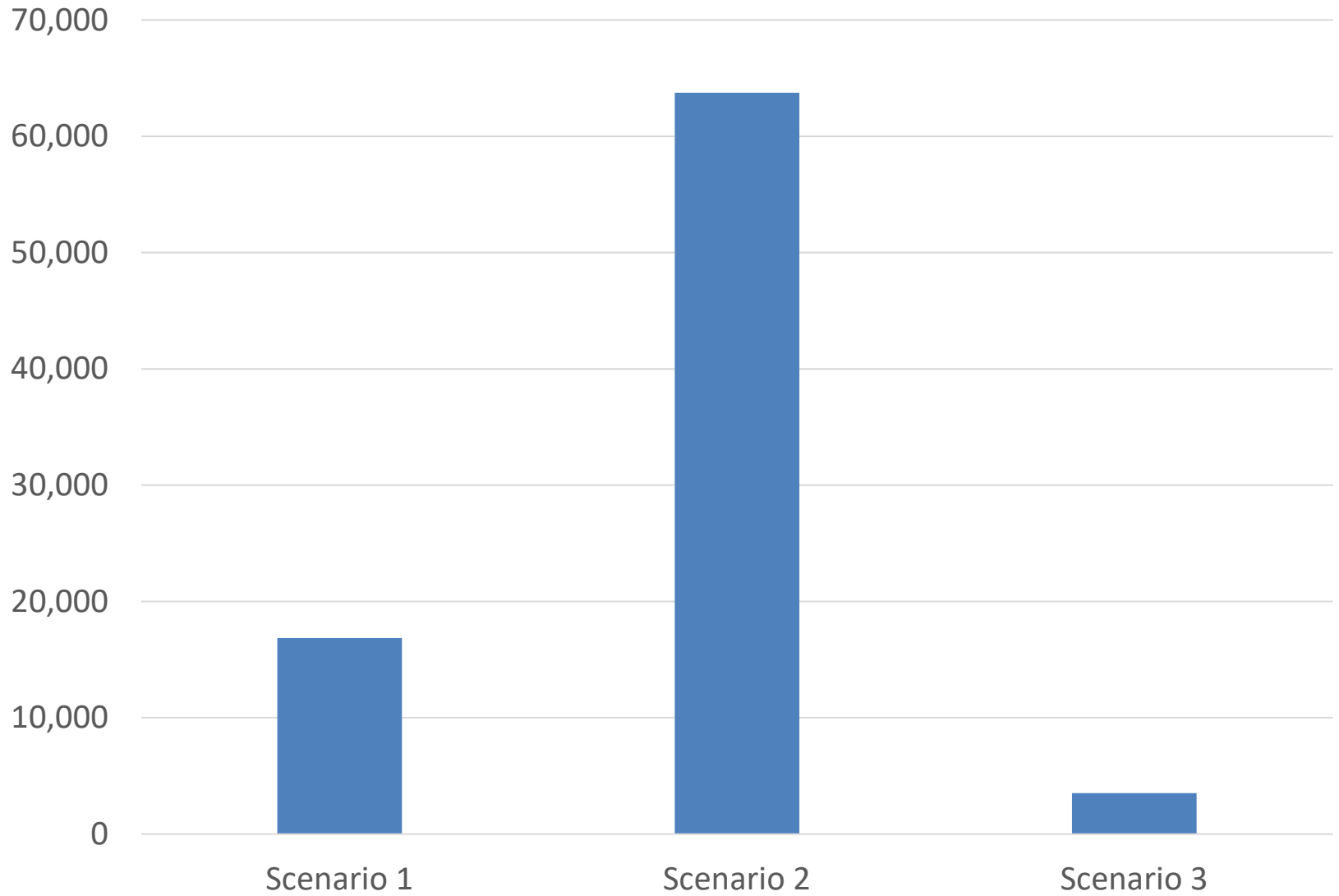
Dwelling Units



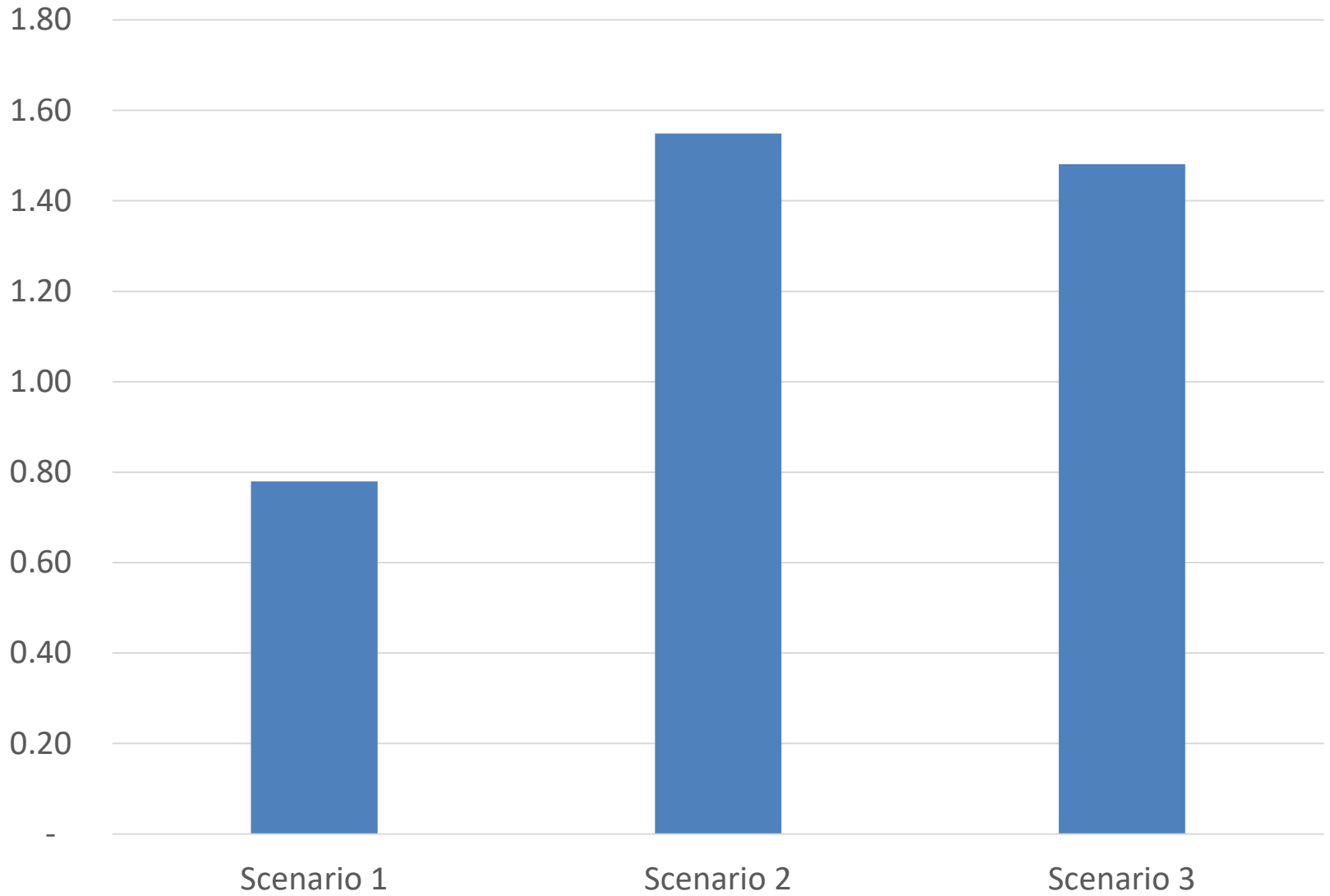
Jobs



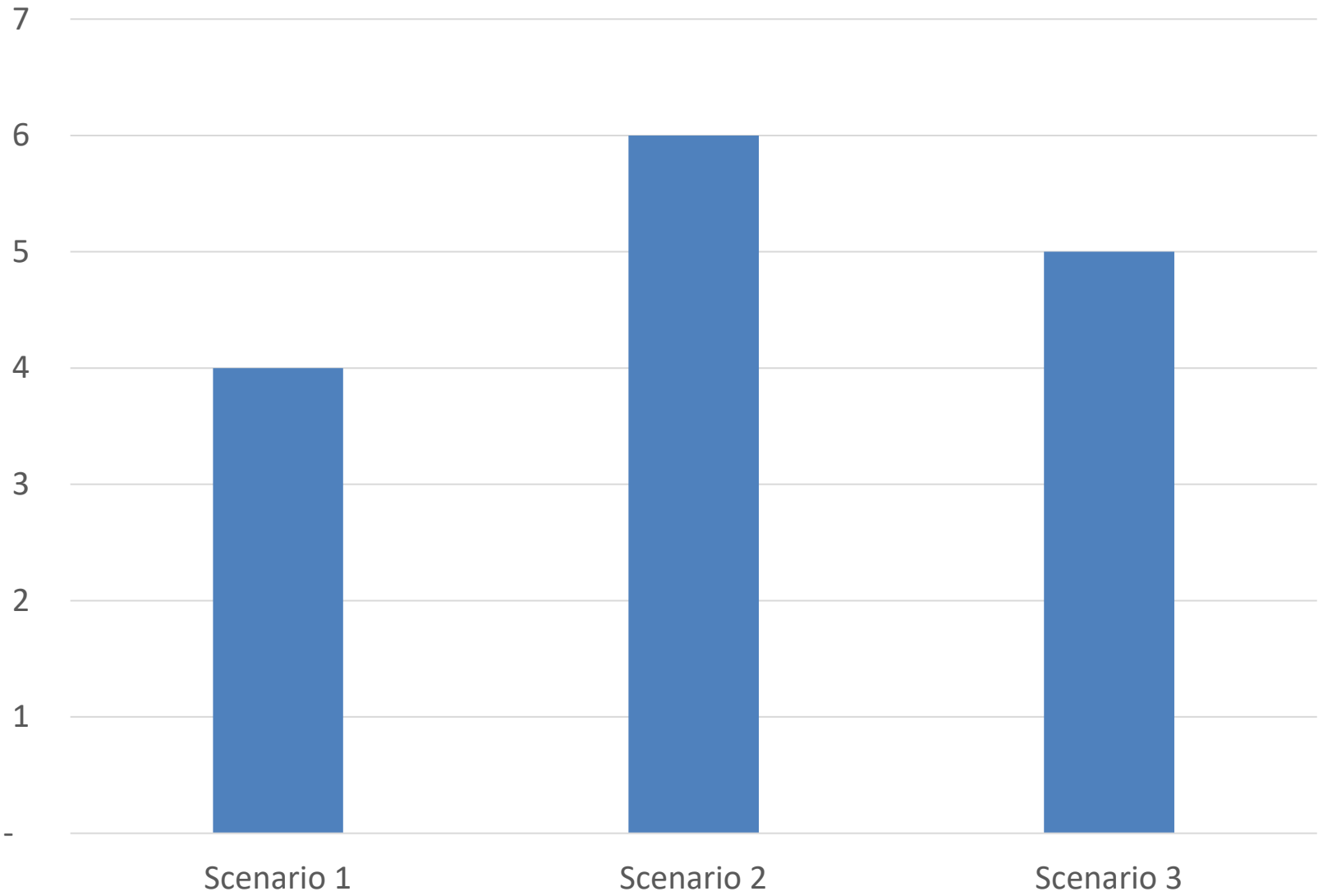
Commercial Space (ksf)



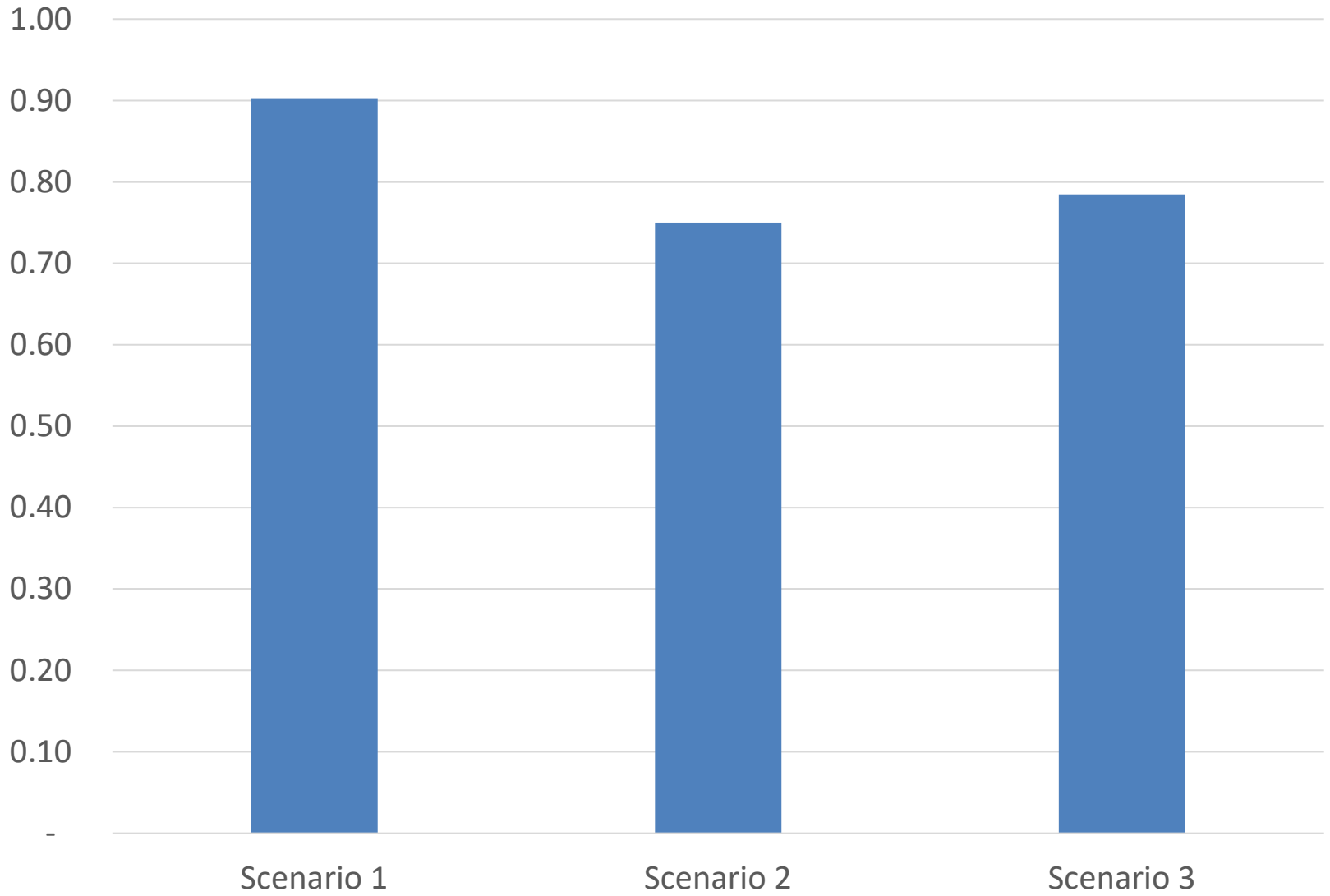
Floor-Area Ratio (FAR)



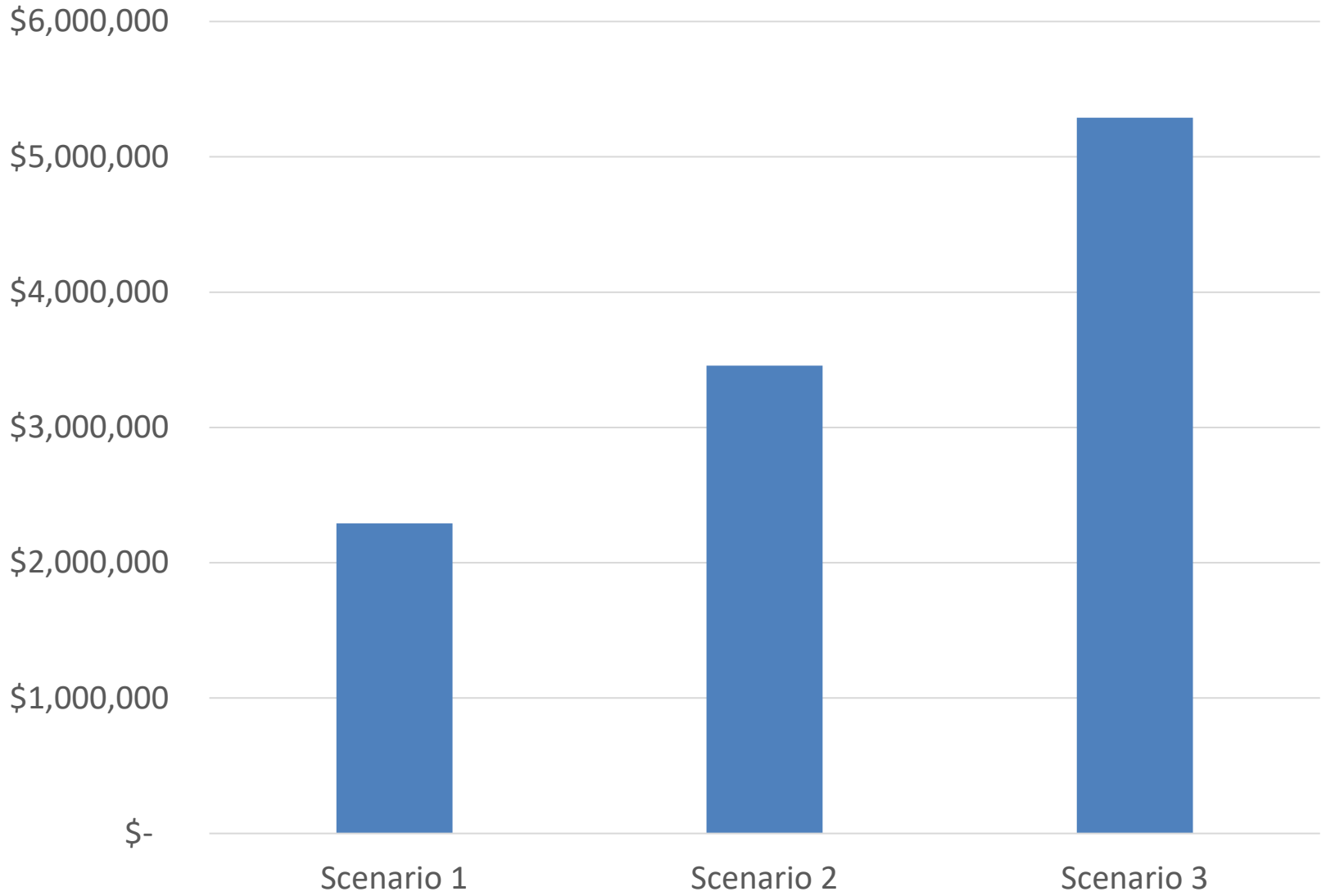
Maximum Height (Floors)



Parking/Dwelling Unit



10-Year Tax Revenue



Residual Land Value vs DJUSD Cost



- Residual Land Value
- Estimated DJUSD Cost (Land)
- Estimated DJUSD Cost (Improvement)

Conclusions

- School district will likely not be able to retain its offices on site if it wishes to pay for construction with proceeds from its entitlement and sale.
- District may be able to break even* if it maximizes entitlement and sells the entire site.
- Maximum site value assumes below market parking ratios for residential and commercial. Also assumes site is residentially-focused and relatively intense relative to surrounding uses.

*Assumes \$50/sf land and \$200/sf construction costs for a 3-story building with 1.5 parking spaces per 1,000 sf of leasable area.