



Date: February 23, 2022

# STRATEGIC LAND INVESTMENT CONSIDERATIONS FOR THE SCHOOL LAND BANK FUND

Prepared For: California State Lands Commission 100 Howe Ave, Suite 100, South Sacramento, CA 95825-8202

Prepared By: William P. Mott Rosen Consulting Group Farmvest, Inc. (415) 686-0828 wmott@aglandinvest.com

### TABLE OF CONTENTS

ACRONYMS & ABBREVIATIONS	1
EXECUTIVE SUMMARY AND RECOMMENDATIONS	2
1.0 INTRODUCTION	16
1.1 Project Scope & Objectives	16
1.2 Report Presentation	
2.0 NATIONAL & CALIFORNIA REAL ESTATE OVERVIEW	
2.1 Economic	
2.2 Overview of Commercial Real Estate Categories	19
2.2.1 Office Market	19
2.2.2 Industrial Market	20
2.2.3 Retail Market	20
2.2.4 Apartment Market	21
2.3 Overview of California Agricultural Land Categories	21
2.3.1 Annual Cropland	22
2.3.2 Vegetable Cropland	22
2.3.3 Permanent Crops and Land	23
2.3.4 Organic Cropland	23
2.3.5 Range/Grazing Land	23
2.3.6 Special Purpose Land	24
2.4 Summary & Recommendations	24
3.0 LAND INVESTMENT CATEGORIES & TREND ANALYSIS	26
3.1 Agriculture: Annual & Permanent Cropland	27
3.1.1 National vs. California Agricultural Land Returns	27
3.1.2 Annual Cropland	29
3.1.3 Permanent Cropland	30
3.1.4 Other Crops	32
3.1.5 Forest and Timberland	32
3.2 Commercial Real Estate	

# Strategic Land Investment Considerations for the School Land Bank Fund

3.2.1 California Financial Returns	
3.2.2 Summary and Recommendations	
4.0 ECONOMIC, ENVIRONMENTAL & SOCIAL ISSUES	
4.1 Economic	40
4.1.1 Uniqueness	40
4.1.2 Volatility	40
4.2 Environmental	41
4.2.1 Water Rights & Water Availability	41
4.2.2 Climate Change	45
4.2.3 Agricultural Chemicals	46
4.2.2 Government Regulations and Subsidies	47
4.3 Social	47
4.3.1 Affordability & Jobs Housing Balance	47
4.3.2 Agriculture Labor & Housing	48
4.4 Summary & Recommendations	49
5.0 CAPITAL REQUIREMENTS BY CATEGORY	51
5.1 Entry Capital Requirements	51
5.1.1 Agricultural Land Capital Requirements	51
5.1.2 Commercial Property Land Capital Requirements	51
5.2 Primary Acquisition Opportunities: Agricultural Land	53
5.2.1 Irrigated Crop Land	53
5.2.2 Annual Irrigated Vegetable Cropland	54
5.2.3 Permanent Crop Irrigated Land	54
5.2.4 Irrigated Cropland in the Path of Urban Growth	54
5.2.5 Range Land	55
5.3 Primary Acquisition Opportunities: Commercial Property	55
5.4 Summary & Recommendations	59
6.0 BENEFITS & RISK COMPARISON BY CATEGORY	61
6.1 Performance	61
6.1.1 Agricultural Land	61
6.1.2 Commercial Property	62

# Strategic Land Investment Considerations for the School Land Bank Fund

6.2 RISK AN	alysis	63
6.2.1 Agr	iculture Land Acquisition Risk	63
6.2.2 Cor	nmercial Property Acquisition Risk	65
6.3 Summa	ry & Recommendations	66
7.0 AGRICULT	URE VS. COMMERCIAL PROPERTY INVESTMENT	69
7.1 Propert	y Categories & Comparison	69
8.0 PROPERT	SELECTION TOOLS	75
8.1 Key Var	iables & Information Sources	76
8.1.1 Agr	icultural Property Selection Tool Variables	76
8.1.2 Cor	nmercial Property Selection Tool Variables	84
8.2 Agricult	ure & Commercial Property Examples	92
8.3 Propert	y Evaluation Tool Worksheets	92
APPENDIX A	AGRICULTURAL PROPERTY INVESTMENT CATEGORIES AND TREND AN	ALYSIS 101
1.0 Annual &	Permanent Cropland	101
1.1 Nut Cro	ps	
1 2 Wino G		
1.2 WITE G	rapes	107
1.3 Citrus	rapes	107 107
1.3 Citrus 1.4 Other C	rapes	
1.3 Citrus 1.4 Other C 2.0 Agricultur	rapes rops al Land Values	
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar	rapes rops al Land Values	
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B	rapes  al Land Values  d VALUE OF WATER BY MAJOR CROP	
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B APPENDIX C	rapes nops al Land Values d VALUE OF WATER BY MAJOR CROP EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES	
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B APPENDIX C APPENDIX D	rapes nops al Land Values d VALUE OF WATER BY MAJOR CROP EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES EXAMPLE EVALUATIONS FOR COMMERCIAL PROPERTIES	107 107 108 109 113 114 114 115 130
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B APPENDIX C APPENDIX D APPENDIX E	rapes nops al Land Values d VALUE OF WATER BY MAJOR CROP EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES EXAMPLE EVALUATIONS FOR COMMERCIAL PROPERTIES BLANK PROPERTY EVALUATION TOOL WORKSHEETS	107 107 108 109 113 114 114 115 130 139
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B APPENDIX C APPENDIX D APPENDIX E APPENDIX F	rapes nops al Land Values d VALUE OF WATER BY MAJOR CROP EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES EXAMPLE EVALUATIONS FOR COMMERCIAL PROPERTIES BLANK PROPERTY EVALUATION TOOL WORKSHEETS SCHOOL LANDS AND AFFORDABLE HOUSING	107 107 108 109 113 114 115 130 139 143
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B APPENDIX C APPENDIX C APPENDIX E APPENDIX F APPENDIX G	rapes rops al Land Values values VALUE OF WATER BY MAJOR CROP EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES EXAMPLE EVALUATIONS FOR COMMERCIAL PROPERTIES BLANK PROPERTY EVALUATION TOOL WORKSHEETS SCHOOL LANDS AND AFFORDABLE HOUSING TYPICAL COMMERCIAL PROPERTY LEASE STRUCTURES	107 107 108 109 113 114 115 130 139 143 148
1.3 Citrus 1.4 Other C 2.0 Agricultur 3.0 Range Lar APPENDIX B APPENDIX C APPENDIX C APPENDIX F APPENDIX F APPENDIX G APPENDIX H	rapes rops al Land Values values VALUE OF WATER BY MAJOR CROP EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES EXAMPLE EVALUATIONS FOR COMMERCIAL PROPERTIES BLANK PROPERTY EVALUATION TOOL WORKSHEETS SCHOOL LANDS AND AFFORDABLE HOUSING TYPICAL COMMERCIAL PROPERTY LEASE STRUCTURES AGRICULTURAL PROPERTY EVALUATION & ACQUISITION CHECKLIST.	107 107 108 109 113 114 115 130 139 143 143 148 149

### FIGURES

Figure 1. NCREIF Farmland Index	. 28
Figure 2. NCREIF Pacific West Farmland Crop Index	. 29
Figure 3. NCREIF Annual Cropland Pacific West Index	. 30
Figure 4. NCREIF Permanent Cropland Pacific West Index	. 31
Figure 5. California NCREIF NPI Annual Returns	. 35
Figure 6. Groundwater Pumping is Depleting Reserves in the Central Valley	. 44
Figure 7. U.S. Average Change in Rent	. 56
Figure 8. The Protracted Decline in Farmland Returns Ends	102
Figure 9. Cropland Federal Districts - High Price Paid per Acre	110
Figure 10. Coastal Cropland - High Price Paid per Acre	110
Figure 11. Wine Grapes - High Price Paid per Acre	111
Figure 12. Pistachios - High Price Paid per Acre	111
Figure 13. Almonds - High Price Paid per Acre	112
Figure 14. Walnuts - High Price Paid per Acre	112
Figure 15. Rangeland - High Price Paid per Acre	113
Figure 16. Cost of One-Bedroom Units for Teachers on Starting Salary	145

### TABLES

Table 1. Agriculture and Commercial Property Characteristics	3
Table 2. Investment Comparison: Agricultural Land Category - Economic	9
Table 3. Investment Comparison: Agricultural Land Category - Environment	)
Table 4. Investment Comparison: Agricultural Land Category - Soil    10	)
Table 5. Investment Comparison: Agricultural Land Category - Social	1
Table 6. Investment Comparison: Commercial Categories - Economic    12	1
Table 7. Investment Comparison: Commercial Category - Environmental	2
Table 8. Investment Comparison: Commercial Category - Social	3
Table 9. Investment Comparison: Commercial Category - Social Continued	3
Table 10. Pacific West (CA Region) Permanent Crop 15 Year Average, (2005 to 2020)	1
Table 11. Pacific West (CA Region) Annual Crop 15 Year Average, (2005 to 2020)	1
Table 12. NCREIF Timber Index	3
Table 13. Return Trends Analysis: Average Annual Return (2004 to 2019)	5
Table 14. Investment Comparison: Agricultural Land Category - Economic	)
Table 15. Investment Comparison: Agricultural Land Category - Environment	1
Table 16. Investment Comparison: Agricultural Land Category - Soil	1
Table 17. Investment Comparison: Agricultural Land Category - Social	2
Table 18. Investment Comparison: Commercial Categories - Economic	2
Table 19. Investment Comparison: Commercial Category - Environmental	3
Table 20. Investment Comparison: Commercial Category - Social	1
Table 21. Investment Comparison: Commercial Category - Social Continued	1
Table 22. Property Selection Tool Parameters: Agricultural Investments      79	Э
Table 23. Property Selection Tool Summary Results: Agricultural Investments	2
Table 24. Property Selection Tool Parameters: Commercial Investments	7
Table 25. Property Selection Tool Summary Results: Commercial Investments      89	Э
Table 26. Data Input Entry for Property Selection Tool: Agricultural Investments	3
Table 27. Data Input Entry for Property Selection Tool: Commercial Investments      97	7
Table 28. Agricultural Land Income 102	2
Table 29. National Cropland, Median Return (2004 to 2018)    103	3

# Strategic Land Investment Considerations for the School Land Bank Fund

Table 30. National Fresh Produce Cropland, Median Return (2004 to 2018)	103
Table 31. National All Other Lands, Median Return (2004 to 2018)	103
Table 32. Pacific West (California Region) Permanent Crops, 15-Year Average	104
Table 33. Pacific West (California Region) Annual Crops, 15-Year Average	104
Table 34. Median Permanent Cropland Return (2004 to 2018)	105
Table 35. Historical Financial Returns of Almond Orchards (2002 to 2017)	105
Table 36. Historical Financial Returns of Pistachio Orchards (2002 to 2017)	106
Table 37. Historical Financial Returns of Walnut Orchards (2002 to 2017)	106
Table 38. Historical Financial Return of Rice Land (2002 to 2017)	108
Table 39. Historical Financial Returns of Olive Orchard Lands (2002 to 2017)	109
Table 40. Water Use, Revenues, and Value of Water by Major Crop Categories, 2005	114
Table 41. Data in Figure 1 NCREIF Farmland Index	160
Table 42. Data in Figure 2 - NCREIF Pacific West Farmland Index	161
Table 43. Data in Figure 3 - NCREIF Annual Cropland Pacific West Index	162
Table 44. Data in Figure 4 - NCREIF Permanent Cropland Pacific West Index	163
Table 45. Data in Figure 7 - U.S. Average Changes in Rent	164
Table 46. Investment Comparison: Agricultural Land Categories	168
Table 47. Investment Comparison: Commercial Categories	170
Table 48. Property Selection Tool Worksheet: Agricultural Investments	174
Table 49. Breakdown of Property Selection Tool Worksheet Fields: Agricultural Investmen	ts 176
Table 50. Data Fields for Property Selection Tool: Agricultural Investments Worksheet	179
	_
Table 51. Breakdown of Property Selection Tool Worksheet Fields: Commercial	181
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial Investments	181 184
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial InvestmentsTable 53. Data for Property Selection Tool Worksheet: Agricultural	181 184 186
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial InvestmentsTable 53. Data for Property Selection Tool Worksheet: AgriculturalTable 54. Data for Property Selection Tool Worksheet: Commercial	181 184 186 190
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial InvestmentsTable 53. Data for Property Selection Tool Worksheet: AgriculturalTable 54. Data for Property Selection Tool Worksheet: CommercialTable 55. Avenue 16 Almonds Data in Property Selection Tool Worksheet	181 184 186 190 194
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial InvestmentsTable 53. Data for Property Selection Tool Worksheet: AgriculturalTable 54. Data for Property Selection Tool Worksheet: CommercialTable 55. Avenue 16 Almonds Data in Property Selection Tool WorksheetTable 56. Shafter Almond and Pistachio #7786 Data in Property Selection Tool Worksheet	181 184 186 190 194 198
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial InvestmentsTable 53. Data for Property Selection Tool Worksheet: AgriculturalTable 54. Data for Property Selection Tool Worksheet: CommercialTable 55. Avenue 16 Almonds Data in Property Selection Tool WorksheetTable 56. Shafter Almond and Pistachio #7786 Data in Property Selection Tool WorksheetTable 57. Panasonic Avionics Corp Data in Property Selection Tool Worksheet	181 184 186 190 194 198 202
Table 51. Breakdown of Property Selection Tool Worksheet Fields: CommercialTable 52. Data Fields for Property Selection Tool Worksheet: Commercial InvestmentsTable 53. Data for Property Selection Tool Worksheet: AgriculturalTable 54. Data for Property Selection Tool Worksheet: CommercialTable 55. Avenue 16 Almonds Data in Property Selection Tool WorksheetTable 56. Shafter Almond and Pistachio #7786 Data in Property Selection Tool WorksheetTable 57. Panasonic Avionics Corp Data in Property Selection Tool WorksheetTable 58. Walgreens Pharmacy Data in Property Selection Tool Worksheet	181 184 186 190 194 198 202 206

# Strategic Land Investment Considerations for the School Land Bank Fund

Table 60. Blank Property Selection Tool Worksheet: Commercial	. 214
Table 61. Property Description Checklist	. 217
Table 62. Objective Considerations Checklist	. 219
Table 63. Subjective Considerations Checklist	. 222
Table 64. Financial Evaluation Checklist	. 225

### **ACRONYMS & ABBREVIATIONS**

Acronyms and Abbreviations	<u>Definitions</u>
ASFMRA	American Society of Farm Managers and Rural Appraisers
Brick-and-Mortar Retail	A retail shop in a building vs. a catalogue or purchases made online
Cap Rate	Net operating earnings divided by purchase price
CDP	Carbon Disclosure Project
COVID-19	Coronavirus Disease 2019
ESG	Environment Social and Governance
GRESB	Global Real Estate Sustainability Benchmark
LEED	Leadership in Energy and Environmental Design (Green Building Certification Program)
NAREIT	National Association of Real Estate Investment Trusts
NCREIF	National Council of Real Estate Investment Fiduciaries
NOP	National Organic Program
RCA	Real Capital Analytics
REIT	Real Estate Investment Trust
SGMA	Sustainable Groundwater Management Act
SWP	California State Water Project
USDA-NCSS	U.S. Department of Agriculture, National Cooperative Soil Survey
USDA	U.S. Department of Agriculture

#### **EXECUTIVE SUMMARY AND RECOMMENDATIONS**

"The State Lands Commission manages approximately 458,843 acres of school lands held in fee ownership and the reserved mineral interests on approximately 790,000 acres of school lands where the surface estate has been sold. These interests are what remain of the 5.5 million acres granted by Congress in 1853. The state sold most of the original school lands during the first 130 years of statehood."

2017-18 Annual Staff Report on the Management of State School Lands

School lands were placed into a statutory trust in 1984 when the legislature enacted the School Land Bank Act (ACT), which created the School Land Bank Fund (Fund). The Commission is examining an investment strategy for the Fund, created through the past transfer and sale of School Land. To date, the Fund is close to \$70 million, generating financial returns of 1% to 1.50% with no long-term inflation protection. Investment of funds in California property are being explored to support the Commission's fiduciary mission to enhance current income and provide stewardship. The size and vibrancy of the California economy has made investment in commercial property, and more recently agricultural property, an attractive long-term investment. This report discusses the characteristics of property acquisition and ownership. It compares the investment of agricultural versus commercial property and recommends a property acquisition strategy.

Land used for agriculture and commercial purposes is an investment in land and improvements, although their overall characteristics differ significantly. This is particularly the case when considering a long-term investment. Commercial property has long been considered an attractive investment, particularly in an expanding economy. Agricultural land has only recently been defined as an asset class for investment. The following table summarizes key differences between the two.

Property Characteristics	Agriculture	Commercial
Asset Class	Resource	Real Property
Asset	Land & Trees / Vines	Land & Structures
Useful Life	Sustainable	Prescribed
Location	Rural	Urban
Primary Valuation Drivers	Resource and Management	Location
	Fixed & Performance	
Income / Net Lease	Incentive	Fixed & Rent Escalators
Primary Economic Output	Food Supply	Service

Table 1. Agriculture and Commercial Property Characteristics

#### Agricultural Real Estate Investment Summary

#### **Opportunities: Investment Recommendations**

The California economy provides many opportunities for land and property investment. The state's unique and predominantly irrigated agricultural land—increasingly planted to permanent plantings of fruit, nut, and vineyard crops—has proved to be a good long-term investment. California farms are important suppliers to the domestic market and globally; over 30% of California's crops are exported. California's irrigated cropland is a relatively new investment category for institutional and absentee investors. The two primary categories of irrigated cropland include (1) annual cropland and (2) land planted with permanent crops.

The management of agricultural land is a very important component of ownership, and opportunities exist for landowners to enter short- and long-term net leases with established farm managers. A common net lease involving land and a permanent crop includes a fixed base rent, plus a performance bonus based on annual income shared between the landowner and farm management.

Net lease properties in the \$5 to \$15 million price range should be the target. Opportunities also exist to merge a group of smaller properties into a more efficient management unit. This capital range is chosen because such deals are (1) large enough to justify resource allocation associated with individual property acquisition, (2) well sized to attract established farm management firms, (3) small enough to preserve capital for additional investments to create a balanced, diversified portfolio and (4) face limited competition from large institutional and foreign capital sources which generally focus on larger deals.

### Performance Measures: The Triple Bottom Line

An investment in agricultural land is a resource investment. California's irrigated land is a unique combination of climate, land, and water resources, which in turn supports a wide variety of crops.

The primary measure for investment decisions is financial performance. Irrigated agricultural land is divided into long-term investments in (1) annual cropland and (2) land planted to a permanent tree or vine crop. Currently, a return on a triple net lease for cropland is 3% to 4%. The return on land planted to a permanent crop—with bonus payments tied to net income— can be above 9%. Another less available alternative is a long-term net lease on land with a permanent crop owned by a third party, usually a farm management firm. The financial return can range from 5% to 9%. The higher the land quality, uniqueness, and water reliability, the higher the financial return.

California's expanding population and industrial base impact its resources. Therefore, environmental and social factors are increasingly considered in making property investment decisions. Issues such as climate, land quality, and water availability are key variables and important factors in land investment decisions. Preservation of the best agriculture land has strong support. The availability and reliability of irrigation water is also a very important consideration in agricultural property selection and acquisition. The importance of water is more meaningful recently given the regulation and potential restriction of groundwater.

Other environmental factors, such as gradual global warming, are projected to impact climate, available water resources, and crop production. Affordable housing, not only for California's general workforce, but specifically for agricultural workers, is a continuing issue. California employs an estimated 420,000 agriculture workers out of 1,300,000 nationally.

### Benefits & Risks

The principal method for investors or absentee owners to maximize financial performance and minimize risk is the use of short or long-term net leases with established farm operators or tenants. Based on current land value—and utilizing an investment of \$5 to \$15 million as the target—the appropriate parcel size of irrigated annual cropland is 640 to 1,300 acres and permanent cropland is 280 to 500 acres. There are also opportunities to consolidate agricultural land parcels to increase farming efficiency.

Land ownership can achieve social and environmental goals, such as conserving prime agricultural land and increasing irrigation efficiency and/or establishing improved and sustainable water sources.

Properties with permanent crops—such as almonds, pistachios, walnuts, and wine grapes yield the highest return. However, annual income from long-term leases with incentive payment clauses are likely to fluctuate year to year due to changes in crop size and market prices. Leaseback properties acquired from long-term farming families, corporations, or food processor/marketers reduce risks and provide reliable and experienced long-term management.

In the final analysis, ownership of agricultural land with the highest quality land, water, and climatic resources minimizes long-term ownership risk.

Financial performance is the key factor for evaluating the benefits and risks associated with investment in a specific land parcel. The acquisition cap rate and the standard deviation of returns are the main variables used to measure financial performance. In addition, several resource factors such as climate, soil, and water must be assessed to minimize acquisition risk. Ownership risk is minimized by using net leases to well-established and well-financed farm managers.

Summary tables are provided comparing the primary characteristics of agricultural land and commercial property investment.

#### **Commercial Real Estate Investment Summary**

#### **Opportunities: Investment Recommendations**

The large and diverse commercial real estate investment universe within California provides potentially attractive investment opportunities across multiple property sectors. A deep demand base and significant supply constraints bode well for long-term value preservation. However, strong investor interest for a limited inventory also creates significant competition for commercial property in the state.

Passive investment options with the steadiest long-term income generation potential should be the focus within each sector to align with the Commission's goals for stable, long-term income generation and minimal property management. Single-tenant, triple net opportunities in the retail, industrial and office sectors, commonly referred to as net lease investments, provide the most opportunities among major property types. Single-tenant net lease investments are typically freestanding buildings leased to well-known businesses under triple net lease structures. They pass building operations costs—property taxes, insurance, and maintenance—to tenants in exchange for fixed lease payments over a long time period.

Recommended investment targets include net lease properties in the \$5 to \$15 million price range in well-located buildings with strong credit tenants in stable sectors.

This capital range is chosen because deals of this size are (1) large enough to justify resource allocation associated with individual property acquisition, (2) within a reasonable range to target properties with high credit tenants with corporate backing, (3) small enough to preserve capital for additional investments to create a balanced, diversified portfolio, and (4) face limited competition from institutional and foreign capital sources which generally focus on larger deals.

The single-tenant net lease asset class is recommended because it (1) best meets the Commission's requirements for long-term income stability with minimal management responsibilities, (2) offers a lower risk alternative to conventional multi-tenant gross lease investment, (3) consists of a sizable investment pool which meets the Commission's investment criteria, (4) includes a large number of properties with lease terms less than the 49-year maximum that ground net leases generally do not, and (5) has less risk and resource commitment to re-tenant at the end of long lease terms when the locations are carefully chosen and desirable, which characterize attractive net lease deals.

Retail properties offer the most opportunities within the target range. Necessity-based segments, such as grocery stores and pharmacies are the most desirable. They can withstand business cycle fluctuations and are more resistant to Internet cannibalization. Office and industrial properties with credit-worthy tenants in stable sectors with strong long-term prospects—such as healthcare, education, logistics and e-commerce—should also be considered.

Attractive deals with strong credit tenants in the \$5 to \$15 million range are more abundant in smaller markets outside of major urban centers. Limited supply and heightened competition characterize desirable properties in primary cities, although opportunities do exist.

#### Performance Measures: The Triple Bottom Line

The primary measure for investment decisions is financial performance. A wide range of office, industrial, and retail categories are likely to offer opportunities for long-term investment. They historically offer stable income returns averaging in the high-4% to mid-5% range. While historical data is very limited, income returns for the recommended triple net lease structure on single-tenant facilities are somewhat lower than the overall market but would provide more stability in cash flows on an ongoing basis. This is because rental increases for net lease properties are fixed and typically tied to inflation rather than more volatile market-wide rental appreciation. Acquisition cap rates for single-tenant properties are in the 5% range and yields for well-chosen properties meet the Commission's criteria for steady, long-term annual income generation. However, peak pricing in the current cycle heightens the need for careful due diligence to ensure that in-place lease terms and rent schedules justify the acquisition prices at historically low cap rates.

Volatility of returns also needs to be considered to assess the potential risk associated with achieving a certain level of return. For commercial investment, volatility is largely a function of economic activity. While industry drivers vary from property type to property type, performance is generally tied to national, regional, and local economic health. Cyclical trends related to business cycle fluctuations have a direct impact on businesses and consumers, which in turn influence their space usage decisions. Total returns for California commercial real estate are more volatile than the national average. However, income returns—especially those of net

lease properties—exhibit very low volatility. This bodes well for investors focused on long-term, stable revenue generation strategies.

Commercial buildings have significant environmental and social impacts which should be considered when making investment decisions. Energy use, water use, emissions, traffic congestion, jobs-housing balance, and gentrification effect overall returns for commercial real estate beyond the financial return of an investment. A variety of quantitative and qualitative measures are used to determine environment and social returns on investment.

### Benefits & Risks

A framework is provided to compare the benefits and risks of commercial real estate alternate investments given the goal of maximizing financial, environmental, and social returns. This includes indicators which effect the entire sector, as well those specifically important for single-tenant net lease investment.

Financial performance is the key factor for evaluating the benefits and risks associated with investing in a particular asset. Acquisition cap rate and the standard deviation of returns are the main variables used to measure financial performance. Time remaining on the lease and provisions for guaranteed rental increases should also be determined to ensure they are reflected in pricing.

Major risk factors for general commercial real estate investment include local economic conditions and larger business cycle fluctuations. These can positively or negatively impact demand for space. Supply constraints in each market determine risks for overbuilding and unanticipated events such as natural disasters. Government action can have out-sized consequences on a particular geography, property category, or the commercial real estate market more broadly. Social and environmental impacts associated with broad specific property sectors (i.e., energy usage in office buildings versus retail buildings, etc.) also fall in this category.

Major risk factors for single-tenant net lease investments include tenant credit (the key determinant to ensuring a solid revenue stream); location (the key determinant of re-leasing potential); and any property/location-specific social and environmental impacts (i.e., the positive effect of a grocery store investment in an underserved community or the negative impact of a retail franchise investment on local small businesses, etc.)

### **Recommendations & Action Plan**

Investments in commercial and agricultural property have several distinct characteristics. Ownership of agricultural property is an investment in the combination of climate, land and water coupled with growing food crops. Commercial property is a combination of land ownership and most often a building or structure. Property income and value is tied closely to market forces and the performance of the overall economy or segments within the economy. The size of the California economy provides a large and wide range of commercial property investments which attracts national and international investment. Third-party investment in California's agricultural land is a more recent trend. It is increasingly focused on investment in land planted to a permanent crop or a combination ownership of land and a permanent crop.

To minimize the Commission's management time and effort and to reduce risk, it is recommended that investment be made in single-tenant properties, with 5 to 25-year leases, managed by a creditworthy experienced management team or company.

#### **Agriculture vs. Commercial Property**

The characteristics of different types of agriculture and commercial property are discussed in the body of the report. They are summarized in the following matrices.

Table 2. Investment Comparison: Agricultural Land Category - Economic

Economics	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Yield	Cap Rate from NCREIF Data	Annual Cash Return Above 2% and Appreciation at or Above Inflation	2% to 4%	5% to 7%	8% to 12%	Minimal
Volatility	Standard Deviation	Stable Revenue Generation Through Economic Cycles	Low	Low	Medium	High
Total Investment Pool in Designated Capital Range	Variable	Stable Investment Pool in \$5 To \$15 Million Range	High	Limited	Limited	Medium
Credit Tenant Pool in Designated Capital Range	Establish Farm Owner/Managers and Professional Managers	Minimum 10 Years' Experience	High	High	High	Low
Lease Terms	Average Lease Term	Long-Term with 45-Year Maximum	5 to 10 Years	20 to 25 Years	20 to 30 Years	Unknown
Management Intensity	Qualitative Score Based on Lease Terms	Minimal Management Role	Low	Low	Medium	Medium

Table 3.	Investment	Comparison:	Agricultural	Land Category -	Environment
			0	0 /	

Environment	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Climate	Adaptability of Crop	Minimal Impact from Climate Change	Property Specific	Property Specific	Property Specific	Property Specific

### Table 4. Investment Comparison: Agricultural Land Category - Soil

Soil	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Soil	Soil Quality	Sustainable, Class 1 or 2 Soils Preferred	Property Specific	Property Specific	Property Specific	Property Specific
Water	Availability and Quality	Sustainable in Periods of Drought	Property Specific	Property Specific	Property Specific	Property Specific
Hazards	Historical Records of Hazards	Minimize Risk	Property Specific	Property Specific	Property Specific	Property Specific

Social	Measurement Metric	Commission Criteria/Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Farm Worker Availability	Agriculture Extension Service Estimate	Preference for Mechanized Crops	Not a Concern	Not a Concern	Consideration	Not a Concern
Farm Worker Housing	Agriculture Extension Service Estimate	Local Availability	County Specific	County Specific	County Specific	Not a Concern

Table 5. Investment	Comparison:	Agricultural	Land	Category -	- Social
---------------------	-------------	--------------	------	------------	----------

### Table 6. Investment Comparison: Commercial Categories - Economic

Economics	Measurement Metric	Commission Criteria / Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
Yield	Cap Rate from Real Capital Analytics (RCA): 2020 to First Half 2021	Annual Cash Return Above 2% and Appreciation at or Above Inflation	High-5%	Low-5%	High-5%	Specific Data Unavailable, But Less Than 5%
Volatility	NCREIF Income Return Standard Deviation 2004 to 2019	Stable Revenue Generation Through Economic Cycles	0.8%	0.9%	0.9%	Specific Data Unavailable, But Less Than 5%
Total Investment Pool in Designated Capital Range	RCA Deal Volume (2010 to 2020)	Sizable Investment Pool in \$5 to \$15 Million Range with Limited Competition from Institutional Investors	\$9.7 Billion in 1,226 Deals	\$10.9 Billion in 1,249 Deals	\$4.2 Billion in 475 Deals	Less Than \$6 Billion

Strategic Land Investment Considerations for the School Land Bank Fund

Economics	Measurement Metric	Commission Criteria / Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
High Credit Tenant Pool in Designated Capital Range	Qualitative Based on RCA Database for \$5 to \$15 Million Historical Transactions	Sizable Investment Pool in \$5 to \$15 Million Range with Desirable, Low- Risk Tenants	Large	Medium	Medium	Small
Lease Terms	Avg. Lease Term	Long-Term with 49-Year Maximum	10 to 25 Years	10 to 25 Years	10 to 25 Years	50 to 99 Years
Management Intensity	Qualitative Score Based on Operational Obligations Related to Lease Structure	Minimize Management Role	Low	Low	Low	Very Low

### Table 7. Investment Comparison: Commercial Category - Environmental

Environmental	Measurement Metric	Commission Criteria / Goals	Net Lease
Energy Consumption / C02 Emissions	Qualitative Score Based on LEED Certification and Other Environmental Impact Factors	Minimize Carbon Footprint, Promote Sustainable Practices	Property Specific, but major positive impacts can include Public Transit and Walkability, Enhancement, Green Building Practices which promote resource usage efficiencies and Worker Health. Negative impacts can include Traffic congestion, Production-Related Emissions, Inefficient Energy Usage.

Table 8. Investment Comparison: Commercial Category - Social

Social	Measurement Metric	Commission Criteria / Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
Job Impacts	Qualitative	Promote High- Quality Job Creation	Tenant Specific, But Sector Has Weaker Potentials	Tenant Specific, But Sector Has Moderate Potential	Tenant Specific, But Sector Has Stronger Potential	Tenant Specific, But Sector Has Stronger Potential

### Table 9. Investment Comparison: Commercial Category - Social Continued

Social	Measurement Metric	Commission Criteria / Goals	Net Lease
Affordability / Community Impact	Qualitative	Provide and Enhance Benefits to Local Community	Property and Market-Location Specific but major positive impacts can include provides needed goods / services for underserved community. Major negative impacts can include contributing to gentrification by diminishing housing affordability or pricing out local businesses.

#### **Property Section Recommendations**

The following recommendations are made under today's conditions and should be modified dependent on current market and economic conditions. The Commission can view selecting property in several stages, as experience is gained in finding and evaluating potential investments. It is recommended that the Commission select 3 or 4 individuals to be designated an "Investment Committee" to focus on potential investment property, commence evaluations, and make acquisition recommendations.

It is noted that, for the past 2 to 3 years, the cap rate on cropland and premium single-tenant commercial property declined due, in part, to low interest rates and lower farm crop prices than the previous 4 to 6 years. Increasing interest rates and an improved farm economy result in higher cap rates.

#### Primary Phase – Initial Property Acquisition Action Plan

As the Commission initiates a new program, it is recommended that several agricultural properties are acquired, as the Commission's primary activities and expertise involve the management of California lands. This can be followed by considering appropriate commercial property. It should be noted that there may be a larger selection of commercial properties than appropriate agricultural property. In any case it takes time to find appropriate property. Agricultural land with these characteristics should be sought:

- Agricultural land classification of 1 and 2.
- Land parcel of \$5 to \$15 million in size or an aggregation of similar smaller parcels into one operating unit.
- Irrigated row cropland with the potential to be planted with permanent crops or multipurpose land planted to rice in the Sacramento Valley.
- Land located within irrigation districts with the most secure and lowest cost irrigation water. Suggested irrigation districts include Modesto and Tulare Irrigation Districts.
- Leases to established farm managers on a net lease basis, thereby minimizing the Commission's management time and expense.

Properties may be evaluated and compared using the property selection methodology and matrixes in Section 8.

It will prove difficult to find a land-only component under commercial buildings in the \$5 to \$15 million range on a long-term net lease basis.

In the next phase, based on experience gained in the initial property acquisitions, consider broader land categories.

#### Secondary Phase – Action Plan

As experience in the California real estate market is gained, consider both agricultural and commercial property with an emphasis on property that has been, or can be, leased to strong tenants on a long-term net lease basis.

Consider agricultural land planted to permanent crops coupled with 10 to 25-year fixed income farm management leases whereby the management company pays all operating costs, along with appropriate inflation adjustments and performance bonuses based on higher-thanaverage market prices and crop production. The addition of a variety of long-term permanent crop leases, coupled with performance bonuses, likely requires allocating staff time to select and monitor the portfolio. Alternatively, the Commission could hire a staff member or contract with a third-party property management firm to evaluate acquisitions and monitor assets.

Seek land investments under prime commercial or industrial property. Consider single-tenant commercial property leased to a creditworthy tenant for 10 to 25 years with appropriate inflation adjustments.

### **1.0 INTRODUCTION**

### 1.1 Project Scope & Objectives

The mission of the State Lands Commission (Commission) is to provide the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care. In this role, the Commission manages State School Lands property originally granted to the state by acts of Congress or indemnity selection with the objective that they be used to support public education. Today this represents approximately 458,843 acres within the State.

Income gained through past transfer and sale of School Lands is held in the School Land Bank Fund. Currently, the balance in the Fund is close to \$70 million. To support the Commission's fiduciary mission to enhance current income and provide stewardship, the Commission requested a report focused on agricultural and commercial land investment opportunities within the State. The objective is to better understand the underlying nature of agricultural and commercial land investment in California. The Commission aims to invest in property to achieve a higher financial return, particularly a current income return, coupled with asset appreciation. Guidance is also provided in the comparison, analysis, and selection of agricultural and commercial property.

Given the history and objectives of the School Land Bank Fund, the primary focus of this report is long-term trends in the California commercial, industrial, and agricultural real estate markets. Emphasis is placed on economic trends and resources and understanding the major drivers of the California real estate market, such as land, water, climate, and the economy. California commercial property is a very large, well-defined, and established investment category. Meanwhile, agricultural land has only recently been recognized as an attractive investment category by institutional investors.

### **1.2 Report Presentation**

The report is divided into eight sections, supported with Appendices containing further background information and historic data trends:

National & California Real Estate Overview

• This section focuses on the California commercial and agricultural property markets in the context of the national property market.

Land Investment Categories & Trend Analysis

• This section provides long-term trends regarding the appreciation and income generated from different categories of California agricultural and commercial lands.

Economic, Environmental & Social Issues

• Special issues regarding economic, environmental, and social trends that effect California property beyond financial returns are identified, and how such factors influence real property in the short and longer term are discussed.

Capital Requirements by Category

• The appropriate size and characteristics of property acquisitions are presented. Recommendations made as to the appropriate size of an individual transaction.

#### Benefits & Risks Compared by Category

• Summaries of income benefits and norms—coupled with primary risks associated with agricultural and commercial property ownership—are presented.

#### Matrix Comparison Tool

• Information presented in prior sections is summarized to provide guidance for property evaluation.

#### **Investment Suitability**

• A qualifying risk factor rating system by category is provided to aid in property selection.

A summary and recommendations are included in each section. Appendices provide additional details, graphs, and historic agricultural and commercial property trends.

#### 2.0 NATIONAL & CALIFORNIA REAL ESTATE OVERVIEW

#### 2.1 Economic

The California economy is large and diverse. Land use and financial returns are tied to major sectors. Over the last four decades, the proportion of California employment as a percentage of total national employment has varied between 10.5% and 11.5%, with the current proportion at the very top of that range. California is the largest state job market in the country. The economic cycles in California and the nation line up very well. This is by virtue of the state's large and diverse economic base. However, the peaks tend to be a bit higher for commercial property in California, and the valleys a bit lower.

Given California's economic and demographic characteristics, major implications for real estate include:

California is more productive, on average, per acre of usable land than the national average. As such, residential home prices are higher than the rest of the U.S. Apartment assets—especially entry-level apartments near job centers—are in high demand. Consequently, rental income and accompanying return on investment attributed to land under such assets is strong.

The industrial property sector rides the wave of online retail purchases rather than in store clicks rather than bricks. An industrial asset (i.e., warehouse) in California puts 40 million people in the state within an easy truck trip of that asset. We believe these factors support strong ongoing demand, bolstering long-term prospects for returns on investment in California industrial property.

Agriculture continues to be a major industry in the state. With a large percentage of agricultural output destined for export, agriculture is currently at risk from trade tensions, not only with China but also with other countries. In the long run, agriculture fares well in the state, but currently agriculture is facing short-term risks that may get worse before they get better. Nevertheless, agriculture remains a staple of the California economy.

Assets and land serving the healthcare industry in California are in strong demand because of the necessity-based nature of healthcare and the anticipated demand from the ageing population. These provide good returns over an extended period. Consequently, land under such assets is attractive and could provide favorable returns.

The high-tech and bio-tech industries are fast growing and relatively concentrated in California. Assets serving these industries are favorable uses of land. We note that the dynamic nature of these industries often causes those in the industry to shy away from long-term obligations. Many of the more mature companies in these industries prefer to own their real estate assets, incurring no debt and no lease obligations. These industries are also more volatile than other parts of the economy, posing elevated risk for investment strategies focused on stable revenue streams.

### 2.2 Overview of Commercial Real Estate Categories

California's commercial real estate sector is composed of a deep investment pool across multiple property segments (apartment, office, industrial, retail, and hotel) supported by a large and diversified economy. Elevated demand and limited inventory help preserve values over the long-term but also create significant competition and pricing pressure for new investors.

In 2019 and 2020, national real estate transaction volume totaled \$985 billion. California accounted for more than 18% of all transactions (approximately \$181 billion), making it the largest investment market in the nation. California property values are historically well above the national average and rapid growth within the state in recent years pushed prices to record highs prior to the pandemic. Even with Covid-19 price induced weakening, the cost per square foot for all commercial properties has more than doubled since 2010. It stood at nearly \$145 at the end of 2020, according to Real Capital Analytics (RCA), a major data provider for commercial real estate transactions. This figure is more than 40% higher than the national average of \$77 per square foot for the same period. At 4.8%, the average cap rate (net operating earnings divided by the purchase price) for California commercial real estate was 50 basis points lower than the national average in 2020.

### Long-Term Drivers of California Commercial Real Estate:

Large, diversified economy creates a strong demand base for commercial property

Strong presence of immigrants and preeminent global cities attracts significant domestic and foreign investment

Supply constraints throughout the state prevent significant overbuilding, helping maintain income generation and preserve property values over the long-term

Limited inventory and elevated demand across investor classes create significant competition and puts accompanying pressure on pricing

There are five main types of commercial real estate investment properties: multifamily, industrial, office, retail, and hotel, along with sub-types in each group. Each type of property has its own unique characteristics from different demand drivers to underlying cash flow cycles. All major property types—except the hotel sector—are described below to highlight potential investment alternatives.

### 2.2.1 Office Market

California is home to a large and diverse office market. It caters to a large tenant base, ranging from global corporations to small businesses and start-ups. Tenants may be in long-established traditional sectors to rapidly growing technology-based and creative industries. As is the case with all major commercial property types, office properties vary significantly in character and quality but are generally categorized as either urban (located within the designed central

business district in each market) or suburban (located outside of the main central business district.) Rapid expansion, particularly in fast-growing cities where technology jobs and other high-growth value-add industries are concentrated, generated record levels of demand for office space during the pre-pandemic growth cycle. More recently, wide deployment of work from home policies across the corporate sector during the statewide business closures gave rise to potential changes in office use. Few companies are going fully remote, but an increasing number of firms has expressed greater desire to adopt more flexible policies. Some high-profile office users have already announced flexible remote work options that allow employees to work from home—at least for some part of the week—indefinitely. High-cost, large markets facing challenges in retaining employees are leading this charge. There is uncertainty around shifts in the demand for future office space, given the wide range of policies major office tenants are still considering, and it will take time to see the most viable longer-term solutions.

### 2.2.2 Industrial Market

Major industrial property categories include warehouse/distribution, manufacturing, and research & development (R&D). Favorable demographic trends—along with the state's role as a major distribution hub and international trading center—support a vibrant warehouse/distribution sector. Additionally, the ongoing focus on new product design and development across a range of innovative industries creates significant demand for laboratory space, supporting a large R&D property base. Demand has greatly outpaced delivery during the past several years, and availability in most major metropolitan areas is very low. Rapid growth in e-commerce and associated supply chain transformation has fueled unprecedented industrial market expansion in major distribution Southern California hubs while the technology boom is fueling rapid industrial growth in the Bay Area.

### 2.2.3 Retail Market

The retail sector includes a broad range of property types. It encompasses a diverse mix of business in several categories including consumer goods, restaurants, entertainment venues, and wellness facilities. Most national retailers—ranging from luxury brands to big box stores— have multiple locations within California. This reflects the state's substantial population and deep consumer base. Most retail properties fall into the following major categories: regional mall, neighborhood/strip center (small shopping center typically anchored by grocery or other convenience stores), power center (large shopping center typically anchored by one or more big-box stores), and freestanding establishments. When the California economy recovered from the Great Recession, favorable economic and demographic trends bolstered consumer spending and fueled demand for retail space. However, as e-commerce gained popularity—and consumers found it more convenient to purchase many products online—several retailers struggled, leading to an increase in store closures and creating competition for some retail segments. The pandemic accelerated the already strong growth of e-commerce, condensing several years of online sales penetration and pushing a large wave of retailers into insolvency. Looking ahead, although growing rapidly, the influence of e-commerce varies greatly across the

brick-and-mortar retail sector. Retail most resistant to online sales should continue to draw consumers to brick-and-mortar locations and provide superior opportunities within the sector. Segments in this category include experiential and lifestyle retail, such as restaurants and other entertainment-oriented concepts, fitness, and wellness centers, as well as unique, specialty consumer products. This type of retail, on a secular rise prior to the pandemic, suffered significant losses in the face of social-gathering fears and restrictions. Despite the setbacks, longer-term prospects for property sectors associated with these activities are positive because they require physical locations that cannot be replaced by digital technology. Grocery and drugstore-anchored centers are also expected to remain less vulnerable to competition posed by e-commerce, acting as neighborhood hubs with enduring appeal, which satisfy daily necessity-based needs.

### 2.2.4 Apartment Market

Strong demographic trends and high home prices create a large base of renters and historical supply is well behind demand throughout California. With the rapid rise of apartment rents in the pre-pandemic growth cycle, housing affordability has become a major public policy issue. The longer-term outlook for apartment properties is strong given the underlying factors that are expected to maintain a large pool of renters in California. Compared with other property types, the apartment market benefits from very stable demand and supports steady income generation over the longer term. While not immune to the negative effects of an economic downturn, apartments provide a steady source of income. Recessions do not diminish the need for shelter, and therefore tenants tend to cut other expenses before terminating leases. Despite recent pandemic-induced weakness, workforce housing experiences less volatility over the long-term compared to luxury housing, which is fueled by demand from high income residents by choice, as opposed to renters by necessity

### 2.3 Overview of California Agricultural Land Categories

Agricultural land is a specialized category within the real property sector although it plays an important role in the California land marketplace. California is by far the national leader in crop production with 2020 crops sales of \$48.1 billion, a 3.3% decrease from the prior year. The value of crops produced in the U.S. was valued at \$374 billion; California crop sales are more than 13% of total U.S. production. California farming is unique in that over 300 commodities are produced due to the diverse land and climates found within the State. This contrasts with the Midwestern farm belt where commodity crops such as corn, soybeans, and grains dominate. Over a third of the country's vegetables and two-thirds of the country's fruits and nuts are grown in California. The report focuses on the most important land and permanent crops in California, as well as the crops that are the most suitable and sought after by investors and absentee landowners.

Irrigation is the key to the success and diversity of crop production.

According to the 2017 Census of Agriculture (USDA), an abundance of crops was produced on 9,597,000 acres of cropland, of which 7,834,000 acres (81.6%) was categorized as irrigated. In 2019, the average per acre value of irrigated land in California was \$15,100 and the value of non-irrigated land was \$5,400.

#### Long-Term Drivers of California Agriculture:

- Mediterranean climate coupled with water resources
- Expanding global economy supporting an agriculture export industry
- Well-developed transportation infrastructure allowing for the efficient distribution and exporting of production
- Ability to produce unique crops, particularly nuts, tree fruit, and vines
- Large market within California: 13% of U.S. population lives in the state
- Sophisticated, scientific, and experienced farm management

From a macro standpoint, the dramatic reduction in global poverty, particularly in Asia, has been a key factor in expanding California's crop exports, especially with regards to nuts. Higher income individuals seek a diverse, higher quality diet. Improved diet is one of the first luxuries low-income families seek. Food—particularly dairy, meat, fruit, nuts, and vegetables—is one of the first places consumers with expanding income spend money. Dramatic improvement in global personal income is a key reason California agricultural exports have more than doubled in the last decade to \$20.56 billion today. California is not only an important source of food for the U.S. population, but it also provides important crops and foodstuffs to the global population. As personal incomes rise around the globe, so does demand for major California crops.

California cropland falls into six broad land use categories. Specific crops and land use are discussed in future sections, including forest and timberlands.

### 2.3.1 Annual Cropland

Annual crops are categorized as crops that can be rotated and changed annually or more frequently. Market demand often influences what crops are grown. The ability to change crops annually allows farmers to react and plan for market changes and provide a wide range of cropping options. Crop rotation also reduces weed, disease, and pest pressures.

### 2.3.2 Vegetable Cropland

Annual cropland is further subdivided into land particularly useful for producing vegetable crops, as well as strawberries and other specialty crops. Most often, this land is situated along the coast and benefits from the mild climate. Such land is unique and can often be used to

produce 2 or 3 crops per year. Other sections of the report discuss the financial characteristics of vegetable cropland.

### 2.3.3 Permanent Crops and Land

Tree and vine crops are permanent crops that take more than several years to initiate production. They have useful lives of 20 to 30 years, although growers often replace a planting earlier due to the development of new or higher yields varieties. Given the expense to develop permanent plantings, they have a relatively high value, and once committed to a specific crop, growers are reluctant to change. This creates the possibility of market forces leading to over or under production.

Fruit, nut, and vine crops are California's principal permanent crop plantings. Harvested acres of almonds, pistachios, walnuts, and wine grapes increased from 1,359,000 acres in 2002 to 2,527,000 acres in 2017. Almonds represented approximately half of the total at 1,274,000 acres. Attractive financial returns and the ability to mechanize production and harvesting are key drivers of the move to convert annual cropland to permanent crops.

### 2.3.4 Organic Cropland

Land classified as organic is a sub-category of field and permanent cropland. Farms producing organic crops must be certified to meet standards set by the USDA's Agricultural Marketing Service's (AMS) National Organic Program (NOP), and they must be certified compliant by an approved agent of NOP. Conversion to organic farmland requires a three-year transition process for the land to be converted to certified organic farmland. During this period, the landowner may experience a loss in yields. The producer may also encounter problems with pests and fertility as the natural biological systems regenerate, (including re-growth of beneficial insect populations and nitrogen fixation from legumes). Typically, organic crop yield is often lower than the commercial equivalent, but the price received is often higher.

In 2019, out of 5.5 million organic certified acres in the U.S., California was the leader in land utilized for organic production. The USDA listed 3,012 certified organic farms in California utilizing 965,000 acres, although only 438,000 acres were listed as cropland. Presumably, the remainder was used for dairy, poultry, and animal production.

### 2.3.5 Range/Grazing Land

Prior to the Gold Rush, most land in California was utilized as range land for cattle and animal production, if it was used at all. As the population grew and opportunities developed to irrigate land, the best rangeland was converted to irrigated pasture or irrigated cropland. Range and pasture lands still represents over 20 million acres in California, and they are primarily used for animal grazing, recreation, or open space.

Pastureland historically earned very low cash returns, usually 1% to 2%, if that. Over time, many of these landowners converted their very low value per acre parcels into a higher use and a very significant capital gain. This tends to be a long-term investment and is not the primary

objective of the School Land Bank Fund. Furthermore, absentee ownership of grazing lands can present environmental problems, as the lessee's economic focus on maximizing the animal carrying capacity of the space can create short- and long-term ecological damage to the land. Managing and monitoring lessee's use of range and pastureland can be time consuming and easily create management issues between lessees and landowners over sustainable stocking rates.

### 2.3.6 Special Purpose Land

Land with unique climate, soil, exposure, slope, water availability, and other resource characteristics is at a premium. Coastal vineyard land—particularly in Napa and Sonoma counties—falls into this category. For example, land planted and farmed as a prune orchard can become significantly more valuable if switched to wine grape production due to its unique location and characteristics. Meanwhile, prunes can be produced in a variety of agricultural regions within the state.

Date palms in Southern California require specific land. Meanwhile, citrus and avocadoes require a nearly frost-free climate for economic production.

### 2.4 Summary & Recommendations

California agricultural and commercial property have proven to be attractive long-term investments. Investment in commercial real estate by institutional investors is a very mature and developed market while institutional investment seeking diversification through ownership of agricultural land is a more recent trend.

### Appropriate Agricultural Property Categories

California has unique predominantly irrigated agricultural land, increasingly planted to permanent fruit, nut, and vineyard crops. California is the primary supplier of specialty crops such as almonds, pistachios, walnuts, and wine grapes to U.S. consumers. It is also an important supplier to expanding export markets. California's agricultural land produces a wide range of crops and is projected to be an attractive long-term investment.

California irrigated cropland is a relatively new investment category for institutional investors. The two primary categories of agricultural land are annual cropland and land planted to permanent crops, particularly permanent crops where farming operations and harvest are mechanized.

### Appropriate Commercial Property Categories

The large and diverse commercial real estate investment universe within California provides potentially attractive investment opportunities across property sectors. A deep demand base and significant supply constraints bode well for long-term value preservation. However, high prices and limited inventory also create significant competition for commercial property in the state.

To align with the Commission's goals for stable, long-term income generation and a minimal property management role, the focus within each sector should be passive investment options with stable long-term income generation potential. As detailed in subsequent Sections 5 and 6, single-tenant, net lease opportunities in the retail, industrial, and office sectors meet these criteria.

#### **3.0 LAND INVESTMENT CATEGORIES & TREND ANALYSIS**

This section summarizes long-term financial returns nationally, and for key categories of California agricultural and commercial investment. Agricultural land is divided into two primary categories: annual and permanent crops. Commercial real estate is divided into land utilized for several property categories. The term "financial return" is a combination of annual cash income and annual appreciation of the asset, if any. Emphasis is placed on annual income received, although in most cases the primary financial return over the past 15 years on California agricultural cropland occurred through asset appreciation. Statistics are provided indicating historic financial returns for selected cropland over the past 20 to 25 years, as well as trends in per acre agricultural land values.

For planning purposes, it is assumed that investments are held in perpetuity and annual income and growth of that income are the primary financial goal. Other goals and objectives for owning land may relate to broader governmental social and environmental policy.

The annual cost to manage properties purchased on a net lease basis is low. It is similar to the level of management the Commission provides on lands under its control. The primary management cost is the selection and acquisition of new land. Acquisition costs are discussed in Section 5. If required, professional property managers may be hired to selectively monitor properties for lease compliance, collection of rental payments, etc.

#### **ASFMRA and NCREIF Financial Data**

The primary source of historic financial return data for commercial and agricultural property is the National Council of Real Estate investment Fiduciaries (NCREIF). NCREIF is a 35-year-old organization serving the institutional real estate investment community as a non-partisan collector, validator, aggregator and disseminator of commercial real estate performance and benchmarking information. While NCREIF's primary audience is institutional investors in commercial real estate, in 1991 NCREIF commenced collecting information on agricultural land investments. While the type of permanent crop data is limited, data focusing on principal crops in California is of interest to investors for both permanent and annual cropland.

Another source of agricultural land investment and financial return information is the California Chapter of the American Society of Farm Managers and Rural Appraisers (ASFMRA). It is an accredited professional organization of farm managers, land appraisers, and agricultural consultants. ASFMRA annually prepares *Trends in Agricultural Land Lease Values*, an analysis and report on for agricultural land in California and Nevada. Fifteen years of published data on principal agricultural land and crops in California was further analyzed to develop estimates of median income, appreciation, and total return. This is presented in summary tables in Appendix A. ASFMRA data has the added advantage of breaking land returns and appreciation into agricultural sub-regions within California. The historic financial results generated by the two methods differ as the mechanism for generating the data is different. ASFMRA data is derived from the annual information collected in California. It is analyzed by experts—primarily through sale and land appraisals—within the prior year. The data relies on the expertise of professional farm managers and appraisers. ASFMRA cautions that, "data represents a general range of sales and rental for each stated market or region. Specific sales or leases may be present in the markets which are higher or lower than the ranges noted."

NCREIF collects and reports on actual income and annual appraisals of specific properties. It is aggregated to provide financial returns on agricultural land owned by institutional investor members.

ASFMRA and NCREIF data are useful in obtaining insights into actual financial returns over time from specific land classes and crops. However, it must be remembered that data focuses on past results and future trends may have different outcomes.

### 3.1 Agriculture: Annual & Permanent Cropland

The principal use of California agricultural cropland is for annual and permanent crops. In the Midwest grain belt, most actively farmed land is planted to annual crops. In California, a mild Mediterranean climate produces more diverse crops, with permanent crops playing an increasingly important role in the use of irrigated cropland.

### 3.1.1 National vs. California Agricultural Land Returns

### National Data

Nationally, financial returns for agricultural land are cyclical (using NCREIF data). Figure 1 indicates national financial returns peaking in 2013 along with commodity prices. Income only returns have been decreasing to 1 to 2% per year return over the past several years. Over the past 6 years, the annual total return from predominantly Midwest annual cropland declined from 10% to 5%.



Figure 1. NCREIF Farmland Index



Income return is the annual net cash flow received from the asset investment and the Appreciation Return is the annual increase in value of the asset from the prior year.

### California Data

In contrast, NCREIF data shows that the short-term income (cash) return on California agricultural land for the past 3 years was 6% to 6.5%, (except for 2020 at 2.9%). It certainly helps that 40% of investment was in permanent cropland. Over the long-term (15 years), the income (cash) return for California permanent cropland was 12.64% while annual cropland was 3.88%. This significant differential return between permanent and annual cropland led many institutional investors and farm operators to focus investments on land planted to permanent crops.


Figure 2. NCREIF Pacific West Farmland Crop Index



### 3.1.2 Annual Cropland

Irrigated cropland can be utilized for a wide range of annual crops such as processing tomatoes, forage and alfalfa, lettuce, rice, cotton, carrots, specialty leafy green and strawberry crops. A trend in California is the conversion of good quality annual cropland with reliable irrigation to permanent crops. This accelerated over the past 20 years through increased institutional investment.



Figure 3. NCREIF Annual Cropland Pacific West Index

Source: NCREIF

### 3.1.3 Permanent Cropland

California's unique climate and soils are the basis for vine crop grapes and four tree crops: almonds, walnuts, pistachios, and oranges. Taken together, the five permanent crops utilize 2,566,000 acres annually and produce over \$15 billion worth of crops with an average gross income of approximately \$6,000 per acre. Not only is the financial return from permanent crops attractive versus annual crops, but these crops can be mechanized, particularly nut crops, thereby reducing labor, one of the primary cost factors in crop production.

The downside of permanent crops is that the useful life ranges between 20 to 30 years. Growers may be reluctant—even facing a period of poor market conditions—to remove a crop and replace it with another annual or permanent crop. Still, it is not uncommon for a property to have blocks of trees or vines of different ages so that an entire property does not have to be renewed at one time. Permanent crops are often renewed with new and improved varieties when market prices are low. Similarly, if crop prices are higher than average, an older tree planting may be retained past is most useful life. Table 10. Pacific West (CA Region) Permanent Crop 15 Year Average, (2005 to 2020)

Permanent Cropland	Income %	Appreciation %	Total Return %
Average Return	14.31%	5.92%	17.41%
Standard Deviation	6.23%	7.97%	14.22%

Source: NCREIF

Table 11. Pacific West (CA Region) Annual Crop 15 Year Average, (2005 to 2020)

Annual Cropland	Income %	Appreciation %	Total Return %
Average Return	3.81%	7.03%	11.03%
Standard Deviation	0.48%	8.79%	9/19%

Source: NCREIF

Figure 4. NCREIF Permanent Cropland Pacific West Index



The standard deviation of the 15-year data is a good measure of the year-over-year fluctuations for crop income. Permanent crops (see Figure 2) have a much higher fluctuation in income due primarily to climate and market variables. Remembering that this data is obtained from institutional investors, and often the investor is farming the land or participating in incentive payments based on crop income versus annual cropland is primarily leased on a fixed price per acre on a long-term basis, thereby dramatically reducing year-to-year income variability.

## 3.1.4 Other Crops

Rice and olives have above average investment potential. Both crops are primarily farmed in the Sacramento Valley and historically have had a good access to low cost and reliable irrigation water. Olive orchards have the added advantage of being relatively drought tolerant.

Rice is a well-established and important California crop, produced primarily on 443,000 acres in the Sacramento Valley. It is a highly mechanized crop with both a domestic and export market. Rice farmland is frequently used in conjunction with land for wildlife habitat, recreation, and other purposes. According to ASFMRA data, the annual income return from rice land is 5.3% over the past 15 years with a modest standard deviation of 1.39%

The production of olives for olive oil is relatively new, although growing olives for table production has a long history in California. Missionaries in coastal California were the first to plant olives. According to the California Olive Oil Council, over 43,000 acres in California are planted. The crop is processed into extra virgin olive oil.

In June 2019, one of the leading publicly listed agricultural REITs, Gladstone Land, announced a \$9.2 million investment in a net 482-acre (\$19,087/acre) olive orchard and land. In turn, it became a net leaseback to the prior owner, a leading processor/marketer of premium olive oil.

# 3.1.5 Forest and Timberland

California plays a relatively minor role in the harvest of U.S. timberlands. The following information is primarily presented on a national, or in some cases a Pacific Northwest, basis. However, School Lands include timberlands. A decision to invest in timberland is beyond the scope of this report. A separate and more detailed examination of existing timberlands within the School Lands portfolio is recommended to determine how forest land can be enhanced or expanded and serve as a source of income.

Timberland ownership generates returns by growing and selling logs to the forest products industry. Logs are two key industrial materials: pulp and lumber. Pulp is used to make paper, packaging material and a host of other products based on cellulose fiber. It is produced from (1) small diameter logs, (2) logs from species of trees lacking structural integrity, and (3) residual portions cut off round logs in the production of dimensional lumber. Logs of greater diameter and structural integrity are sawn into dimensional lumber for construction.

Long-term investments in timber and timberland ownership provide:

- Both current income and appreciation
- Risk-adjusted total returns competitive with returns from other major asset classes
- Low volatility
- Hedge against inflation

Timber investment and ownership has significant risks, particularly as climate change issues are more fully understood and wildfire and insect damage risks have increased. A public institution's, such as the State Lands Commission's, role is also often viewed by the public as protecting forested land and not harvesting forested property.

#### **Timber Return History**

NCREIF has tracked institutional timber returns for over 25 years. Its data is from institutional owners and based on actual income and appraisals. Total U.S. returns from 2005 to 2020 were 6.2% (2.9% income and 3.2% appreciation). The annual variability of total returns expressed as standard deviation was 6.8%.

California is most like the Pacific Northwest in terms of species grown and log characteristics. However, the quality of timber and lack of timber industry infrastructure are limiting factors in the California timber sector. The financial return from California timber is likely to be lower than the return in the Pacific Northwest.

NCREIF Timber Index (2005-2020)	Geo Mean Total Return	Total Return Standard Deviation	Geo Mean Income Returns	Geo Mean Appreciation Returns
National U.S.	6.2%	6.8%	2.9% (0.9% SD)	3.2% (6.0% SD)
Pacific Northwest	7.0%	9.2%	3.2% (1.8% SD)	3.8% (7.3% SD)

Table 12. NCREIF Timber Index

SD = Standard Deviation

Biological growth is the most significant driver of returns on timber investment. It has two main components: volume growth and value growth. Volume growth refers to the annual growth rate of a forest measured in cubic meters (m<sup>3</sup>)/hectare/year or mean annual increment (MAI). Standing timber is often referred to as stumpage because the trees are still on the stump. If the trees remain on the stump, they continue to increase in size (volume growth) and value (value growth.) Growth is highly variable across regions due to differences in soil condition and climate. Seedling genetics and forest management practices can increase the growth rate and

quality of logs. Depending on the species, the highest growth rates are achieved in the Southern U.S. and South America.

Value growth refers to the increase in value that certain species of timber achieve as they progress from small-diameter trees to large-diameter trees. As the tree grows larger, it not only generates more absolute timber product, but the value of that product increases as well. Larger diameter timber is often worth more because it is milled into higher value, structurally robust, dimensional lumber and panels. As a result, the price ultimately realized for timber is a function of both volume (how much timber there is) and value (how much the timber is worth.)

### 3.2 Commercial Real Estate

### 3.2.1 California Financial Returns

This section examines historical investment returns for the California commercial real estate market. Property types covered include office, industrial retail, and apartments.

Income returns for commercial real estate are typically very stable, with the bulk of volatility coming from capital appreciation. Consequently, commercial real estate investment can provide investors with steady long-term revenue streams. Within California, total returns have averaged approximately 10% since 2014, with more than half of this return coming from income generation.

Commercial property's long-term contractual nature and underlying income stream contribute to stable earnings. This accounts for the bulk of commercial real estate investment's overall return. The greater reliance on income, in turn, results in a more stable valuation over time compared with other asset classes. Historical return data shows that income returns hold steady over the long-term, with upside and downside volatility coming from the appreciation component of total returns. Returns from changes in real estate capital values typically have cyclical fluctuations. Income yield in California averaged 5.3% annually between 2004 and 2019, with a standard deviation (a measure of volatility of these returns) of less than 1%. Capital appreciation returns averaged 4.7%, with a standard deviation above 10% for the same period. It should be noted that 2019 was chosen as the ending period for this section's NCREIF returns data series to give a better picture of long-term trends, which were skewed by the pandemic-induced volatility of 2020 and 2021 data.



Figure 5. California NCREIF NPI Annual Returns

Total returns for California commercial real estate consistently outperform the national average. The 9.7% annual average total return between 2004 and 2019 was 90 basis points above the 8.8% national average for the same period. The industrial sector posted the highest total return, followed by the office, retail, and apartment sectors. Looking at a longer time between 1978 and 2019, which captures more economic cycles, shows a similar trend. Total returns for California commercial real estate averaged 10.4% annually during this period, compared with the 9.0% national rate (see Table 13).

Area of Focus	Total Return	Standard Deviation	Income Return	Standard Deviation	Appreciation Return	Standard Deviation
NATIONAL	8.8%	9.4%	5.5%	0.8%	3.1%	8.8%
Apartment	8.3%	9.7%	5.0%	0.5%	3.2%	9.2%
Office	8.5%	10.3%	5.5%	0.9%	2.9%	9.7%
Industrial	10.5%	9.7%	6.0%	0.8%	4.3%	9.4%
Retail	8.7%	8.2%	5.8%	0.8%	2.8%	7.7%
CALIFORNIA	9.7%	10.6%	5.3%	0.8%	4.7%	10.1%
Apartment	9.1%	10.4%	4.7%	0.5%	4.3%	9.9%
Office	10.0%	11.8%	5.3%	0.9%	4.6%	11.2%
Industrial	12.2%	11.6%	5.5%	0.9%	6.4%	11.2%
Retail	9.2%	8.1%	5.5%	0.8%	3.6%	7.6%

Table 13. Return Trends Analysis: Average Annual Return (2004 to 2019)

Source: NCREIF

### 3.2.2 Summary and Recommendations

Long-term commercial investments are likely to provide higher income returns, coupled with more stability, than annual agricultural cropland leases. However, permanent crops based on incentive driven leases may provide a higher return than commercial property.

### Agricultural Land

The long-term ownership and short to medium term leasing of annual cropland is a common practice, although ownership of permanent crops most often requires a long-term lease coupled with farm management based on a fixed price lease plus performance bonuses. The income returns on California annual cropland averaged 3.81% over the past 15 years versus 14.3% for permanent cropland.

#### Forest Land

Long-term investment in timberlands is a well-established investment category, particularly in the Pacific Northwest, although there is little financial return data on California forested lands. Fifteen-year income returns for timber investment in the Northwest have averaged 3.2%,

higher than the national average. Further research is recommended on the performance, management, financial return, and risk associated with California forestry investments.

#### **Commercial Land**

A wide range of office, industrial, and retail categories are likely to offer opportunities for longterm investment, historically offering stable income returns averaging in the high-4% to mid-5% range, depending on property sector. While historical data is very limited, income returns for recommended triple net lease structure on single-tenant facilities are somewhat lower than the overall market, but this provides even more stability in cash flows on an ongoing basis. (This is discussed further in Section 5.)

Additional statistics, trends, and graphs on agricultural property can be found in Appendix A.

### 4.0 ECONOMIC, ENVIRONMENTAL & SOCIAL ISSUES

This section focuses on land acquisition and ownership issues beyond normal financial goals. Many non-economic issues are incorporated into the cross-cutting term "sustainability." Primary non-financial issues are often referred to as "triple bottom line" and fall under the categories of economic, environmental, and social factors. Many of these factors are incorporated into the land selection matrix.

Recent trends within the professional investment community have shown an emphasis on environmental, social, and governance issues, often referred to as ESG issues. The term "governance" primarily relates to the responsibility of corporate boards in the establishment of policy related to ethics, transparency, and responsibility to stakeholders. Economic, environmental, and social issues impact land investment decisions, particularly for public or governmental entities, such as the State Lands Commission, that directly or indirectly reflect current governmental, environmental, and social norms.

#### Sustainability

Sustainability of the land resource, as well as the water resource for irrigation, has become an important issue in land selection and management. The measurement of sustainability, as is the case with ESG, is not fully defined, although the goal of maintaining soil depth, organic matter, carbon content, and overall fertility are important components in the long-term sustainability of agricultural land. It is reported that, in England, the Crown lands are placed on long-term leases with farm operators, and one lease element is the measurement of soil quality at the beginning of the lease versus the end of the lease. The lessee is penalized if there is a decrease in soil quality. Several measures of soil quality, such as soil pH and percent organic matter, coupled with an agreement on lab procedure for conducting sampling and testing may be used.

Agriculture sustainability standards are being developed by various groups. One of the leading providers is Leading Harvest. Although a relatively new organization, their membership includes over 2 million acres of farmland. A system of 13 variables provides the context for a review of sustainable agriculture practices. Third parties are used to audit and verify that sustainability principles are employed.

Leading Harvest's primary categories of sustainability principals include:

- Sustainable Agriculture
- Soil Heath and Conservation
- Protection of Water Resources
- Protection of Crops
- Energy Use, Air Quality, and Climate Change

- Waste and Material Management
- Conservation of Biodiversity
- Protection of Special Sites
- Local Communities
- Employees and Farm Labor
- Legal and Regulatory Compliance
- Management Review and Continuation
- Tenant Operated Operations

Commercial real estate investment has significant sustainability implications. The momentum behind sustainable investment in this sector is gaining steam. Investors are increasingly focusing on their assets' environmental and social impacts. They are adopting goals to simultaneously achieve financial returns coupled with measured positive environmental and social impacts. Successful projects can provide benefits to users of the assets and the surrounding environment.

In addition to meeting targeted risk-adjusted financial investment returns, various strategies exist within the commercial property industry to achieve sustainability goals. They include:

Green strategies applying environmentally sustainable principles to projects. The goal is to deliver a real, physical asset that outperforms building standards for energy efficiency, water efficiency, and reduced waste. Green real estate investing achieves positive environmental impacts.

Worker health and productivity strategies encompassing innovations in space design and the resulting impact of how people interact. Health design trends include integrating amenities and features into building designs such as access to daylight, quality of lighting, acoustics, ventilation, and thermal comfort. Studies have shown that design choices of this nature can have a positive effect on cognition and productivity, boosting social return on investment.

Housing affordability strategies concentrating on enhancing affordability by providing housing to lower- and middle-income segments of the population. Affordable housing investing achieves positive social impact. The subject of affordable housing in California is discussed in Appendix F.

Sustainable community strategies concentrating on designing and building real estate assets that serve as a foundation for neighborhood growth. The goal is to deliver projects that are designed with the local community's input, provide central congregation areas for public interactivity, and serve certain essential needs of the neighborhood. Sustainable community investing can achieve both environmental and social impact.

Transportation-oriented strategies promoting environment and social impact through transitoriented development which promotes use of public transport and walkability.

### 4.1 Economic

The financial return remains the most evaluated and significant investment guidepost for institutional investment. Other factors such as uniqueness and volatility are taken into consideration.

## 4.1.1 Uniqueness

While commercial real estate has a long history as a viable and desirable investment for income and appreciation, only recently in the last 10 to 15 years has the professional investment community considered agricultural land a defined investment class. NCREIF data indicates that, as a class, members' land investment today totals \$10 billion versus \$827 million in 2003. California makes up \$4.1 billion of the total. These figures only include seven agriculture investment groups that make up the NCREIF agriculture index, so the total institutional investment in agricultural land is much higher. Higher financial returns of agricultural land in California, particularly from permanent crops, accelerated interest from institutional investors.

# 4.1.2 Volatility

Real property as an investment class is often sought after because it lacks the volatility of more traditional stock and bond investments.

# Agriculture

For agricultural land, volatility is most often a function of short- and long-term commodity price cycles, primarily due to global supply and demand, as well as climatic fluctuations. Standard deviation is an indication of volatility. It is provided in many financial charts for both income and land appreciation. Income variability, particularly as indicated by NCREIF income data for national farmland, has a standard deviation of 2.1%. This measure is expected to be lower for land leased to third parties.

Income from permanent crops often reflects more volatility than annual cropland due to crop variability, supply, and demand cycles. NCREIF data indicates a standard deviation for permanent crops ranging from 2% to 11%. The high number (11) is pistachio orchards because pistachios are often alternate bearing. Similarly, olives often have alternated crops and a standard deviation of 9%. Changes in market demand and prices impact year-to-year income and standard deviation.

## Commercial

Volatility is largely a function of economic activity for commercial investment. While industry drivers vary by property type, performance is generally tied to national, regional, and local economic health. Cyclical trends related to business cycle fluctuations have a direct impact on businesses and consumers. This then influences space usage decisions. Owing largely to the greater volatility of California's high-growth economic drivers that fuel property market performance, return fluctuations are greater than the national average. However, as highlighted in Section 2, this variability stems primarily from price appreciation, specifically the run-up in prices during heated economic periods. Bolstered by generally strong predictable rent streams, income yield between 1979 and 2019 had a standard deviation of less than 1%. Comparatively, the standard deviation for capital appreciation returns during the same period was 10.5%.

## 4.2 Environmental

## 4.2.1 Water Rights & Water Availability

Fresh water is a fundamental requirement for California's population and the irrigation of nine million acres of agricultural cropland. Due to the importance of water available for irrigation, considerable detail is provided regarding the legalities of water for agricultural use and the state of the situation today. A table indicating the relative importance and imputed value of water for major California crops is in Appendix B. For higher value crops, the ratio of the value of the crop to the cost of water is high. This includes fruits, nuts, and truck farming (vegetables.) For lower value crops, revenue generated by the application of irrigation water may sometimes be lower than the cost of water. This applies to crops such as irrigated pasture, rice, corn, and alfalfa. Low crop-to-water value ratio is an indication of competitive weakness of a specific crop in relation to other crop options.

Because of the importance of water to agriculture, additional detail on water allocation and use is provided in this section. As California's population and agricultural land expanded, additional water has been required for human, agricultural, and environmental uses. Today, the availability and cost of water for a specific agricultural land parcel may be more important than the underlying quality of the land. Hence, the cost and availability of water is priced into the value of the land. For example, the 2019 ASFMRA *Trends* report comments:

In Fresno County, sale prices of farmland with only well water fell by a mean of 20% in the past year, and by 37% overall since the value peak in 2015. In Madera, the mean decrease was 6% in the past year, and 41% overall since the value peak in 2015. In contrast, sale prices of farmland with surface water in eastern Fresno County increased by a mean of 8% *in the past year, and overall showed a mean 5% strengthening since 2015.* 

The impact of groundwater regulation is already affecting land prices. For many areas within the state, the result of regulating groundwater is not fully known or understood.

California's Mediterranean climate provides both rain and snowfall. The snowfall in the Sierra mountains is particularly important as a warehouse of water. It is utilized as the mountain snowpack slowly melts during the summer months and replenishes reservoir water which is released into rivers and streams long after the rain and snow have stopped. The availability of water has been reduced and become critical during drought cycles characteristic of California's climate.

Farming in the San Joaquin Valley is made possible by a world-famous network of reservoirs, aqueducts, canals, tunnels, and pipelines that shunt water up and down the state. It is managed by a patchwork of districts and government agencies that allocate water rights and contracts. There are approximately two hundred water districts within the system that manage local water distribution and allocate water.

#### Water Rights

It is important to understand the basis of water rights that accompany a land parcel. The interpretation of water rights is often complex. Legal specialists are often consulted to evaluate water rights for each farmland parcel based on its location and history of the rights connected to the parcel. There are basically two types of water rights: surface water rights and groundwater rights.

#### **Surface Water Rights**

Riparian water rights are some of the oldest water rights in California. Early farmers started irrigated farming where water was available. This was often some of best soil for farming. As the name implies, an owner of land adjacent to a natural watercourse can take and reasonably use water. Riparian rights have priority over other types of surface rights unless the others predate a riparian claim. When water supply is short, all users must equitably share available supplies. Priority of riparian rights is determined by the first in line and type of use. Upstream users have priority over downstream users. Downstream human sustenance and household uses for water are superior to upstream uses for irrigation, watering large herds of livestock, power generation, or other commercial uses.

Appropriative water rights are the rights to divert and use previously unappropriated water. When there is more surface water available than is claimed by riparian water rights, others can divert and use the additional water. These rights do not depend on being contiguous to a waterway and are based on use instead. They must be used beneficially, or they are lost after five years of non-use. Furthermore, the priority of these rights is determined by the first in time, so older uses are a higher priority than newer uses. Before December 19, 1914, appropriative rights could be obtained by diversion and beneficial use alone. After that date, California statutory law required that a permit be obtained from the State Water Resources Control Board (SWRCB). SWRCB determines if unappropriated water exists.

Prescriptive water rights arise when the adverse use of water is knowingly allowed for a period five years or more. The water must be used beneficially and reasonably. Prescriptive rights cannot be asserted against rights of the state, public agencies, or public utilities.

Spring water rights accrue to landowners who have spring waters arise on their land if those waters do not naturally leave the property. If such water enters a watercourse further downstream, the landowner has the right to develop the spring to produce greater flow, thus providing the landowner a right to the increased flow.

The two principal government projects storing and distributing irrigation water are:

The Federal Central Valley Project of California (CVP) stores and distributes about 20% of California's developed water. The includes eighteen dams and reservoirs, and canals for water transport 450 miles in length.

The California State Water Project (SWP) was funded to divert water from the Feather River (north of Sacramento) to the Central Valley, South Bay Area, and Southern California. SWP also developed the 444-mile-long California Aqueduct. The pumps in the Delta—along with a portion of the canal and an off-stream storage reservoir—support efficient distribution of federal water from Northern California to the rich farmlands west of San Joaquin Valley. Today, only 30% of SWP water is used for irrigation. The remainder is used for domestic and industrial purposes.

In addition, the Colorado River provides water to 35 million people and four million acres of farmland. The headwaters begin northwest of Denver. Delivery contracts are in perpetuity, but different contracts have different priority levels. A matrix of rules and water allocation govern the use of Colorado River water. California is allocated the first 4.4-million-acre feet of Lower Basin Colorado River water. Priority goes first to the Palo Verde Irrigation District, then to the Imperial Irrigation District, and then to others.

### **Groundwater Rights**

Groundwater from underground aquafers was not regulated until 2014 with the passage of the Sustainable Groundwater Management Act (SGMA). Because groundwater was unregulated for many years, it led to a situation where water from aquifers is extracted faster than it is replenished. This is known as over drafting. The Public Policy Institute of California estimates that over drafted water represents about 15% of the net water use in the San Joaquin Valley. A significant share of over drafted water occurs in the Tulare Lake basin in the lower San Joaquin Valley (Figure 9). This area is also heavily dependent on water deliveries from other parts of the

state. The Institute went on to say that up to 535,000 acres of farmland in the San Joaquin Valley can be fallowed, or abandoned, due to a lack of groundwater. It reported that, "farmers who can afford to pay sky-high water prices would do just that. Most valley farmers are willing to pay between \$300 and \$500 per acre-foot of water." However, at the height of the last drought, some Kern County growers paid more than double, including Harris Ranch, a cattle operation that bid \$1,350 per acre-foot. William Bourdeau, Executive Vice President of Harris Farms, a Coalinga-based company that owns the ranch, could not say if he'd be willing to pay that much again. In 2021, surplus irrigation water was priced as high as \$2,000 per acre-foot, presumably just to keep a permanent crop alive. Figure 5 indicates the severity of groundwater depletion over time since 1925, particularly in the Tulare Lake basin.



Figure 6. Groundwater Pumping is Depleting Reserves in the Central Valley

Source: Public Policy Institute of California

The impact of SGMA is gradual. California has identified 515 groundwater basins, 127 of which are designated high or medium priority. This accounts for 96% of the state's groundwater withdrawals. Meanwhile, 266 Groundwater Sustainability Agencies (GSAs) organized for 131 basins statewide (basins can have more than one GSA). GSAs deemed critically over drafted prepared plans to achieve sustainability as of January 31, 2020, while others set a deadline of January 31, 2023.

SGMA staff in a seminar on June 19, 2019, summarized sustainability as avoidance of six significant and unreasonable impacts:

- 1) Declining groundwater tables
- 2) Reduction of groundwater storage

- 3) Saltwater intrusion
- 4) Degradation of water quality
- 5) Land subsidence
- 6) Adverse effects on connected surface waters

When purchasing land within the 127 high or medium priority basins, it is important to understand SGMA's impact and the parcel's plan to achieve sustainability.

Groundwater basins can store large volumes of additional water, and there are opportunities to replenish ovedrafted basins. Groundwater basins can be "recharged" by spreading water on fields to percolate through the soil or the use of water injection wells. Additionally, opportunities exist to select agricultural land where groundwater replenishment can be an important tool to provide adequate water for irrigation or urban use.

In agriculture property selection, it is important to evaluate surface water supply—particularly during drought periods—and determine the status of groundwater regulations within the underlying aquifer. The ability to have two sources of irrigation water is an optimum condition. Irrigation water supply has become one of the most, if not the most, important factors when considering property acquisition in California.

### 4.2.2 Climate Change

### Agriculture

Long-term climatic changes are being felt in California agriculture, and they are projected to slowly continue. The biggest impact of climate change may be overall lower elevation precipitation and a reduced Sierra snowpack, which in turn affects the annual available supply of irrigation water, as well as increased extremes in year-over-year precipitation.

The impact of climate change may be positive on some crops, as is the case in California's Central Valley. Crops—such as almonds—are benefiting from an improved climatic pattern in the southern part of the Sacramento Valley.

Studies indicate that there is less winter Tule fog in the central valley than 20 years ago, thereby reducing the needed winter chill for almond and other deciduous fruit trees. This is due to a combination of climate change and the short-term benefit of improved air quality i.e., less particulate matter.

Wine grape growers in the southern part of the Napa Valley project that there are slightly cooler temperatures in the southern part of the valley, due to higher coastal temperatures. This creates an increased cooling effect of fog generated by the overall higher air temperatures.

Research continues to evaluate the impact of warmer temperatures and increased climatic extremes. Very long-term effects may include increased use of controlled environment

greenhouses in the production of crops, thereby improving the efficiency of water use and labor, thus gaining the opportunity of year-round crop production.

#### Commercial

Commercial real estate buildings have a significant impact on the environment. According to the U.S. Department of Energy, commercial buildings account for 18.7% of energy usage, 40% of carbon dioxide emissions, and 88% of potable water consumption. Such environmental impacts entail significant costs, in the form of greenhouse gases, water usage, and air pollutants, among others.

A variety of factors fuel increased market expectations for environment goals. One major driving factor is the signing of the Paris Climate Accord, which calls for a *"transition to a nearzero carbon global economy in this century."* Because buildings account for such a significant portion of global carbon dioxide emissions, real estate is at the center of these policy activities, with many initiatives expected to target buildings and urban developments.

The past several years have seen rapid growth in sustainability and corporate responsibility reporting of commercial real estate investments. For example, the Global Real Estate Sustainability Benchmark (GRESB) now includes data from 66,000 assets representing over \$2.8 trillion in asset value. The United Nations Principles of Responsible Investment (UNPRI) annual survey represents over \$59 trillion in assets. The Carbon Disclosure Project (CDP), the National Association of Real Estate Investment Trusts (NAREIT), the U.S. Green Building Council (USGBC), and many other organizations collect, analyze, and aggregate data on sustainability and corporate responsibility issues in commercial real estate. While the body of research in this arena is growing, it must also be noted that significant barriers still exist. Real estate is intrinsically illiquid, limiting sample sizes of transactions and comparable properties. Financial data is also closely held and considered proprietary and confidential. Additionally, the growing number of connected devices in buildings generated a huge increase in digital data related to commercial real estate usage. With ever-increasing amounts of data available, making sense of it poses a challenge. Industry players have to determine which information is most useful to investment and management decisions.

### 4.2.3 Agricultural Chemicals

There is a variety of federal and state regulations governing the use of agricultural chemicals that farm managers must follow. The regulations have generally reduced the quantity and type of chemicals utilized.

The expansion of organic farming is a direct consumer reaction to the use of agricultural chemicals in crop production. A variety of studies have indicated that organic farmed fruit and vegetables benefit soil fertility, water holding capacity, and even nutritional content, versus traditional farmed crops. In general, there is less use of agricultural chemicals in farming today

than 10 or 15 years ago, in part due to organic farming, but more importantly the incorporation of disease and insect prevention in seed genetics and seed coatings.

### 4.2.2 Government Regulations and Subsidies

Changes in government policies and regulations continue to have a significant impact on the farming industry. The issue of farm subsidies and market distortions caused by government payments is a constant debate. To date, government payments and increases in government payments have been the norm. The use of a commercial property is primarily governed by county or municipal governments. However, incentive payments and programs are initiated at the federal and state levels.

The federal government can have a major influence on net farm income through various farm programs. However, the influence in California is limited. An important impact on farmland values is the support and magnitude of government payments. Government payments can be in the form of direct payments or loan guarantees. Because government payments contribute to farm income, they indirectly support farmland values. As government payments become a component of expected future returns, they are incorporated into land values through capitalization.

Government payments have a significant impact in the Midwest where corn and soybeans are the primary crops. However, in California, the crops receiving government payments are limited primarily to cotton, rice, and wheat.

### 4.3 Social

# 4.3.1 Affordability & Jobs Housing Balance

Commercial real estate investment decisions have notable social implications and impact property occupants as well as surrounding communities. One of most prominent issues is how land use choices affect the ability of residents and businesses to sustain their livelihoods.

In California, the byproducts of skyrocketing growth have dampened regional quality of life factors, displaced residents, and raising concerns about the ability of local companies to retain workforce talent. Despite solid gains in income, housing costs continue to outpace earnings for most renters. A major contributor to this trend is the focus on luxury residential and commercial development in the most expensive, urban job centers during the current growth cycle. Regional concerns associated with these risks need to be addressed to sustain expansion and promote more equitable growth. Investments in workforce housing can boost affordability and stem displacement related to neighborhood gentrification. Additionally, commercial real estate investment in underserved, secondary job centers within the state—including rural communities—can provide vital infrastructure, boosting economic opportunity and quality of life for residents. For example, investment in mixed-use projects with reasonable expectations for achieving competitive financial returns can create more inclusive communities for residents through better access to jobs, transit, goods, and services.

# 4.3.2 Agriculture Labor & Housing

Next to water, farm labor is a very important factor in California's agricultural operations. While farm labor is the concern of the farm operator, landowners need to be aware of the issues and crops that are sensitive to the labor supply.

The concentration of fruit, nut, wine grape, vegetable, mushrooms, and greenhouse crops in California create a strong demand for labor, particularly at harvest time. Agricultural labor is characterized by an almost entirely foreign born (mostly Hispanic) workforce. These laborers are in the country both legally and illegally, and their annual income is low compared to most other occupations. Low earnings are the result of low hourly wages and less than full-time employment. California agriculture employs an estimated 420,000 workers out of 1,300,000 nationally.

## Federal H-2A Agriculture Worker Program

The federal government's H-2A program dates to 1952 and allows U.S. farm employers to request certification from the U.S. Department of Labor to admit foreign workers *"temporally to the United States to perform agricultural labor...of a temporary or seasonal nature."* 

The farmer must provide free housing and ensure there is no adverse effect on U.S. worker's wages. Additionally, they have to pay guest workers at least 20% above the state's minimum wage.

Dr. Philip Martin, a Professor Emeritus of Agricultural and Resource Economics at the University of California, Davis, reports that "California farm employers have traditionally shunned the H-2A program, arguing that the state's wide array of labor-intensive crops and complex farm labor market were ill-suited for a guest worker program requiring advance planning and employer-provided housing." The complexity the H-2A program led employers to hire labor intermediaries. These companies specialize in providing agricultural labor. In California, Fresh Harvest is the largest labor intermediary. It places up to 5,000 workers annually in the Salinas berry and vegetable fields and also provides housing. Fresh Harvest benefits from having operations in Mexico where it can select appropriate and experienced workers for the H-2A program. There are several other labor contractors operating in California who utilize local labor.

Labor costs have continued to rise in the production and harvest of California crops. The labor supply was reduced—particularly the past two years—due to expanded immigration enforcement. Additionally, California agriculture increasingly turned to mechanization. As previously discussed, high value crops such as almonds, pistachios, and walnuts, as well as wine grapes, rice, and olives for olive oil, are expanding and benefit from mechanized harvest. Crops such as strawberries and vegetables are prime targets for the application of mechanical harvest technology.

### Worker Housing

The housing of permanent and seasonal agriculture labor is a continuing problem. Some agricultural areas such as Napa County have taken the lead in developing agricultural worker housing. The Napa County wine industry knows the importance of skilled workers who return each year. The Napa County Housing Authority created three publicly owned and operated farmworker housing centers. Each center houses 60 workers and is open 9 to 11 months per year. Vineyard owners pay an annual assessment of \$10 per acre to help house and feed migrant workers. Workers are charged \$10 per day for housing, as these workers are not in the H-2A program. This model may be needed in other parts of California, but Napa County is the only county so far supporting a specifically designed housing program for agricultural workers.

The long-term issue facing the agricultural economy and local government is housing lower paid agricultural workers. They often live in small towns in the Central Valley where utilities and infrastructure are limited, leading to sub-standard homes and support services, particularly household water and sanitary services.

### 4.4 Summary & Recommendations

This section looks beyond the bottom line in making investment decisions. The long-term sustainability of investments in land and improvements are increasingly emphasized by the investment community in response to consumer and governmental concerns. For agricultural land, the emphasis has not only been on conserving land for agricultural use, but also on long-term goals of maintaining the quality and depth of topsoil, coupled with having sufficient irrigation water and labor for crop production.

Although financial returns remain the most evaluated and significant investment guidepost for institutional investors, increasingly economic, environmental, and social issues in agricultural and commercial property play a role in the decision process.

#### Agriculture

For agricultural land, volatility is most often a function of short- and long-term commodity price cycles, primarily due to global supply and demand, and climatic fluctuations.

The availability and reliability of irrigation water is critical to agricultural land. The role of historical surface water rights—coupled with the new groundwater regulations known as the SGMA—are important issues when considering an investment.

Climate change is a major long-term issue that directly impacts the variability and quantity of surface water availability related to precipitation patterns and the annual Sierra snowfall. Other, more indirect effects relate to long-term micro climatic variations or changes that impact (1) the traditional quality enhancing factors in wine grapes and (2) the annual variation in the amount of winter chill received by nut and tree fruits, thereby affecting future crop yields. A variety of continuing research programs will provide more specific information about the results of global warming.

Crop production is also subject to a wide range of federal and local regulations on water use and runoff, as well as regulation on the use of agricultural chemicals. The federal government also is an important source of financial incentives and subsidies for major commodity crops although California is not a significant producer of crops receiving subsidies.

The availability and compensation of agriculture labor—coupled with the need for affordable worker housing—is an important long-term issue for California agriculture, although it is predominantly an issue faced by the farm manager. Automation and mechanization are the primary solution.

#### Commercial

For commercial investment, volatility is largely a function of economic activity. While industry drivers vary by property type, performance is generally tied to national, regional, and local economic health.

Cyclical trends related to business cycle fluctuations have a direct impact on businesses and consumers which influence their space usage decisions. Total returns for California commercial real estate are more volatile than the national average, but income returns exhibit very low volatility, boding well for investors focused on long-term, stable revenue generation strategies.

Commercial buildings have significant environmental and social impacts, and these should be considered when making investment decisions. Energy and water use, emissions, traffic congestion, jobs-housing balance, and gentrification, among other issues, should be factored in when considering investment alternatives.

# 5.0 CAPITAL REQUIREMENTS BY CATEGORY

It is difficult to provide specific guidelines on the size and value of properties, as the market presents a wide range of investment options in both agricultural and commercial lands. It is noted that once the value of the property exceeds \$10 to 15 million, competition for that property among buyers increases, as it attracts competitive bids from institutional investors managing large pools of money.

## 5.1 Entry Capital Requirements

It is important to consider the size of the Commission's investment pool. It is recommended that the Commission seek a diversified portfolio that includes more than one category of agricultural and commercial land. For example, a total portfolio of real property valued at \$70 million could include 7 properties valued at \$10 million each or 10 valued at \$7 million each.

It is assumed that a property valued at less than \$5 million would be uneconomic in terms of the acquisition cost as well as the Commission's associated management costs. It would be reasonable to expect the acquisition cost to reach \$125,000 to \$150,000— or 2.5% to 3.0%—on a \$5 million property. This is due to negotiation, evaluation, legal, environmental site assessment, appraisal fees, permits, and staff time. The acquisition fee for a \$10 million property would incur similar costs.

Private investment groups often utilize low-cost mortgage debt, if available, as leverage to increase the overall financial return for both cash return and appreciation. It is assumed the Commission is an all-cash buyer.

# 5.1.1 Agricultural Land Capital Requirements

A significant number of agricultural properties in the \$1.5 to \$3.0 million size range are available. They are typically for sale by farm operators and landowners. As discussed, the cost to acquire and manage such properties presents a problem, particularly to institutional investors. Opportunities exist in the agriculture land market to merge two or three 100 to 200-acre properties together into a more efficient production unit. Opportunities may also evolve—particularly for agricultural lands with limited water—to find new technologies, conservation practices, or percolation of surface water into groundwater reservoirs during winter and spring water flows. This could serve as a means to re-storing the groundwater basin, thus increasing a parcel's productivity and value.

# 5.1.2 Commercial Property Land Capital Requirements

The recommended capital target range for commercial land investment is \$5 to \$15 million. The single-tenant commercial property sector is large and diverse, providing a variety of options that meet the proposed capital targets. This is the primary acquisition opportunity outlined in the next section.

The varied investment pool for single-tenant properties includes institutional investors, private equity investment funds, REITs, and individual investors (a large portion of which are IRS 1031 buyers seeking assets to meet tax-deferred exchange requirements). It is noted that an investment in commercial property is most often an investment in the land and the building. The average transaction size for single-tenant properties in California between 2018 and 2020 was approximately \$19 million, according to Real Capital Analytics. However, a very wide range exists within the segment, including a large pool of properties within the target range of \$5 to \$15 million. This capital requirement range is selected for several reasons. First, deals in this range are large enough to justify the fixed costs and other resource allocation associated with individual property acquisition. Second, this threshold captures a sizable pool of desirable properties with corporate-backed tenants. Deals smaller than \$5 million tend to be in less desirable locations and unattractive to high credit tenants who provide the most stable revenue streams. A review of sales activity from the last few years reveals very few transactions for buildings with well-known tenants under \$5 million, other than retail bank buildings. Third, this threshold is small enough to preserve capital for multiple property purchases to create a diversified portfolio. Larger deals could potentially account for an outsized share of available capital and hinder the ability to acquire additional assets to broaden the scope of geography and the type of assets. Finally, deals in this range face limited competition from institutional and foreign capital sources, which generally focus on larger deals.

Recent sales data illustrate the breadth of opportunities over a broad geographic scope. While there are substantial barriers for entry to trophy assets in prime markets occupied by high-profile corporations, several opportunities exist for investors in search of smaller deals which fit the Commission's requirements. Pre-pandemic transactions in 2019 ranged from the \$1.1 billion sale of Park Tower at Transbay in San Francisco (occupied by Meta Platforms, formerly known as Facebook) – to the \$221 million sale of YouTube's headquarters in San Bruno – to the \$20 million sale of a Sears department store in Buena Park – to the \$13.5 million sale of a Safeway grocery store in Truckee – to the \$8.4 million sale of a FedEx industrial facility in Santa Fe Springs. In 2020, 322 properties in the \$5 to \$15 million range—valued at \$2.9 billion—traded hands. This was very close to annual levels during the previous two years. Smaller cities outside of the main urban centers offer the best value and least competition from commercial real estate investors, although opportunities also exist in primary cities. While it is assumed that the Commission plans to hold investments in perpetuity, significant deal activity also highlights a sizable investment pool, pointing to liquidity in the market for future sale if necessary.

Sellers fall into three broad categories: (1) single-tenant property owners, (2) corporate users who own their buildings and wish to sell real estate to free up capital and then lease it back from an investor, and (3) developer/owners who construct purpose-built facilities for lease to a specific tenant. All three provide potential investment opportunities. However, purchasing existing properties with long in-place leases requires the least commercial real estate expertise and poses less risk than the alternatives.

### 5.2 Primary Acquisition Opportunities: Agricultural Land

The management of agricultural property is particularly important. Property acquisition on a net leaseback basis is an efficient way to minimize operating and management risks. A joint venture with an established farm operator/owner is another alternative.

The most attractive investment opportunities are likely to be situations where a farm operator, processed food, or related company is interested in selling a land asset on a sale and leaseback basis, whether it be agricultural land or commercial land. The transaction becomes a means of raising capital to deploy in the processing, marketing, or acquisition of additional assets. The leaseback becomes the mechanism whereby the seller retains use of the property as a source of raw material or an important part for expanding the business. The contractual mechanism is a triple net lease negotiated between the owner of the property and the buyer. The lessee typically pays the real estate taxes, water costs, and irrigation system maintenance. Normal operating costs and working capital needs are borne by the lessee.

Another alternative, particularly with agricultural land, is generational changes whereby a portion of family members owning a land parcel seek liquidity. These family members may no longer wish to be involved in farming. The remaining family members stay in farming and leaseback the land asset.

The lease term is often for the useful life of the asset, which for permanent crops may be 15 to 25 years. For example, in the case of an almond orchard, a lease for a young, 5-year-old orchard might be 18 years. It is important to consider that there may be residual value of the productive asset reverting to the landowner at the end of the lease—in this case the almond trees and irrigation infrastructure—which becomes a bonus for the property owner.

The productivity of agricultural land in California is increasingly tied to the availability and cost of irrigation water. Other factors include location, soil type, and topography. In the final analysis, land price is tied to net income from crops produced on the land. The net result is a wide per acre price range within each land category. Similarly, the annual price of the lease a farm operators can offer is tied to their decision on the crop to be produced. Norms for land values and leases are established within each growing region in California and can be verified by land appraisers. Increasingly, the cost of irrigation water is priced into the land value; low-cost reliable water increases the price of land.

### 5.2.1 Irrigated Crop Land

Irrigated land for annual crops is the most common land owned by a farm operator or investor. The common lease term is 3 to 5 years for a short-term lease or 20 to 25 years for a long-term lease, particularly for a permanent crop. The most common annual crops are tomatoes, alfalfa, rice, cotton, and specialty crops ranging from sweet potatoes to sweet corn. Well-established seed companies are also in the market for leasing annual cropland.

Target properties have per acre values in the \$6,500 to \$25,000 per acre range, most often influenced by location and the availability, cost, and reliability of irrigation water. The impact of new groundwater regulations and restrictions is having a negative effect on the value of lands in historically overdrafted groundwater basins (see Section 4).

# 5.2.2 Annual Irrigated Vegetable Cropland

According to ASFMRA, vegetable cropland is predominantly specialized coastal lands for strawberry and vegetables that offer a long growing season, multiple crops, and moderate temperatures. This land is infrequently for sale. It is often leased for long periods of time by farm operators or fruit and vegetable processing and marketing companies that need land in different locations to ensure a 12-month growing season. For example, fresh vegetable companies in the Salinas Valley utilize land in the Imperial Valley and southern Arizona for winter crops.

Properties targeted for strawberries planted in the Oxnard, Santa Maria, and Salinas Valley regions are in short supply. Thus, they are valued at over \$40,000 to \$60,000 per acre. Land for specialty vegetable crops can range from \$30,000 to \$50,000 per acre. There is limited turnover of lands in this category.

# 5.2.3 Permanent Crop Irrigated Land

Permanent cropland can be purchased with the aim of planting an orchard or permanent crop. Alternatively, it can be purchased with the permanent crop in place. Some institutional investors purchase annual cropland and develop it. More commonly, an institutional investor seeks a young orchard (3 to 5 years old) that is starting to produce and creating a cash flow. Permanent crop orchards may also be purchased with the idea of pulling out a declining orchard and replanting a new orchard, although this requires farm management capability and results in no positive cash flow for 4 to 5 years.

Targeted agricultural land in this category is dependent on the age and useful life of the permanent crop, production history, water availability, and water reliability. The price for land with trees/vines can range from \$18,000 to \$40,000 per acre. The price is at the low end of the range if water availability is an issue. Wine grape vineyards in Sonoma and Napa Counties often dramatically exceed these values.

# 5.2.4 Irrigated Cropland in the Path of Urban Growth

Special situations exist around urban areas, particularly in the San Joaquin and Sacramento Valleys where agricultural land is in the path of projected urban growth. A premium price is usually assigned to such land—and while a modest financial return may be realized—it becomes speculative as to when such land will be converted to commercial or residential land.

Agricultural land in the path of urban growth may be purchased by conservation or other groups to preserve agricultural use. The Commission may be approached by sellers with a conservation goal.

#### 5.2.5 Range Land

As previously discussed, range land encompasses a wide variety of land types, locations, and usage. It spans animal grazing lands to lands for recreation use. Range land historically has had a low financial return and can present potential management issues between owner and lessee. (See Section 2.)

### 5.3 Primary Acquisition Opportunities: Commercial Property

Net leases of land and buildings with strong credit tenants provide steady revenue streams while minimizing investment and management risk, potentially providing an attractive alternative that meets the Commission's goals. Among property types, retail properties are most abundant within the \$5 to \$15 million capital requirement range, but the office and industrial sectors also pose interesting opportunities going forward.

The single-tenant investment strategy recommended in this report commonly use triple net lease structures (commonly referred to as single-tenant net leases.) They pass all operating expenses through to tenants and typically have long-term, pre-determined rent schedules. These lease characteristics shift operational responsibilities to building occupants, providing a shield from rising costs and creating a predictable revenue stream for property owners with minimal management responsibilities. In contrast, under a full-service gross lease structure, the landlord charges a fixed rent which covers expenses, taking responsibility for building operation. The tenant pays a fixed rental payment regardless of whether the operating costs are higher or lower than the estimate produced during original lease negotiations. Net leases are generally executed for a minimum of 10 to 15 years, but 20- or 25-year leases are not uncommon. Comparatively, typical gross lease terms on commercial real estate properties are generally between 3 and 10 years. Because net leases average more than 15-year terms, landlords seek firms with stable growth and solid business platforms which are typically better protected from economic cycles. Dealing with just one high credit tenant for a very long period further reduces vacancy rate fluctuations and re-tenanting risk commonly associated with multi-tenant buildings. As such, single-tenant, net lease properties can be one of the most reliable forms of income producing commercial real estate ownership. Illustrating this stability (see Figure 10), during the 2008 to 2009 Great Recession, average rent growth for net leased properties remained positive throughout the downturn, while average rents fell among nearly all other major commercial property types.

Figure 7. U.S. Average Change in Rent



#### Retail

Among commercial real estate properties, single-tenanted net lease buildings are most ubiquitous in the retail sector. They are typically either standalone big box properties occupied by national chains like Target and Walmart, or pad sites within larger shopping centers, most often occupied by banks, fast-casual restaurants, and drug stores. Gyms and auto body shops are other common net lease tenants. Unlike office and industrial tenants, retailers are more tied to specific locations to draw customers and compete with other chains. As such, they most often sign long-term leases to capture and lock in specific sites within neighborhoods for extended periods. Established, regional and national retailers are typically the most creditworthy. With the acceleration of internet cannibalization and accompanying closure of high-profile chains, however, internet-resistant tenants—such as grocery stores and experiential, entertainment/lifestyle-based retailers—are expected to provide the best opportunities for this strategy. Consumers—especially younger shoppers coming of age in the mobile internet era—are seeking memorable experiences over traditional shopping that cannot be replaced with e-commerce activity.

Despite continued store closures and the erosion of product-based retail by online competition, storefronts are repopulating with a variety of experiential, service-oriented retail concepts that

are attracting consumers. These include street retail trending towards specialty stores, more innovative food concepts and health and wellness-oriented formats. Brick and mortar locations for grocery stores and drug stores are also expected to remain dominant, even as online delivery services gain popularity. Concerns exist surrounding the price pressures of Amazon's ever-increasing dominance.

The most successful competitors are quickly adapting by diversifying the way consumers shop. They are shifting from an in-store only approach to omni-channel strategies such as adopting smaller formats and providing in-store or curbside pickup for online orders. Additionally, unlike many other retail categories more susceptible to online competition, grocery and drugstorerelated e-commerce tends to be more complimentary than substitutive. For example, Amazon/Whole Foods and Walmart, which have the largest market share in the grocery delivery segment, as well as the dominant grocery shopping apps—such as Instacart—still rely on professional shoppers to make purchases in physical stores for delivery to consumers. Onsite pharmacists at the major drugstore chains provide advice available only at physical store locations.

Moreover, necessity-based segments such as grocery stores and drug stores also tend to perform well through economic cycles, providing essentials which are necessary regardless of the state of the economy, adding an additional layer of stability. Buildings with Albertsons, Safeway, CVS, and Walgreens (necessity-based) along with 24 Hour Fitness and Starbucks (entertainment/lifestyle based) as tenants all traded hands in 2019 in the designated price range, giving an indication of potentially attractive available deals. Overall, between 2010 and 2020, retail single-tenant transactions in the \$5 to \$15 million range totaled \$9.7 billion in volume in 1,226 sales, accounting for about 41.5% of all single-tenant deals in this price range.

#### Industrial

A significant portion of industrial properties are purpose-built. As such, the industrial sector has a large inventory of properties which are occupied by single-tenants who can provide investors long-term, steady cash flows. In aggregate, industrial single-tenant building sales in the \$5 to \$15 million range totaled \$10.9 billion in 1,249 deals between 2010 and 2020. This accounts for approximately 42% of properties that traded hands in this segment during the time period. However, properties built to tenants' specifications often include complex machinery and technology. The more specialized an industrial property, the harder it becomes to convert for another tenant. Because of the customization they require, purpose-built properties can be difficult to re-lease without significant expenditures, posing some risk and greater management responsibility to re-tenant. Additionally, compared with the retail sector, fewer deals with well known, high credit tenants are available in the \$5 to \$15 million price range within the industrial sector. 2019 transactions with high credit tenants which fit the Commission's capital target range include several FedEx distributions centers. Going forward, the increasing number of national retailers expanding their e-commerce presence represents a growing base of potential tenants for this strategy within the sector. Smaller in-fill sites for next-day and sameday delivery—which require less capital than larger distribution centers and pose less competition from institutional investors—could be especially promising. Cold storage facilities for major grocery and food services companies—which are growing in demand as in-home food delivery gains market share—could also represent interesting investment opportunities.

### Office

Office properties are the smallest segment of the single-tenant market. While the total value of all deals in a given time period is significantly higher than in the industrial and retail sectors, sales volume is fueled by very large transactions in a smaller number of deals. In 2019, the largest single-tenant institutional investors and private equity funds all invested in office properties largely concentrated in prime buildings leased to major technology and finance companies. Because office net lease deals tend to be larger in size, fewer opportunities exist in the Commission's targeted range, posing more competition and greater barriers to entry. In total, office single-tenant transactions in the \$5 to \$15 million range accounted for just 17% of all single-tenant transactions since 2010, in 475 deals valued at \$4.2 billion. Medical office buildings and properties tenanted by other healthcare-related businesses are more resilient to business cycle fluctuations because of their necessity-based nature and are among the more promising segments for smaller deals within the office sector. Buildings occupied by government agencies and education-related tenants could also provide good stability and pose interesting investment options. However, there is uncertainty about remote work models and the future of office use. Recent deals with healthcare-related tenants include several medical and dental clinics. Government and education-related buildings that traded hands in 2019 include those occupied by the U.S. Bureau of Land Management in El Dorado Hills, the Alameda County Courthouse in Pleasanton, and California Southern University in Irvine.

Long-term ground net leases are another "minimal" management alternative which can provide stable cash flows. However, deal size tends to be larger and opportunities in the Commission's current maximum 49-year lease term range are limited.

Ground net leases (GNL's) behave very similarly to net leases from a financial perspective, with potentially even less management exposure. This allows an owner to earn reliable cash flows over decades without selling the land. This is a familiar structure to the State Lands Commission as most of its surface leases are structured in this way, with the lessee owning all the improvements. The GNL structure generally separates ownership of the land from ownership of improvements constructed on land. Rent for a net lease covers use of the building and the tenant is responsible for all expenses on that location. However, rent for a GNL covers use of the land itself that the tenant plans to build a business location on, thereby taking on the responsibilities and expenses of the building owner/developer. At the end of a GNL term—

which often may be extended on one or more occasions by the tenant pursuant to contractual options contained in the lease—the land and any improvements thereon revert to the landlord for no additional consideration. As such, GNL properties often hold considerable, residual value upon reversion at the end of the lease term in addition to stable cash flows resulting from regular lease payments and built-in rent escalators, depending on the property location and quality. GNLs generally range from 30 to 99 years (prior to any tenant extension options, if applicable,) but deals in the 50 to 99-year range are more common.

Because GNL lease terms are very long, the pool of properties with strong credit tenants, and lease terms less than the Commission's current 49-year maximum are limited. GNL's are also typical for high-price, prime real estate, limiting the number of options in the \$5 to \$15 million range. Tenants take on all the costs associated with constructing and maintaining a property—despite not owning of the land—because the location is of strategic or mission-critical importance to them. Consequently, desirable deals tend to garner top dollar, pricing out investors with smaller capital requirements. Retail GNLs for big box stores and fast-food restaurants are most common under the 49-year target. They represent the most realistic investment option for the GNL alternative.

## 5.4 Summary & Recommendations

### Agriculture

Properties in the \$5 to \$15 million price range should be prioritized. Irrigated annual cropland would span about 640 to 1,300-acres according to this criterion. Likewise, land planted to a permanent crop would span roughly 280 to 500 acres. Purchasing land at the bottom of cropping or economic cycles is always desirable. It provides an option to realize a financial return from appreciation and income.

Opportunities also exist to consolidate agricultural land parcels in order to increase farming efficiency.

Properties with permanent crops yield the highest return, although annual income from longterm leases with incentive clauses are likely to fluctuate year to year due to crop size and market prices. Leaseback properties acquired from long-term farming families/corporations or processors/marketers reduce risks and provide reliable and experienced management.

# Commercial

Within the commercial real estate sector, single-tenant net lease properties in the \$5 to \$15 million price range in well-located buildings with strong credit tenants in stable sectors are the recommended investment targets.

This capital range is chosen because deals of this size are (1) large enough to justify resource allocation associated with individual property acquisition, (2) within a reasonable range to target properties with high credit tenants with corporate backing, (3) small enough to preserve

capital for additional investments to create a balanced, diversified portfolio and (4) face limited competition from institutional and foreign capital sources, which generally focus on larger deals.

The single-tenant net lease asset class is recommended because (1) it best meets the Commission's requirements for long-term income stability with minimal management responsibilities, (2) it offers a lower risk alternative to conventional multi-tenant gross lease investment, (3) it consists of a sizable investment pool which meets the Commission's investment criteria, (4) it includes a large number of properties with lease terms less than the 49-year maximum that ground net leases in general do not and (5) carefully chosen, desirable locations—which characterize attractive net lease deals—come with less risk and resource commitment to re-tenant at the end of long lease terms.

Retail properties offer the most opportunities within the target range. Necessity-based segments within this asset class are most desirable, such as grocery stores and pharmacies. They can withstand business cycle fluctuations and are more resistant to Internet cannibalization. Office and industrial properties with credit-worthy tenants in stable sectors with strong long-term prospects—such as healthcare, education, logistics and e-commerce—should also be considered.

Attractive deals with strong credit tenants in the \$5 to \$15 million range are more abundant in smaller markets outside of the major urban centers. Limited supply and heightened competition characterize desirable properties in primary cities, although limited opportunities exist.

## 6.0 BENEFITS & RISK COMPARISON BY CATEGORY

This section contains the benefits and risks associated with agricultural and commercial property.

### 6.1 Performance

The principal measure of performance is long-term financial return plus any targeted environmental or social goals associated with a specific investor. The financial return is often considered the combination of current income plus annual asset appreciation. As previously discussed, the primary focus of this analysis is on the current income return since an investment in School Lands takes on the characteristic of an investment in perpetuity. However, there is always the possibility over time to take advantage of an attractive sale price and reinvestment. Asset appreciation is important as it reflects a growth in income over time.

The principal measure of current income from a property is known as the cap rate. This is the rate of return on the investment and is calculated as the ratio between the net operating income (before loan amortization) and the original capital cost of the asset. It may also be calculated, particularly when acquiring property, based on projected income. A summary of cap rates for different property categories is included.

## 6.1.1 Agricultural Land

Irrigated cropland for annual crops and land planted to permanent crops are the primary agricultural investment opportunities, although the financial returns are distinctly different.

### Irrigated Cropland

Ownership of cropland and leasing it on short- or long-term leases is a common practice. The current cap rate expected by the owner is paraphrased from the recent ASFMRA report *Trends in Agricultural Land & Lease Values*. It reports that in 2019, "Historical rates have trended from 4.5 to 5.5%, however, current rates range from 3.0 to 4.0%." The trend to lower rates is reflective of a period of low interest rates coupled with investors purchasing good quality cropland previously available for lease and converting it to permanent crop plantings. Currently most of the cropland is farmer owned and operated. There is limited cropland available for lease, and what is available is of lower quality or has some limitation. Several agriculture investment groups indicated they are no longer interested in purchasing cropland, as it does not meet their financial threshold. The land price is too high in relation to its ability to generate an acceptable lease income.

### Permanent Cropland

Land for permanent crops can be purchased or leased to operators based on ownership of the land and the lessee becomes responsible for paying for the improvements i.e., trees or vines, internal irrigation equipment, etc. The other approach is ownership of both the land and improvements coupled with a farm manager/operator to manage the property. In this situation it is common for the landowner to provide a long-term lease (18 to 25 years) with a fixed base rent plus participation in net crop income. The amount of participation in future income is subject to negotiation.

Land ownership without participation in the crop would likely have a cap rate between 6% to 7%. Land ownership coupled with improved orchard or vineyard would be 9% to 14%. However, as indicated previously, annual lease income varies with variations in crop yields and market forces. For example, a \$25,000 per acre almond orchard could have a base rent of \$1,000 per acre, plus enough share of crop income that it would (hopefully) meet the target cap rate of 9% to 14%. Financing the annual farm operating expenses is also subject to negotiation.

### 6.1.2 Commercial Property

Yields for single-tenant investment are in the 5% range and well-chosen properties should meet the Commission's investment criteria for stable, long-term income generation. However, high values signal a need for extra caution to ensure that pricing reflects future revenue generating potential.

As commercial property prices in California skyrocketed during the pre-pandemic growth cycle, cap rates compressed. The average cap rate for single-tenant properties trading hands in 2019 was in the mid-5% range, compared with a pre-recession low in the mid-6% range in 2007. By geography, cap rates range from the high-4% range in primary, coastal markets to the mid-6% range in smaller, secondary markets. While cap rates rose somewhat in the office and retail market in response to pandemic-induced weakening—they remained in the high-5% range into 2021—they were still low by historical standards. Conversely, the industrial cap rate fell to the low-5% range, fueled by the recent e-commerce boom. Additionally, while the retail investment market remains tepid, prices for office and industrial properties are growing at a fast rate again in 2021. Reflecting the growing popularity of longer-term, stable investments—such as net lease properties in uncertain times—price growth for single-tenant assets is outpacing growth in the overall market.

Considering the significant historical supply constraints in California—which limit the inventory of desirable commercial property in general—growing competition for net lease properties is helping to push up prices and maintain low cap rates. However, cap rates for single-tenant properties are in line with the overall commercial property market. Given the more stable income stream compared with multi-tenant gross lease investment and the very long investment horizon, investment performance should be comparatively favorable from a risk minimization perspective. Consequently, because cap rates for single-tenant net lease properties are fueled by income generation rather than short-term capital appreciation, yields for well-chosen properties should meet the Commission's investment criteria for steady, long-term annual cash flow. It should be kept in mind, however, that while it is assumed that land will be held in perpetuity, high pricing, especially in the office and industrial markets, magnifies the need for careful due diligence to ensure that in-place lease terms and rent schedules justify acquisition prices at low cap rates.

#### 6.2 Risk Analysis

The two primary risks in the ownership of real estate are the acquisition and operational risks.

The acquisition risk involves an examination of the many short- and long-term variables that impact the property.

The operational risk relates to year-over-year income variation. Commercial and agricultural property leased on a fixed net long-term lease has minimal operational risk. In the case of agricultural property leased on a fixed rent plus a performance bonus, the lease income is subject to fluctuations in crop size and market forces. A performance bonus is often a component of a long-term net lease. It allows the landowner to participate in gross crop income which is above average due to higher crop prices or higher than average yields i.e., above average management skill and performance.

### 6.2.1 Agriculture Land Acquisition Risk

For agriculture, the principal method of risk reduction is crop and geographical diversification to mitigate risk associated with variable climate and market fluctuations. A variety of resource constraints discussed below are important considerations in agriculture land selection.

Geographic and property type diversification reduce risks associated with economic, demographic, and environmental shifts relating to specific locales or asset classes. Natural disasters such as earthquakes or wildfires, for example, could wipe out an entire portfolio of investments if they were all concentrated in an affected area. Federal policies with a direct negative impact on trade activity could create significant vulnerabilities for a portfolio of agricultural crops, or of industrial properties in port cities. Risk can further be reduced by land investments diversified between agricultural and commercial land use.

Primary risk factors or considerations in land acquisition include:

**Financial Performance**: Financial return is usually the most important consideration in property acquisition by far. The financial assumption is based on past performance and assumptions about the future. Appropriate cap rates are discussed in Section 5.

The income variability from year to year is measured by standard deviation. A standard deviation of 1 to 2 is considered very good, a standard deviation of 3 is average, and above 4 is considered negative.

**Location/Climate**: Location and climate are particularly important variables related to crop yield and quality, particularly for wine grapes, citrus, strawberries, and vegetables. Risk can be

reduced by seeking the optimum location for specific crops. Finding optimal land for specific annual and permanent crops is usually gained by research or sometimes trial and error. It was previously noted that today's climate in the lower Sacramento Valley improved almond production versus the climatic patterns 70 to 80 years ago. This is presumably due to milder weather, particularly during bloom.

**Soil**: Soils are generally classified by the USDA-NCSS (U.S. Department of Agriculture, National Cooperative Soil Survey) into seven capability classes. Many soil surveys go back to the early 1900's while others have been updated and are available for specific land parcels.

- Class 1 and 2 soils are best and have minimal defects. Class 3 and 4 soils can often be corrected, and Class 5 and 6 may have crop restrictions, thin topsoil, or defects.
- Soil quality is also evaluated by depth, texture, water infiltration rate, water holding capacity, and compatibility with the crop.
- Soil with organic matter below 1.0% is considered negative, 1.5% to 3.0% is average, and 3.0% to 4.5% is considered positive.

**Crop Yield**: Historic 5-year crop yields over average are positive while yields below regional average are negative.

**Water**: Land with riparian water rights—coupled with both supplies of surface (district) and groundwater—is best. Land with a history of restricted water due to drought or poor-quality water garners a negative rating.

**Irrigation System**: Drip irrigation is positive. Sprinkler irrigation is neutral. Flood irrigation is often a negative.

**Market Prospects**: A trend of maintaining or increasing crop prices over 5 to 7 years is positive, while flat or decreasing prices is negative. A long-term or forward contract indicating price and quantity is positive.

**Management**: A management team with 20 plus years of experience on, or near, the property/crop mix is positive. Management agreeable to an incentive payment system is positive. Management depth is also important.

**Infrastructure**: Land that is near a paved road with easy access to agricultural support services—such as farm machinery, harvesting and processing facilities—is positive. Land with a history of crops in adjoining or nearby properties is considered a good indication of success.

Other risk factors include:

**Disease:** Indication of serious crop disease threat, either nearby or regionally, is a negative.

**Government Regulations and Subsidies:** Crops subject to government regulation or subsidy payments are considered a negative, as rules and regulations can change from year to year.
**Drainage:** Good drainage is important for maintaining soil quality and healthy plant growth. Drainage water leaving a property is a negative, as federal and state regulations are restricting these situations. Environmental laws that influence the target property are a negative. Naturally occurring events—such as frost risk, flooding, wind, and hail—are undesirable factors.

**Labor:** Ability to mechanize a crop is important for the sustainability of a specific crop, particularly a permanent crop. Labor intensive crops are at risk for both increasing wages and limited availability of labor.

## 6.2.2 Commercial Property Acquisition Risk

Several factors are presented to evaluate the benefits and risks for acquiring commercial real estate. They include indicators which impact the entire sector, as well as factors which are more important for single-tenant net lease investment.

## **Financial Performance and Volatility**

Financial performance is the key factor for evaluating the benefits and risks associated with investment in a particular asset. As highlighted in Section 6 (the agricultural land section of the risk analysis), the acquisition cap rate and the standard deviation of returns are the main variables used to measure financial performance. Time remaining on the lease and provisions for guaranteed rental increases should also be determined to ensure they are reflected in pricing.

## **Economic Health**

A major determinant of future commercial real estate market performance is the state of the economy in which the investment is located. Local, regional, and national trends may negatively affect space demands, risking deteriorating rent growth and property values. Metropolitan area GDP growth, job growth, and income metrics are common measures used to determine local economic health. Additionally, measures for the cost of living and doing business in an area can help determine risks associated with prospects for attracting workforce talent and business expansion necessary for future growth. The single-tenant net lease structure largely shields an investment from economic fluctuations. However, larger structural shifts which impact local economies permanently, or for long periods of time, could create risks for re-tenanting properties when leases expire. The recommended focus on tenants in stable sectors with strong long-term growth prospects is intended to mitigate economic risks.

## Tenant Credit

Tenant credit is a major risk factor which should be evaluated for net lease investment. It is the key determinant to ensuring a guaranteed, long-term revenue stream. Single-tenant properties are either 0% or 100% occupied. Well-known, high credit tenants with strong track records pose the least risk. Rental payments should be guaranteed by a major corporation as opposed to a

subsidiary or franchisee. Company credit ratings are the main indicator used to assess balance sheet health.

#### Location

Building location is the main determinant of re-leasing potential for net lease buildings. Even if an investment is purchased with a strong in-place lease, it expires at some point and needs to be renewed or re-tenanted. Retail locations rely on customer foot traffic while industrial tenants seek strategic access to distribution networks and proximity to targeted population centers. Office tenants engaging in long-term leases are in general seeking sites desirable to employees and customers and may opt for multi-tenant alternatives if a building does not provide locational advantages.

#### **Supply Constraints**

Commercial real estate investments in markets with both physical and regulatory building limits hold better value over time. In general, California is a very supply-constrained market and risks of overbuilding are low. However, risk levels vary and barriers to development should be evaluated because variation still exists in the amount of available developable land among cities across the state.

#### Social and Environmental Impacts

The social and environmental impacts of commercial real estate on local communities (outlined in Section 4), pose benefits and risks, depending on property characteristics. For example, a transit-oriented investment in an urban center could create environmental benefits by alleviating traffic congestion. Meanwhile, an office project that transformed a neighborhood could lead to gentrification, posing a negative social impact for lower-income residents. In general, environmental, and social factors are more challenging to quantify and rely largely on qualitative measures for evaluation.

#### **Unanticipated Events**

Major unanticipated events are of course unpredictable but pose investment risk if they result in loss of property or economic instability. Natural disasters are the most prominent example in this category. Government action associated with shifting political sentiment directly impacting commercial real estate investment can create potential challenges for future revenue generation as well. This may include legislation on the federal, state, or local levels. Portfolio diversification is the key mechanism for mitigating this type of risk.

## 6.3 Summary & Recommendations

Short- or long-term net leases with established operators or tenants is the principal method for investors or absentee owners to maximize financial performance and minimize risk.

## Agriculture

California's unique climate and soils provides a wide range of crops and land use. California agriculture is most competitive in the production of irrigated permanent crops. This segment has been steadily growing as water and operating costs have increased. Institutional investors and farm operators have gradually moved to more profitable permanent crops that offer the opportunity for cap rates above 9%.

Institutional investors have obtained net leases with high credit farm operators or processors. Alternatively, they have accepted management risk and established their own farm management unit.

The primary acquisition risks are associated with land/soil, crop selection, water availability, and water reliability. Crop selection risks—particularly for permanent crops—are closely tied to future market prospects and can be minimized with contractual marketing relationships. The leasing of cropland has minimal operational risks, although management is an important factor in long-term land leases for permanent crops.

## Commercial

Benefits and risks for commercial real estate are highlighted to provide a framework for comparing alternate investments given the goal of maximizing financial, environmental, and social returns. They include indicators that affect the entire sector as well as factors that are more specifically important for single-tenant net lease investment. Because of the minimal management role for single-tenant net lease properties, risks are mainly on the acquisition side. Operational risks are more limited.

Financial performance is the key factor for evaluating the benefits and risks associated with investment in a particular asset. The acquisition cap rate and the standard deviation of returns are the main variables used to measure financial performance. Time remaining on the lease and provisions for guaranteed rental increases should also be determined to ensure they are reflected in pricing.

Major risk factors for general commercial real estate investment include the following: (1) local economic conditions and larger business cycle fluctuations, which can positively or negatively impact demand for space, (2) supply constraints in a given market, which determine risks for overbuilding, (3) unanticipated events such as natural disasters and government action, which could have an out-sized impact on a particular geography, property category, or the commercial real estate market more broadly, and (4) social and environmental impacts associated with broad property sectors (i.e., energy usage in office buildings versus retail buildings, etc.).

Major risk factors for single-tenant net lease investments specifically include the following: (1) tenant credit, which is the key determinant to ensuring a solid revenue stream, (2) location, which is the key determinant of re-leasing potential, and (3) any property/location-specific social and environmental impacts (i.e., the positive impact of a specific grocery store

investment in an underserved community, the negative impact of a franchise retail tenant on local small businesses, etc.).

#### 7.0 AGRICULTURE VS. COMMERCIAL PROPERTY INVESTMENT

The categories recommended in this report for agricultural and commercial investment have distinct characteristics as well as important similarities that highlight the benefits and risks associated with different investment opportunities. As described in Section 5 (Primary Acquisition Opportunities), major agricultural property categories are irrigated land used primarily, or exclusively, for annual crops as well as land used for row and permanent crops. The major commercial property categories are office, industrial and retail single-tenant net lease properties and ground net lease properties. Two comparison matrices are presented to provide an overview of how well each category (agricultural and commercial) fits with the Commission's goals. While final investment decisions are ultimately property-specific, a summary comparison of major characteristics by category provides an initial vetting tool for targeting investment types and placing potential opportunities in a broader context.

Ownership of agricultural property is an investment in a combination of unique natural resources of climate, land, and water, coupled with growing food crops. Commercial property is most often a combination of ownership of land and a building or structure on the land. The value of such property is closely tied to market forces and the growth and performance of the economy or a specialized segment of the economy.

In general, the size of the California economy provides a large and wide range of commercial property investments. Third-party or absentee investment in agricultural land is a recent trend. They are increasingly focused on land planted to permanent crops or a combination ownership of crop and land planted to permanent crops. In the cases of both agricultural and commercial property, there is keen competition by investors for prime real estate. The availability of large agricultural land parcels is particularly limited as most agricultural land is owned by farm operators and often handed down from one generation to the next. The distinct characteristics of agricultural and commercial sectors, as well as recommended investment sub-categories, require two matrices in order to cover the differences between the sectors.

## 7.1 Property Categories & Comparison

To assist in understanding the different categories of property investment, the following agriculture property comparison matrix and commercial property comparison matrix summarize the financial targets and primary differences.

Economics	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Yield	Cap Rate from NCREIF Data	Annual Cash Return Above 2% and Appreciation at or Above Inflation	2% to 4%	5% to 7%	8% to 12%	Minimal
Volatility	Standard Deviation	Stable Revenue Generation Through Economic Cycles	Low	Low	Medium	High
Total Investment Pool in Designated Capital Range	Variable	Stable Investment Pool in \$5 To \$15 Million Range	High	Limited	Limited	Medium
Credit Tenant Pool in Designated Capital Range	Establish Farm Owner / Managers and Professional Managers	Minimum 10 Years' Experience	High	High	High	Low
Lease Terms	Average Lease Term	Long-Term with 45-Year Maximum	5 to 10 Years	20 to 25 Years	20 to 30 Years	Unknown
Management Intensity	Qualitative Score Based on Lease Terms	Minimal Management Role	Low	Low	Medium	Medium

# Table 14. Investment Comparison: Agricultural Land Category - Economic

## Table 15. Investment Comparison: Agricultural Land Category - Environment

Environment	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Climate	Adaptability of Crop	Minimal Impact from Climate Change	Property Specific	Property Specific	Property Specific	Property Specific

Table 16. Investment Comparison: Agricultural Land Category - Soil

Soil	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Soil	Soil Quality	Sustainable, Class 1 or 2 Soils Preferred	Property Specific	Property Specific	Property Specific	Property Specific
Water	Availability and Quality	Sustainable in Periods of Drought	Property Specific	Property Specific	Property Specific	Property Specific
Hazards	Historical Records of Hazards	Minimize Risk	Property Specific	Property Specific	Property Specific	Property Specific

# Table 17. Investment Comparison: Agricultural Land Category - Social

Social	Measurement Metric	Commission Criteria / Goals	Ground-Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Farm Worker Availability	Agriculture Extension Service Estimate	Preference for Mechanized Crops	Not a Concern	Not a Concern	Consideration	Not a Concern
Farm Worker Housing	Agriculture Extension Service Estimate	Local Availability	County Specific	County Specific	County Specific	Not a Concern

## Table 18. Investment Comparison: Commercial Categories - Economic

Economics	Measurement Metric	Commission Criteria / Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
Yield	Cap Rate from Real Capital Analytics (RCA): 2020 to First Half 2021	Annual Cash Return Above 2% and Appreciation at or Above Inflation	High-5%	Low-5%	High-5%	Specific Data Unavailable, but Less Than 5%
Volatility	NCREIF Income Return Standard Deviation 2004 to 2019	Stable Revenue Generation Through Economic Cycles	0.8%	0.9%	0.9%	Specific Data Unavailable, but Less Than 5%
Total Investment Pool in Designated Capital Range	RCA Deal Volume (2010 to 2020)	Sizable Investment Pool in \$5 to \$15 Million Range with Limited Competition from	\$9.7 Billion in 1,226 Deals	\$10.9 Billion in 1,249 Deals	\$4.2 Billion in 475 Deals	Less Than \$6 Billion

Economics	Measurement Metric	Commission Criteria / Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
		Institutional Investors				
High Credit Tenant Pool in Designated Capital Range	Qualitative Based on RCA Database for \$5 to \$15 Million Historical Transactions	Sizable Investment Pool in \$5 to \$15 Million Range with Desirable, Low- Risk Tenants	Large	Medium	Medium	Small
Lease Terms	Avg. Lease Term	Long-Term with 49-Year Maximum	10 to 25 Years	10 to 25 Years	10 to 25 Years	50 to 99 Years
Management Intensity	Qualitative Score Based on Operational Obligations Related to Lease Structure	Minimize Management Role	Low	Low	Low	Very Low

 Table 19. Investment Comparison: Commercial Category - Environmental

Environmental	Measurement Metric	Commission Criteria / Goals	Net Lease
Energy Consumption / CO2 Emissions	Qualitative Score Based on LEED Certification and Other Environmental Impact Factors	Minimize Carbon Footprint, Promote Sustainable Practices	Property Specific, but major positive impacts can include Public Transit and Walkability, Enhancement, Green Building Practices which promote resource usage efficiencies and Worker Health. Negative impacts can include Traffic congestion, Production-Related Emissions, Inefficient Energy Usage.

## Table 20. Investment Comparison: Commercial Category - Social

Social	Measurement	Commission	Single Tenant Net	Single Tenant Net	Single Tenant Net	Ground Net
	Metric	Criteria / Goals	Lease Retail	Lease Industrial	Lease Office	Lease
Jobs Impact	Qualitative	Promote High Quality Job Creation	Tenant Specific, But Section Has Weaker Potential	Tenant Specific, But Sector Has Moderate Potential	Tenant Specific, But Sector Has Stronger Potential	Tenant Specific, But Sector Has Stronger Potential

 Table 21. Investment Comparison: Commercial Category - Social Continued

Social	Measurement Metric	Commission Criteria / Goals	Net Lease
Affordability / Community Impact	Qualitative	Provide and Enhance Benefits to Local Community	Property and Market-Location Specific but major positive impacts can include provides needed goods / services for underserved community. Major negative impacts can include contributing to gentrification by diminishing housing affordability or pricing out local businesses.

#### **8.0 PROPERTY SELECTION TOOLS**

Decision-making tools are presented for (1) agriculture property and (2) commercial property. These tools are used to compare individual properties and aid in investment decisions based on key performance indicators. The tools use a weighted five-point system applied to both objective and subjective measures. In addition to a numerical 1 to 5 score, each variable is also assigned a weight to show the degree of importance. While specific variables for agricultural property and commercial property are different, the tools yield a final score for a given property which can be used to directly compare one agriculture property against another, or similarly, one commercial property against another. The variables and associated weights are intended to capture a combination of key criteria that target the Commission's investment goals to maximize the triple bottom line for economic, environmental, and social returns. Variables are therefore divided into these three major categories. High scores are intended to highlight investments with the strongest investment potential which meet these goals and yield the best outlook for long-term returns. The final tools are presented as Excel workbooks in which qualitative and quantitative data for each variable can be input directly by the Commission to calculate the weighted scores for potential investment targets. These Excelbased deliverables accompany the report.

#### **Property Appraisal**

It should be noted that the overall issue as to whether an investment property is priced appropriately or realistically is primarily answered in the appraisal process. Appraisers, if asked, can supply information useful in completing the property selection tool worksheets. It is noted that appraisers may have access to databases not easily available to the Commission.

#### **Economic Considerations**

The primary measure used to evaluate a property, whether agricultural or commercial, is most often the financial return. This is coupled to a lesser degree with a measure of year-to-year fluctuations (referred to as volatility), in the financial return. In this case, agriculture and commercial property can be measured by the cap rate and volatility through calculation of the standard deviation. Different property types have different long-term returns. Financial return norms change over time due to economic activity, investment demand, interest rates, and other factors.

It should be noted that because of the size, complexity, and history of commercial property investing, it has a variety of databases and economic measurement tools. These are not readily available for agricultural land investing.

A significant difference exists in the financial return between an agriculture property under lease for annual crops (row crops) and a property planted to a permanent orchard or vine crop that may have a viable life of 10 to 25 years. In this case, the return based on a net lease is often a combination of a fixed rent per acre plus an incentive payment based on crop revenue and size of crop i.e., yield. The formula for calculating the incentive payment is set up in the long-term lease and is usually divided between the landowner and the farm manager as a management incentive. In contrast a commercial net lease is usually a fixed amount with accelerator clauses based on an inflation index.

#### Environmental

Agriculture property is a combination of natural resources—such as climate, land, and water used to produce a crop. As indicated, several variables define a specific agricultural property. The quality and sustainability of these resources is key, and this is reflected in sale prices. For commercial property, it is important to consider the environmental impact in terms of carbon footprint and sustainability efforts.

#### Social

Commercial property's social impacts focus on job creation, affordability, and the overall effect on the community. In contrast, much of the social impact of agriculture is focused on the availability of workers, working conditions, housing, and worker safety.

## 8.1 Key Variables & Information Sources

The variables included in the property selection tools are described below. The economic variables for agricultural and commercial property are similar while the important environmental and social factors vary considerably. For further details on sources and variable calculations, please refer to the Appendices. Additional details on agricultural properties planted to specific crop and crop characteristics can also be found in the Appendices.

## 8.1.1 Agricultural Property Selection Tool Variables

- Economic
  - NCREIF Cap Rate
  - o NCREIF Income Return
  - o NCREIF Income Return Volatility
  - Crop Market Growth Projections, Subjective
  - Crop Prospects, Subjective
  - Management, Subjective
- Environmental
  - o Location
    - Close to Same or Similar Productive Crops
    - Climate Fit to Targeted Crop, Subjective
    - Crop Yield Per Acre, State and County Information
    - Government Interference/Control, Federal Gov.
  - o Soil
    - Soil Quality, Appraisal
    - Soil Condition, Appraisal

- Soil Depth, Appraisal
- Soil Texture, Appraisal
- o Water
  - Water Sources, Surface, Well, SGMA Data
  - Affordability, Total Water Cost
  - Reliability History, Historical, Local Irrigation District
  - Irrigation System, Type
- Hazards
  - Hail or Frost Risk, Wind Damage, Flooding or Major Diseases, Historical Records
- Social
  - Farm Worker Availability, Subjective
  - Farm Worker Housing, Subjective

#### ECONOMIC

Economic factors that can change from year to year—such as average cap rate, total return, and income return volatility—are best judged by reviewing data averages provided through specific databases like the NCRIEF database.

**Cap Rate**: The cap rate is calculated as the ratio between net operating income and the original property value or acquisition cost. It is useful in comparing various property investments.

**Total Return**: The total financial return is the combination of the net operating income plus annual asset appreciation. This is often used to compare the impact of property appreciation coupled with income, particularly when considering sale of property, as annual income and appreciation income are taxed differently. When considering long-term investments, it is considered particularly important that appreciation be equal to or exceed the rate of inflation.

**Income Return Volatility**: This is essentially a standard deviation algebraic calculation that measures the amount of deviation in annual return from the mean. It is most often used when 5 or 10 years of historical income data is available and there is a need to determine the reliability of the income steam. In general, the income over a period of years from a fixed lease is even and with a low standard deviation. Meanwhile, income based on the value and amount of crop has significant variation over time.

**Crop Market Growth Projections**: This is a best estimate of the historical growth in the market for the primary crops produced on a property.

**Market Prospects**: This is a best estimate of the depth of a market for a specific crop, based on the number of buyers/processors for a specific crop.

**Management**: Experienced management of agricultural property is particularly important because of the number of variables that a farm property manager must take into consideration. Similarly, environmental factors are a particularly important consideration in property selection.

#### ENVIRONMENTAL

**Location**: Factors such as whether a given crop has a history of success in a particular location given a specific climate and crop yield performance are important. Both federal and state government have specific rules and regulations which govern crop production. In California, the rules mainly pertain to the use of agricultural chemicals, water run-off, etc. Primary crops grown in the Midwest face specific financial support and environmental rules that can dramatically affect the financial return on crops such as corn and soybeans.

**Soil**: Measures that relate to the quality of the soil often dictate the crop yield, although some negative factors can be overcome through careful management.

Water: The availability of water and quality of water are as critical as soil quality.

**Hazards**: Certain crops—such as citrus—are sensitive to specific climatic risks like early frost, late frost, or hail. Certain locations may experience flooding, such as was experienced by walnut orchards in Northern California several years ago.

#### SOCIAL

**Farm Labor**: The role of farm labor, availability, housing, and treatment are particularly important for crops that are predominantly hand harvested. High labor crops are berries, fresh fruit, and vegetables, etc. Crops that can be mechanically harvested—such as nut crops—are less subject to labor availability.

## Property Selection Tool Parameters: Agricultural Investments

Property:

Asking Price:

Size (Acres):

Market:

Property Type:

Crop:

Tenant:

Table 22. Property Selection Tool Parameters: Agricultural Investments

Characteristic	Quality Parameters					
characteristic	Poor	Good	Excellent			
Economic						
Cap Rate	Below Market Average	At Market Average	Above Market Average			
Total Return	Below Market Average	At Market Average	Above Market Average			
Volatility	Below Market Average	At Market Average	Above Market Average			
Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%			
Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers			
Management	Less Than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience			
Environmental: Location						

Characteristic	Quality Parameters					
characteristic	Poor	Good	Excellent			
Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less			
Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition			
Crop Yield	Below State Average by 15%	State Average Plus or Minus 15%	Above State Average by 15% or More			
Government Interference / Control	-	Government Controls on Price / Volume / Payments	Free Market			
Environmental: Soil						
Soil Quality	Class 4 or Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2			
Soil Condition	-	Only for Row Crops	For Both Row and Permanent Crops			
Soil Depth	2 Ft. or Less	2 to 3 Ft.	3 Ft. or More			
Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay			
Environmental: Water						
Water Sources	1 Source, but Unreliable	1 Reliable Source	2 Reliable Sources			
Affordability	\$80+ Acre/Ft.	\$40 to \$80 Acre/Ft.	Below \$40 Acre/Ft.			
Reliability History	Not Reliable	Do Not Have to Fallow	Reliable in			

Characteristic	Quality Parameters						
characteristic	Poor	Good	Excellent				
		in Drought Year	Drought Year				
Irrigation System	-	Flood Irrigation	Drip or Sprinkler Irrigation				
Environmental: Hazards							
Hail or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years	-	No History Last 10 Years				
Social							
Farm Worker Availability	-	Shortages	Acceptable / Available				
Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm				

## **Property Selection Tool Summary Results: Agricultural Investments**

Table 23. Property Selection Tool Summary Results: Agricultural Investments
---

	1		
Characteristic	Score (1-5)	Weight (1-100%)	Weighted Score
Economic			
Cap Rate			
Total Return			
Volatility			
Crop Market Growth Projections			
Crop Market Prospects			
Management (if Management Comes with the Property)			
Environmental: Location			
Close to Same or Similar Productive Crops			
Climate Fit to Targeted Crops			
Crop Yield			
Government Interference/Control			
Environmental: Soil			
Soil Quality			
Soil Condition			
Soil Depth to Restrictive Layer			

Characteristic	Score (1-5)	Weight (1-100%)	Weighted Score
Soil Texture			
Environmental: Water			
Water Sources			
Affordability			
Reliability History			
Irrigation System			
Environmental: Hazards			
Hail or Frost Risk, Wind Damage, Flooding, or Major Diseases			
Social			
Farm Worker Availability			
Farm Worker Housing			
Total Score			

#### Notes:

Total score is calculated based on individual variable scores

Suggested weights (0-100%) are in Table 26 (Data Input Entry for Property Selection Tool: Agricultural Investments) in Section 8.3. The weights are based on the professional judgement of the Rosen Consulting Group. Weights may change as different issues become more important, such as water availability for agricultural land.

## 8.1.2 Commercial Property Selection Tool Variables

- Economic
  - o Financial
    - RCA Cap Rate
    - NCREIF Income Return
    - NCRIEF Income Return Volatility
    - Years Left on Lease/Renewal Provisions
    - S&P Tenant Credit Rating
  - o Market Level
    - Tenant Industry
    - Market Employment Growth
    - Market Employment Growth Volatility
    - Market Rent Growth
    - Market Vacancy Rate
    - Market Supply Constraints
  - o Property Levels
    - Building Location Quality
    - Building Specialization
- Environmental
  - LEED Certification
  - Public Transit/Walkability Impacts
  - Traffic Congestion Impacts
  - Other Environmental Impacts
- Social
  - Benefits to Underserved Community
  - o Gentrification Impact
  - Jobs Impacts
  - Other Social Impacts

## ECONOMIC

In addition to cap rates, income returns, and income return volatility (described in the agricultural investment tool section above), other economic variables are important. They are divided into financial, market-level, and property-level categories. For most of the financial and market-level variables, scores are assigned based on how property-level metrics for a prospective investment compare with metro-wide or statewide averages. The source for commercial property cap rates is Real Capital Analytics, and the source for market-level returns is NCREIF. Both sources are subscription-based data providers. In general, data is released on a quarterly basis and accessible via website-based data extraction tools.

Lease Renewal Terms include time remaining on a lease for a prospective investment and provisions for contractual rental increases. Investments with locked-in long-term leases (see

Appendix G for typical lease terms) are very desirable, while leases expiring in the near-term pose greater re-tenanting risk. Rent escalation provisions should also be evaluated. Because of the longevity of net lease agreements, attractive provisions for rental increases help ensure healthy income growth. Meanwhile, unfavorable terms, such as a rental increase that does not keep pace with at least the rate of inflation, pose challenges. These factors are measured qualitatively on a deal-by-by-deal basis and should be reflected in investment pricing.

Tenant S&P Credit Rating is a credit score which measures the creditworthiness of an existing or prospective tenant. The rating assigns a letter grade ranging from AAA to D to indicate how likely a debt is to be re-paid. Credit risk is a key determinant of cash flow stability. A tenant with a strong track record and a healthy balance sheet is less likely to break a leases deal. Several organizations produce credit ratings; S&P Global Ratings is the agency which issues the ratings used in this tool.

**Tenant Industry Correlation to GDP Growth (since 1990):** measures the historical correlation of industry employment growth nationally relative to national GDP growth. A low correlation indicates lower volatility and less vulnerability during recessionary periods. The source for GDP data is the Bureau of Economic Analysis, which publishes publicly available results on a quarterly basis.

**Market Job Growth has been measured (since 1990)**: measures the historical growth in total employment within a given metropolitan statistical area (MSA). Rising employment growth typically leads to favorable demand growth for real estate. The Bureau of Labor statistics provides publicly available employment data on a monthly basis.

**Market Job Growth Volatility (Since 1990)**: measures the volatility in historical total employment growth within a given MSA. Greater volatility typically indicates more vulnerability to economic cycles while lower volatility indicates more stable underlying demand drivers, signaling potentially greater income stability.

Market Real Estate Fundamentals (Rent Growth, Vacancy Rate): provides an indicator for the health of local real estate market conditions. MSA-level vacancy rates and rent growth data from established data providers, primarily brokerage firms, are the source for this information. The data is typically available on a quarterly basis. Investments in markets with stronger underlying fundamentals could hold more favorable long-term value.

**Barriers to Entry for New Development**: measures RCA's assessment of the relative barriers to entry for development of new supply within a given MSA. Markets with high barriers hold better value over time and pose little supply-side risk. While California in general is very supply-constrained, the amount of available developable land and local building regulations vary across metro areas.

**Building Location Quality/Building Specialization**: is a qualitative measure for the quality of the structure and geography (locational advantage) of a prospective investment. As net leases

generally draw tenants seeking to lock in specific locales for extended periods, building location is a major determinant of re-leasing potential. The age of the building and any issues with quality of fixtures that speak to the potential for functional obsolesce and high replacement costs would also be captured here. The level of specialization of a particular building is also an important factor in investment evaluation. A highly specialized building could involve significant capital investment upon lease expiration to re-tenant.

#### ENVIRONMENTAL

**LEED Certification**: measures performance for green building design, construction, and operations across several environmental areas. These include the use of sustainable sites and building materials, energy and water efficiency, CO2 emissions reduction and indoor environmental quality. Developed by the U.S. Green Building Council, LEED employs a system which awards points based on achievement in these areas. Certification categories include Certified, Silver, Gold and Platinum.

**Public Transit, Walkability Impact/Traffic Congestion Impact**: is a qualitative metric for the impact of a target investment on promoting or detracting from environmentally beneficial transportation patterns. Investments in areas with favorable public transit connectivity and walkability receive a higher score, while those in less accessible areas which exacerbate traffic congestion receive lower scores.

**Other Environmental Impacts**: captures any other environmental impacts the Commission feels are not captured in the other environmental variables.

#### SOCIAL

**Benefits to Underserved Community/Gentrification Impact:** are qualitative measures for the impact of a prospective investment on residents and communities in need. Investments tenanted by companies which fill gaps for necessary goods and services in distressed or otherwise underserved areas create significant social benefit beyond financial returns, boosting their scores. Conversely, large, well-capitalized tenants typical of net lease investments could pull demand from local small businesses and push up rental rates, posing a negative social impact which lowers a target investment's score.

**Jobs Impact**: measures the quality and number of jobs created by the tenant of the target investment. The presence of higher-skilled, salaried jobs—which provide job security and create a large multiplier effect in other parts of the economy—create demand for local goods and services, benefitting the broader market. As with other social variables, jobs impact is a qualitative input based on assessments of individual tenants and the industries they are in.

**Other Social Impacts**: captures any other social impacts the Commission feels are not captured in the other social variables.

For all the designated economic, environmental, and social variables, the specific parameters used to score each investment are highlighted below:

#### **Property Selection Tool Parameters: Commercial Investments**

- Property:
- Asking Price:
- Size (Sq. Ft.):
- Market:
- Property Type:
- Sector (Industry):
- Tenant

Table 24. Property Selection Tool Parameters: Commercial Investments

Characteristics	Quality Parameters			
	Poor	Good	Excellent	
Economic: Financial				
RCA Cap Rate	Below Market Average	At Market Average	Above Market Average	
NCREIF Income Return	Below Market Average	At Market Average	Above Market Average	
NCREIF Income Return Volatility	Below Market Average	At Market Average	Above Market Average	
Years Left on Lease / Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years	
S&P Tenant Credit Rating	Below High Grade	AA+ to AA- (High Grade)	AAA (Prime)	
Economic: Market-Level				

Characteristics	Quality Parameters				
Characteristics	Poor	Good	Excellent		
Tenant Industry	Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth		
Market Employment Growth	Below State Average	At State Average	Above State Average		
Market Employment Growth Volatility	Above State Average	At State Average	Below State Average		
Market Rent Growth	Below State Average	At State Average	Above State Average		
Market Vacancy Rate	Above Market Average	At Market Average	Below Market Average		
Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints		
Economic: Property-Level					
Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re-Tenant	Prime Location with Best Access / Irreplaceable Sites		
Building Specialization	High-Level of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade		
Environmental	·	·			
LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects		

Characteristics	Quality Parameters				
Characteristics	Poor	Good	Excellent		
			Receive a "0")		
Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*		
Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*		
Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*		
Social					
Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*		
Gentrification Impact	Negative Impact	No Impact	Positive Impact*		
Jobs Impact	Negative Impact	No Impact	Positive Impact*		
Other Social Impacts	Negative Impact	No Impact	Positive Impact*		

\*Based on qualitative assessment

An excel-based workbook is available for the commercial property selection tool. In it, a spreadsheet is included to input underlying, raw data, where applicable, to assign property scores. Once the data and property scores are input for each variable, they feed into a second spreadsheet where weights are input, and a final score is calculated. Next, the data feeds into a spreadsheet of final output summary results, showing the weighted average property score:

#### Property Selection Tool Worksheet Summary Results: Commercial Investments

Table 25. Property Selection Tool Summary Results: Commercial Investments

Characteristics	Score (1-5)	Weight (1-100%)	Weighted Score
Economic: Financial			
RCA Cap Rate			

Characteristics	Score (1-5)	Weight (1-100%)	Weighted Score
NCREIF Income Return			
NCREIF Income Return Volatility			
Years Left on Lease / Renewal Provisions			
S&P Tenant Credit Rating			
Economic: Market-Level			
Tenant Industry			
Market Employment Growth			
Market Employment Growth Volatility			
Market Rent Growth			
Market Vacancy Rate			
Market Supply Constraints			
Economic: Property-Level			
Building Location Quality			
Building Specialization			
Environmental			
LEED Certification			
Public Transit / Walkability Impact			
Traffic Congestion Impact			
Other Environmental Impacts			
Social			
Benefits to Underserved Community			
Gentrification Impact			

Characteristics	Score (1-5)	Weight (1-100%)	Weighted Score
Jobs Impact			
Other Social Impacts			
Total Score			

Notes:

Total score is calculated based on individual variable scores

Suggested weights (0-100%) are in Table 27 (Data Input Entry for Property Selection Tool: Commercial Investments) in Section 8.3. The weights are based on the professional judgement of the Rosen Consulting Group. Weights may change as different issues become more important.

## 8.2 Agriculture & Commercial Property Examples

To demonstrate tool functionality, agricultural and commercial property examples currently on the market or recently sold in designated agricultural and commercial categories are presented in Appendix C and D. Descriptions of each property and score results are provided.

Commercial property examples include a single-tenant retail building occupied by Walgreens in the Sacramento metropolitan area and an industrial/flex building occupied by Panasonic in Orange County. The agriculture property examples include two nut orchard properties in different geographical growing locations that differ primarily due to the resources and tree life on each property.

## 8.3 Property Evaluation Tool Worksheets

Appendix E contains blank Agriculture and Commercial Property Selection Tool worksheets.

#### Data Input for Property Selection Tool: Agricultural Investments

- Property:
- Asking Price:
- Size (Acres):
- Market:
- Property Type:
- Crop:
- Tenant:

#### Table 26. Data Input Entry for Property Selection Tool: Agricultural Investments

Quality Parameters				Score		
Characteristics	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Economic: Financial				-	40%	-
Cap Rate	Below Market Average	At Market Average	Above Market Average	-	10%	-
Total Return	Below Market Average	At Market Average	Above Market Average	-	5%	-
Volatility	Below Market Average	At Market Average	Above Market Average	-	5%	-

	Quality Parameters			Score		
Characteristics	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%	-	5%	-
Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers	-	5%	-
Management	Less than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience	-	10%	-
Environmental: Location				-	55%	-
Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less	-	3%	-
Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition	-	5%	-
Crop Yield	Below State Average by 15%	State Average +/- 15%	Above State Average by 15% or More	-	10%	-
Government Interference / Control		Government Controls on Price / Volume / Payments	Free Market	-	1%	_

		Quality Param	neters	Score		
Characteristics	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Environmental: Soil						
Soil Quality	Class 4 of Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2	-	4%	-
Soil Condition	-	Only For Row Crops	For Both Row and Permanent Crops	-	4%	-
Soil Depth	2 feet or less	2 to 3 feet	3 feet or more	-	4%	-
Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay	-	2%	-
Environmental: Water			·			
Water Sources	1 Source but Unreliable	1 Reliable Source	2 Reliable Sources	-	9%	-
Affordability	\$80 plus / acre/foot	\$40 to 80 acre/foot	Below \$40 acre/foot	-	5%	-
Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year	-	3%	-

Characteristics	Quality Parameters				Score		
	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score	
Irrigation System	-	Flood Irrigation	Drip or Sprinkler Irrigation	-	2%	-	
Environmental: Hazards							
Hail and / or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years	-	No History Last 10 Years	-	3%	-	
Social				-	5%	-	
Farm Worker Availability	-	Shortages	Acceptable / Available	-	3%	-	
Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm	-	2%	-	
			Total Score	-	100%	-	

Scoring: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

Data Input Entry for Property Selection Tool: Commercial Investments

- Property:
- Asking Price:
- Size (Sq. Ft.):
- Market:
- Property Type:
- Sector (Industry):
- Tenant:

Table 27. Data Input Entry for Property Selection Tool: Commercial Investments

Characteristics	Quality Parameters			Score		
	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Economic: Financial				-	70%	-
RCA Cap Rate	Below Market Average	At Market Average	Above Market Average	-	10%	-
NCREIF Income Return	Below Market Average	At Market Average	Above Market Average	-	8%	-
NCREIF Income Return Volatility	Below Market Average	At Market Average	Above Market Average	-	1%	-

	Quality Parameters			Score		
Characteristics	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Years Left on Lease / Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years	-	7%	-
S&P Tenant Credit Rating	Below High Grade	AA+ -AA- (High Grade)	AAA (Prime)	-	10%	-
Economic: Market-Level						
Tenant Industry	Highly Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth	-	5%	-
Market Employment Growth	Below State Average	At State Average	Above State Average	-	5%	-
Market Employment Growth Volatility	Above State Average	At State Average	Below State Average	-	5%	-
Market Rent Growth	Below State Average	At State Average	Above State Average	-	1%	-
Market Vacancy Rate	Above State Average	At State Average	Below State Average	-	1%	-

	Quality Parameters			Score		
Characteristics	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints	-	2%	-
Economic: Property-Level						
Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re-Tenant	Prime Location with Best Access / Irreplaceable Sites	-	10%	-
Building Specialization	High Level of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade	-	5%	-
Environmental				-	15%	-
LEED Certification	Not Applicable	Not Applicable	Investment has LEED Certification (All Other Projects Receive a "0")	-	4%	-
Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*	-	4%	-

Characteristics	Quality Parameters			Score		
	Poor	Good	Excellent	Score (1-5)	Weight (1-100%)	Weighted Score
Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*	-	4%	-
Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*	-	3%	-
Social				15%		
Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*	-	4%	-
Gentrification Impact	Negative Impact	No Impact	Positive Impact*	-	4%	-
Jobs Impact	Negative Impact	No Impact	Positive Impact*	-	4%	-
Other Social Impacts	Negative Impact	No Impact	Positive Impact*	-	3%	-
Total Score			-	100%	-	

\*Based on qualitative assessment

Scoring: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5
### APPENDIX A AGRICULTURAL PROPERTY INVESTMENT CATEGORIES AND TREND ANALYSIS

This section contains tables summarizing long-term historical financial returns and changes in asset valuations over a 15-year period for key categories of California agricultural land, particularly permanent crops.

It is assumed that land investments, for planning purposes, are held in perpetuity and annual income and growth of that income becomes the primary financial goal. Other goals and objectives for owning land may relate to broader governmental social and environmental policy.

### 1.0 Annual & Permanent Cropland

The principal use of California agricultural cropland is for annual and permanent crops. In the Midwest grain belt, most actively farmed land is planted to annual crops. With California's mild Mediterranean climate, crops are more diverse, with permanent crops playing an increasingly important role in the use of irrigated cropland.

Throughout this report, attention is paid to the annual income return. This can play a more important role in the management of the School Land Bank Fund, although the return from land appreciation has often been higher than the annual cash income return. Land value appreciation typically reflects increasing income or the prospect of higher income in the future.

### National vs. California Agricultural Land Return

Nationally, financial returns in agricultural land are cyclical. The chart below indicates national financial returns peaking—along with commodity prices—in 2013. Income only returns decreased to 4% in 2014 and 2015 and leveling off to 1% or 2% per year from 2016 to 2018. In contrast, the income (cash) return on California agricultural land for the past 3 years was closer to 6.0% to 6.5%. Note that the national NCREIF data is heavily weighted by large institutional investment in the Midwest for commodity crops.

### The Protracted Decline in Farmland Returns Ends



### Figure 8. The Protracted Decline in Farmland Returns Ends

Historically, annual cropland appealed to institutional investors as it appeared relatively easy to rent or lease to farm operators. Furthermore, cropping options are more diverse and can be adjusted to market forces.

### **California Agricultural Land Income**

Over the past five years, California NCREIF data indicates a similar income decline from the 2013 peak index containing both annual and permanent cropland.

Year	Total Return (%)	Income Only (%)
2018	8.66	6.34
2017	8.04	6.16
2016	10.94	6.65
2015	18.47	7.96
2014	22.98	12.79

### Table 28. Agricultural Land Income

The NCREIF index for California is approximately 40% permanent crops. Nationally and in the Midwest farm belt, where annual commodity crops dominate, the historic 15-year long-term income return is 7.25%. However, Midwest commodity prices have fallen considerably over the past 5 years and returns on leased cropland are closer to 1.5% to 2.5%.

			(
Table 29.	National Croplane	d, Median Return	(2004 to 2018)

Commodity Cropland	Income	Appreciation	Total
Average Return	3.95%	7.19%	11.34%
Std. Deviation	0.53	0.27	0.88

Source: NCREIF

Table 30. National Fresh Produce Cropland, Median Return (2004 to 2018)

Fresh Produce Cropland	Income	Appreciation	Total
Average Return	4.52%	7.14%	11.89%
Std. Deviation	0.47	8.09	9.19

Source: NCREIF

Table 31. National All Other Lands, Median Return (2004 to 2018)

All Other Lands	Income	Appreciation	Total
Average Return	4.32%	8.05%	12.62%
Std. Deviation	0.35	7.12	7.57

Source: NCREIF

Permanent crops play an important role in California. The table above indicates the significant difference in income from annual and permanent cropland. In California, irrigated cropland had a 3.88% income return over 15 years versus 12.64% for permanent cropland (a delta of 876 basis points). It is not surprising that institutional investors are increasingly attracted to key California permanent crops, particularly nut crops. A variety of incentive-oriented contracts between farm management and investor are utilized to align the interests of both parties.

While annual cropland owned by institutional investors is most often leased to a farm operator, permanent plantings can be leased or managed directly or by a subsidiary owned by the institutional investor. By taking on the direct management of permanent crops, the investor takes on more risk but also enjoys a higher financial return. Further analysis of NCREIF data indicates over the period 2004 to 2018 the leased permanent cropland had income return of 7.63% versus 12.26% for directly managed and operated permanent crop plantings. Direct management control also comes with the option to participate in income derived from further processing the crop, thereby increasing the total return of directly managed properties. Direct management can also require more attentive management i.e., additional specialized staff coupled with increased income volatility.

Table 32. Pacific West (California Region) Permanent Crops, 15-Year Average

Permanent Cropland	Income %	Appreciation %	Total Return %
Average Return	12.64%	7.03%	19.95%
Standard Deviation	6.06%	7.67%	13.57%

Source: NCREIF

Table 33. Pacific West (California Region) Annual Crops, 15-Year Average

Annual Cropland	Income %	Appreciation %	Total Return %
Average Return	3.88%	8.55%	12.66%
Standard Deviation	0.58%	9.60%	10.13%

Source: NCREIF

The annual cropland lease income from ASFMRA data is more difficult to obtain, although land categorized as vegetable cropland in the Sacramento Valley had a historic annual return of 2.64%. The return on land appreciation was significantly higher, 11.15%. Often the annual return from land leases lags the increase in appreciation, particularly if the lease is for 5 or 10 years.

### **Permanent Cropland**

There is a trend toward planting permanent crops, particularly nut crops, on land previously utilized as annual cropland or irrigated pasture. Not only are the financial returns from permanent crops more attractive, but the ability to mechanize farming and harvest of permanent crops, plus the ability to utilize scarce irrigation water for a higher value crop, encourage the planting of permanent crops. Investors are willing to accept the perceived higher risk associated with permanent crops, particularly unique permanent nut crops.

### 1.1 Nut Crops

California is the leading producer of almonds, pistachios, and walnuts for the U.S. market, as well as an important source for an expanding global market. The unique California climate and infrastructure, as well as a continuing investment in marketing and promotion, has been an important support to this trend.

The NCREIF 2004 to 2018 average income return is summarized in the table below. It provides an indication of financial return from California permanent crops. Almonds and pistachios have been popular with institutional investors as indicated by the financial return ranging from 14% to 20%. The historical income return is particularly high due to unusually high crop prices during 2014 to 2016.

The income return reported by ASFMRA for almonds and pistachio orchards is considerably lower. This is primarily due to the income figure representing a wider range of low and high quality properties. This represents a return based on leasing of orchards rather than direct management.

Crop	Income %	Standard Deviation	Appreciation %	Standard Deviation	Total Return %	Standard Deviation
Pistachios	20.16%	11.21	6.35%	8.04	27.07%	15.98
Almonds	14.16%	9.02	7.46%	14.48	21.83%	24.27
Citrus	9.86%	3.29	4.44%	10.76	14.63%	11.62
Wine Grapes	6.41%	2.02	5.87%	5.02	12.49%	5.46
Other Permanent Crops	11.34%	4.52	4.56%	5.24	16.06%	9.52

Table 34. Median Permanent Cropland Return (2004 to 2018)

Source: NCREIF

### Table 35. Historical Financial Returns of Almond Orchards (2002 to 2017)

Region	Total Return Mean %	Total Return Standard Deviation	Income Mean %	Income Standard Deviation	Appreciation Mean %	Appreciation Standard Deviation
Sacramento & Inter- Mountain Valley	16.92	15.6	6.42	3.07	10.58	14.19
Northern San Joaquin Valley	10.8	15.1	3.45	1.46	7.45	14.06
Central San Joaquin Valley	12.83	12.9	3.61	3.21	9.34	11.2
Southern San Joaquin Valley	14.19	18.5	4.20	2.1	10.15	16.85

Source: NCREIF

Region	Total Return Mean %	Total Return Standard Deviation	Income Mean %	Income Standard Deviation	Appreciation Mean %	Appreciation Standard Deviation
Central San Joaquin Valley	12.16	9.3	3.98	1.82	8.21	8.62

### Table 36. Historical Financial Returns of Pistachio Orchards (2002 to 2017)

Source: ASFMRA

Pistachio orchards take 7 to 10 years to mature, come into full production and require frontend capital and patience for a return on investment. Pistachio trees have grown in the Middle East for thousands of years and are a delicacy in the region. It was only recently that pistachios were brought to California and commercialized. The first commercial crop was in 1976, and today 358,000 acres are planted to pistachio. It is an attractive crop for investment funds seeking appreciation with an above average income return of 20.16% as reported by NCREIF, although ASFMRA data indicates an income return of 3.98%. The low ASFMRA return is likely due to very limited data on pistachio orchards available for lease. The crop is also popular because pistachio trees have a long life and are drought tolerant.

In 2002, 88,000 acres of pistachio were harvested. In 2017 this figure rose to 358,000 acres, a fourfold increase.

### Walnuts

Region	Total Return Mean %	Total Return Standard Deviation	Income Mean %	Income Standard Deviation	Appreciation Mean %	Appreciation Standard Deviation
Sacramento & Inter- Mountain Valley	12.3	24.3	4.25	1.93	8.14	23.34
Northern San Joaquin Valley	9.86	11.3	3.03	1.12	6.87	10.65
Southern San Joaquin Valley	12.9	20.4	3.74	1.66	9.29	19.26

### Table 37. Historical Financial Returns of Walnut Orchards (2002 to 2017)

### Source: ASFMRA

Walnut growing has a long tradition in California. It has shown a gradual increase to total plantings of 335,000 acres. Like other nut crops, walnuts are a popular investment for institutional or absentee investors, although not as popular as other nut crops. The trees have a relatively long life. The development of more productive varieties is a principal reason a farm operator would consider replacing an existing planting with a new more productive variety. As with other nuts, the health benefits of walnuts have a positive effect on walnut demand.

### 1.2 Wine Grapes

The growing of grapes is a major California crop, utilizing 925,000 acres. The industry includes grapes produced for raisins, table (fresh) and wine. Each category requires specialized varieties, cultural systems, and post-harvest handling and processing. Raisins are produced on 156,000 acres, table grapes on 132,000 acres, and wine grapes on 637,000 acres. Financial returns for raisin and table grapes are not readily available. The focus of this report is wine grapes, the largest segment of the market.

The major wine grape growing areas are the North Coast (Napa and Sonoma), South Coast (Monterey to Santa Barbara), and Inland (San Joaquin Valley). Vineyards are owned by wineries or independent growers, who most often have a long-term contract with a winery. Wineries and growers are focused on producing specific varietals of grapes that exhibit the best characteristics of that type. Wineries pay premium prices for varietal grapes from specific vineyards and locations. The highest prices are paid for grapes produced in Napa and Sonoma Counties. Vineyard values in specific growing areas can have dramatically different valuations from \$40,000 to \$400,000 per acre.

It should be noted that a degree of fashion exists in the wine market. Grape prices fluctuate depending on the popularity of varietal from specific geographical areas. Investments in vineyard land in Sonoma and Napa counties need careful evaluation as to appellation, site, crop management, and grape varietal. It is recommended that wine grape vineyard land in the upper San Joaquin valley be considered, as land in this region is lower cost, easier to evaluate and can be used for a variety of crops.

### 1.3 Citrus

The historical financial return on citrus is harder to evaluate, as the industry has been in a transition over the past 15 years. It has gone from producing primarily the Navel and Valencia varieties to developing new plantings of the mandarin type i.e., easy peel citrus varieties. In 2002, predominantly Navel and Valencia citrus varieties were planted on 194,000 acres. By 2017, these two varieties decreased to 145,986 acres.

The consumer has readily accepted the size and ease of peeling an orange, which was supported by advertising campaigns backed by large, well-financed corporate farms. This made the wide range of mandarin type citrus very profitable.

The NCREIF citrus data based on investment grade citrus planting has an income return of 9.86%. (It is assumed to be predominantly new citrus varieties.) Comments from ASFMRA appraisers indicate that the mandarin type of citrus plantings are very profitable and sell at prices above \$40,000 per acre. The consumer has clearly indicated a preference for the mandarin citrus products. It is not surprising that the category of mandarin and mandarin-hybrid citrus varieties increased from a reported 5,700 acres of bearing and non-bearing in 2002 to 61,282 acres in 2018.

California citrus is facing increased competition from imports as well as the potential impact of Huanglong Bing (greening) disease spread by Asian citrus psyllid, an insect found in Florida and Brazil, but not yet in California. The disease risk needs to be evaluated when considering an investment in citrus groves and land.

### 1.4 Other Crops

Rice and olives have above average potential. Located in the Sacramento Valley, they both have generally good historical sources of irrigation water and above average income in the 5% to 10% range. Rice has a long history in the Sacramento Valley, while olives planted for olive oil production in high density plantings is relatively new.

Region	Total Return Mean %	Total Return Standard Deviation	Income Mean %	Income Standard Deviation	Appreciation Mean %	Appreciation Standard Deviation
Sacramento & Inter- Mountain Valley	13.22	8.5	5.3	1.39	7.92	8.24

Table 38. Historical Financial Return of Rice Land (2002 to 2017)

Source: ASFMRA

Rice production is concentrated in the Sacramento Valley (95%), often on heavy soil. Statewide, most of the 550,000 acres of rice land has good access to long-term water resources. Rice land is unique, as is the equipment used to farm it. Not many sales of rice land occur because it has been a consistent income earner. Rice production, unlike rice growing in Asia, is highly mechanized, from plowing and seeding through harvest. California rice is a small player in the global rice market. The focus is on producing a premium Japonica medium grain rice variety which is particularly sought after in Japan and Asian countries.

Rice farmland is frequently used in conjunction with land for wildlife habitat, recreation, and other purposes. There is some discussion of diverting water from the East side of the Sacramento Valley to the West side, which could cause some rice land to be fallowed.

### Strategic Land Investment Considerations for the School Land Bank Fund

Region	Total Return Mean %	Total Return Standard Deviation	Income Mean %	Income Standard Deviation	Appreciation Mean %	Appreciation Standard Deviation
Sacramento & Inter- Mountain Valley	16.32	23.1	9.37	4.82	7.82	22.74

### Table 39. Historical Financial Returns of Olive Orchard Lands (2002 to 2017)

Source: ASFMRA

While the growing of olives in California for table consumption has a long history, commercially growing olive varieties for olive oil production is relatively new. According to the California Olive Oil Council, over 41,000 acres are planted in California for conversion to extra virgin olive oil. It is also estimated that 15,000 new acres will have been planted by 2020. Most of the plantings are in the Sacramento Valley, where water is not an issue and olives are also drought tolerant. What makes olives for olive oil production attractive is the ability to establish high density plantings to be harvested mechanically.

### 2.0 Agricultural Land Values

It is also useful to consider the current prices paid for agricultural land and the role of land appreciation over time in the Sacramento and San Joaquin Valleys, as well as coastal cropland, over a 25-year period as estimated from ASFMRA data. The charts indicate an often-dramatic increase in land values for the most popular crops and cropland sought by farm operators and investors, as well as land price differential between ASFMRA regions.

The figure below indicates the land price differential over 25 years in a relatively low-cost water district, such as North San Joaquin Valley, Stanislaus versus other Federal Irrigation Districts with higher prices or less reliable irrigation water. In certain water district, land market prices have increased due to increasing water shortages over the past 20 years.



Figure 9. Cropland Federal Districts - High Price Paid per Acre

Source: ASFMRA

In contrast to Federal Irrigation Districts, coastal cropland most often relies on local reservoirs and well water for irrigation. Land prices in Ventura County are particularly high due to the scarcity of land and water, as well as demand for coastal land to plant strawberry and vegetable production. Coastal cropland has many uses for both the residential and vegetable and wine grape sectors.



Figure 10. Coastal Cropland - High Price Paid per Acre

Source: ASFMRA



Figure 11. Wine Grapes - High Price Paid per Acre

Source: ASFMRA



Figure 12. Pistachios - High Price Paid per Acre Source: ASFMRA

### Strategic Land Investment Considerations for the School Land Bank Fund



Figure 13. Almonds - High Price Paid per Acre

Source: ASFMRA



Figure 14. Walnuts - High Price Paid per Acre Source: ASFMRA

### 3.0 Range Land

While there are millions of acres of California lands categorized as range land—as well as range land already within the School Land Bank Fund portfolio—it is not currently considered an attractive land investment for several reasons:

Historical income returns are low, ranging from 1% to 2% at best

Absentee management of range land is difficult, particularly environmental management, as the tenant's objective is to maximize the carrying capacity of the land, often above what is best for the environmental sustainability of the land.

The majority of rangeland is owned by multiple family generations or acquired for a specific purpose such as recreational. Or it may also be acquired to develop and irrigate specific crops, such as wine grapes, particularly in coastal lands. It may also be acquired for long-term residential or industrial development.

The high values indicated for coastal range land are due predominantly to the conversion of this land to wine grape vineyards over the past 25 years.



Figure 15. Rangeland - High Price Paid per Acre

Source: ASFMRA

The high values indicated for coastal range land is due predominantly to the conversion of coastal range land to wine grape vineyard over the past 25 years.

### APPENDIX B VALUE OF WATER BY MAJOR CROP

Crops	Gross Water %	Net Water %	Gross Revenues %	Irrigated Acres %	Gross Revenues / Gross Water (\$/AF)	Gross revenues / net water (\$AF)
Irrigated Pasture	12	11	0.4	9	31	47
Rice	10	9	2	6	127	223
Corn	7	7	1	7	176	258
Alfalfa	18	18	4	12	200	287
Cotton	7	8	3	7	416	551
Other Field Crops	8	8	3	13	375	573
Fruits and Nuts	27	29	44	30	1,401	1,875
Truck Farming & Horticulture	10	10	42	16	3,724	5,363

Table 40. Water Use, Revenues, and Value of Water by Major Crop Categories, 2005

Sources: Authors' calculations using data provided by DWR staff. Revenue information draws on California Agricultural Statistics and county agricultural commissioner reports.

**Notes**: Gross water use = 27.3 MAF, net water use = 18.9 MAF; crop revenues from irrigated agriculture = \$23.9 billion (2005 \$); irrigated crop acres (including multiple cropping) = 9.2 million acres. In addition to field corn, corn acreage and water use includes some sweet corn, which his included in the value estimates for truck farming. "Truck farming and horticulture" includes assorted vegetables, some fruits (e.g., melons), flowers, and nursery products. "Fruits and nuts" include all fruit and nut tree crops plus berries.

### APPENDIX C EXAMPLE EVALUATIONS FOR AGRICULTURE PROPERTIES

### Avenue 16 Almonds

Property Brochure

Weight Input and Final Score

### Shafter Almond and Pistachio #7786

Property Brochure

Weight Input and Final Score



### 320.00± Acres Tulare County, California

- Strong Soils
- Mature Almonds
- Tax Benefits
- Land to Assist with Mitigating SGMA

Exclusively Presented By: Pearson Realty



### **CALIFORNIA'S LARGEST AG BROKERAGE FIRM**

www.pearsonrealty.com CA DRE #00020875



# **Avenue 16 Almonds**





DESCRIPTION:	This 320± acre offering is located near Delano, CA. The productive land is being farmed to 312± acres of almonds. This investment offers agricultural income, strong soils, tax benefits and land to help mitigate SGMA.						
LOCATION:	Southy Deland south (	Southwest corner of Avenue 16 and Road 120. Approximately $3.5\pm$ miles northwest of Delano, $50\pm$ miles north of Bakersfield, $157\pm$ miles north of Los Angeles and $244\pm$ miles south of Sacramento.					
LEGAL:	According to the Tulare County website, the parcels are zoned AE-40 (Exclusive Ag) and are enrolled in the Williamson Act. APN's: 336-180-003, 004, 005 and 336-190-007. Located in the east 1/2 of Section 30, T24S, R25E, all in M.D.B.&M.						
SOILS:	(Califor 52.5± 9 27.5± 9 20.0± 9	(California Revised Storie Index (CA) 52.5±% (119) Gareck-Garces association, 0-2% slopes, Grade 2-Good 27.5±% (127) Kimberlina fine sandy Ioam, 0-2% slopes, Grade 1-Excellent 20.0±% (103) Atesh-Jerryslu association, 0-2% slopes, Grade 1-Excellent					
<u>PLANTINGS:</u>	<u>Block</u> 1 2 3	<u>Variety</u> 33% Nonpareil, 33% Fritz, 17% Monterey, 17% Aldridge 50% Butte & 50% Padre 33% Nonpareil, 33% Fritz, 17% Monterey, 17% Aldridge 50% Butte & 50% Padre	<u>Year</u> <u>Planted</u> 1999 1999 1999	<u>Spacing</u> 22' x 18' 22' x 18' 22' x 18' 22' x 18'	Planted Acres 78± 77± 79± 78±		
PRODUCTION:	The 3 y	ear average yield of all varieties is	reported to b	e 2,253.17±	lbs/acre.		
WATER:	The far other i from b proper district	The farm is irrigated with 2 wells powered with electric motors; one is 200 HP and the other is 300 HP. Pump tests completed 5/6/19 show a total output at 4,192± GPM from both wells. Additionally, there is a third well not is use, condition unknown. The property is located in the Tri-County Water Authority GSA, but is not located in a water district. The orchard is irrigated by a micro sprinkler system.					
PRICE/TERMS:	\$4,250	,000, or \$13,281± per acre, cash at	close of escro	ow. The 2019	) crop is negotiable.		

CALIFORNIA'S LARGEST AG BROKERAGE FIRM

www.pearsonrealty.com

### Strategic Land Investment Considerations for the School Land Bank Fund



Water Disclosure: The Sustainable Groundwater Management Act (SGMA) was passed in 2014, requiring groundwater basins to be sustainable by 2040. SGMA requires a Groundwater Sustainability Plan (GSP) by 2020. SGMA may limit the amount of well water that may be pumped from underground aquifers. Buyers and tenants to a real estate transaction should consult with their own water attorney; hydrologist; geologist; civil engineer; or other environmental professional. Additional information is available at: California Department of Water Resources Sustainable Groundwater Management Act Portal - https://sgma.water.ca.gov/portal/ Telephone Number: (916) 653-5791

### Offices Serving The Central Valley

 F R E S N O
 V I S A L I A

 7480 N Palm Ave, Ste 101
 3447 S Demarce Street

 Fresno, CA 93711
 Visalia, CA 93277

 559.432.6200
 559.732.7300

 VISALIA
 BAKERSFIELD

 34475 Demaree Street
 4900 California Ave, Ste 210 B

 S59,732,7300
 661.334.2777







We believe the information contained herein to be correct. It is obtained from sources which we regard as reliable, but we assume no liability for errors or omissions Policy on cooperation: All real estate licensees are invited to offer this property to prospective buyers. Do not offer to other agents without prior approval.

### Strategic Land Investment Considerations for the School Land Bank Fund





Property Selection Tool Worksheet: Agricultural Investments – Avenue 16 Almonds								
Property: Asking Price Size (Acres)	Avenue 16 Almonds e: \$4,250,000 : 320			Property Type: Crop: Tenant:	Permanent Planting Almonds None			
iviarket:	Agricultural Land		Quality Pa	rameters				
Considerati	ons	Poor		Good	Excellent	Score	Weight	Weighted Score
Economic							40%	1.8
	Cap Rate	Below Market Average	At Marke	t Average	Above Market Average	5	10%	0.50
	Total Return	Below Market Average	At Marke	t Average	Above Market Average	5	5%	0.25
Financial	Volatility	Below Market Average	At Marke	t Average	Above Market Average	з	5%	0.15
	Crop Market Growth Projections	Below 2%	2% to 4%	j	Above 4%	3	5%	0.15
	Crop Market Prospects	1 to 2 Buyers	2 to 4 Bu	yers	Over 4 Buyers	5	5%	0.25
	Management	Less than 10 Years' Experience	10 to 20 Experience	Years' ce	Over 20 Years' Experience	5	10%	0.50
Environme	ntal				1		55%	2.09
Lauria	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less		Plantings Within 10 Miles or Less	5	3%	0.15
	Climate Fit to Targeted Crops	Not Known	Appropriate		Optimum Condition	5	5%	0.25
Location	Crop Yield	Below State Average by 15%	State Average +/- 15%		Above State Average by 15% or More	3	10%	0.30
	Government Interference/ Control		Governm Price/Vol Payment	ent Controls on lume/ s	Free Market	5	1%	0.05
	Soil Quality	Class 4 of Lower	Class 1, 2	, 3 and 4	Mix Class 1 to 2	3	4%	0.12
Soil	Soil Condition		Only For	Row Crops	For Both Row and Permanent Crops	5	4%	0.20
Environmenta Cl Si Cr Location Cl Ta Cl Cl Cl Cl Cl Si Cl Si Si Cl Si Si Cl Si Si Cl Si Si Cl Si Si Cl Si Si Si Si Si Si Si Si Si Si Si Si Si	Soil Depth	2 feet or less	2 to 3 fee	et	3 feet or more	5	4%	0.20
	Soil Texture	> 60% Clay	50% to 60	0% Clay	< than 50% Clay	3	2%	0.06
	Water Sources	1 Source but Unreliable	1 Reliable	e Source	2 Reliable Sources	3	9%	0.27
	Affordability	\$80 plus/acre/foot	\$40 to 80	) acre/foot	Below \$40 acre/foot	3	5%	0.15
Water	Reliability History	Not Reliable	Do Not H Drought	ave to Fallow in Year	Reliable in Drought Year	3	3%	0.09
	Irrigation System		Flood Irri	gation	Drip or Sprinkler Irrigation	5	2%	0.10
Hazards	Hail and/or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years			No History Last 10 Years	5	3%	0.15
Social			_				5%	0.21
	Farm Worker Availability		Shortage	5	Acceptable/ Available	5	3%	0.15
	Farm Worker Housing	Poor Living Conditions Locally	Condition	ns Are Good	Portion Available at Farm	3	2%	0.06
Scoring: N	Not Acceptable = 0, Po	oor = 1, Good = 3, Excelle	nt = 5		Total Score		100%	4.10



### 213.21± Acres Kern County, California

- Semi-Tropic WSD and Well Water
- Mature Almonds and Pistachios
- Excellent Production History
- Strong Soils
- Income
- Tax Benefits

Exclusively Presented By: Pearson Realty



**CALIFORNIA'S LARGEST AG BROKERAGE FIRM** 

www.pearsonrealty.com CA DRE #00020875



# **Shafter Almond and Pistachio Offering**

### 213.21± Acres

\$7,200,000 (\$33,769± acre)

DESCRIPTION:	This 213.21± acre almond and pistachio opportunity is in the desirable farming area of Shafter, CA. The orchards are in full production and have strong production history. All of the land is in Semi-Tropic Water Storage District boundaries with 39.23± acres receiving contract water with the balance of the land being eligible for non-contract water. The farm has one agricultural well. This opportunity features; Semi-Tropic WSD and well water, mature almond and pistachio orchards, excellent production history, strong soils, income, and tax benefits.
LOCATION:	The offering begins ½ mile west of intersection of Rowlee Road and Riverside Street. The property is approximately 9± miles west of Shafter, 21± miles northwest of Bakersfield, 123± miles north of Los Angeles and 268± miles south of San Francisco.
LEGAL:	The site is zoned A (Exclusive Agricultural) and is not enrolled in the Williamson Act according to the county website. Portion of the SW ¼ of Section 15 and N ½ of the NW ¼ of Section 22, all in Township 28S, Range 23E, MDB&M. Kern County, CA. APN: 087-100-08, 16, 17, and 34, and 087-130-09, 10 and 11. Seller is in the process of completing a lot line adjustment to add 8± acres of Almonds to 087-100-08 from adjoining 087-100-35.
PLANTINGS:	The land is planted to: 151± acres of almonds on Hansen rootstock, 50% Non-Pareil, 25% Fritz and 25% Monterrey, 22'x18' spacing, established in 2008, and 44.5± acres of pistachios on Pioneer rootstock, budded to Kerman and Peters, 20'x17' spacing, 19.5± acres were established in 1989 and 25± acres in 1994.
PRODUCTION:	The yield history for the orchard is quite impressive coming in well above Kern County averages. Production records provided by the Seller reflect a five year average (2014 to 2018) yield of 3,807± lbs/acre on the Almonds and 3,851± lbs/acre on the Pistachios. Upon submission of an offer the Seller will provided detailed production records.
SOILS:	87.8±% (156) Garces silt Ioam 11.4±% (196) Milham sandy Ioam, 0 to 2% slopes, MLRA 17 1.1±% (165) Jerryslu Ioam
WATER:	The property is improved with one well and is located in Semi-Tropic Water Storage District (STWSD). The well is equipped with a diesel motor, gear head, fuel tank, spin clean filter, and acid injection system. 39.23± acres have 137.3 AF of contract water entitlement delivered through meter B-30. The balance of the farm can receive non-contract water through meter BR 293T. The owner is not currently using the district water. In 2019 the contract water costs were \$58/AF for the water charge and \$49/AF for additional water use charge. Non-contract water is available in 2019 at \$102/AF. In 2019/20 on behalf of the STWSD the Kern County Tax Collector collects a total charge of \$140±/acre with the property taxes. The almonds are irrigated with a fan jet system, the pistachios with a single line drip system, all through an in-line spin clean filter, but the system is not set up to run district water.
PRICE/TERMS:	\$7,200,000 (\$33,769±/acre) Cash at close of escrow. Excluding any remaining mineral rights. The crop is available with reimbursement of agreed farming costs. The sale is subject to the completion of the lot line adjustment for the 8± acres being added to the sale as provided above.
CALIFORNIA'S	ARGEST AG BROKERAGE FIRM www.pearsonrealty.com



Strategic Land Investment Considerations for the School Land Bank Fund

### SOIL AND FARM MAP



Map unit symbol	Map unit name	Rating	Component name (percent)	Percent of AOI
156	Garces silt loam	Grade 4 - Poor	Garoes (85%)	87.8%
165	Jerryslu loam	Grade 5 - Very Poor	Jerryslu (85%)	1.1%
196	Milham sandy loam, 0 to 2 percent slopes MLRA 17	Grade 2 - Good	Miham (85%)	11.1%
Totals for Area of In	100.0%			

**CALIFORNIA'S LARGEST AG BROKERAGE FIRM** 

www.pearsonrealty.com



### PROPERTY PHOTOS





**CALIFORNIA'S LARGEST AG BROKERAGE FIRM** 

www.pearsonrealty.com

### **PROPERTY PHOTOS**



### Strategic Land Investment Considerations for the School Land Bank Fund



<u>Water Disclosure</u>: The Sustainable Groundwater Management Act (SGMA) was passed in 2014, requiring groundwater basins to be sustainable by 2040. SGMA requires a Groundwater Sustainability Plan (GSP) by 2020. SGMA may limit the amount of well water that may be pumped from underground aquifers. Buyers and tenants to a real estate transaction should consult with their own water attorney; hydrologist; geologist; civil engineer; or other environmental professional. Additional information is available at: California Department of Water Resources Sustainable Groundwater Management Act Portal - https://sgma.water.ca.gov/portal/Telephone Number: (916) 653-5791

### Offices Serving The Central Valley App Store Download Our FRESNO VISALIA BAKERSFIELD Mobile App! 7480 N Palm Ave, Ste 101 4900 California Ave, Ste 210 B ееттон Google Play 3447 S Demaree Street Fresno, CA 93711 Visalia, CA 93277 Bakersfield, CA 93309 http://snap.yu/ouea 559.432.6200 559.732.7300 661.334.2777

We believe the information contained herein to be correct. It is obtained from sources which we regard as reliable, but we assume no liability for errors or omissions. Policy on cooperation: All real estate licensees are invited to offer this property to prospective buyers. Do not offer to other agents without prior approval.

Property Selection Tool Worksheet: Agricultural Investments - Shafter Almond and Pistachio #7786								
Property: Asking Price Size (Acres) Market:	Shafter Almond and e: \$7,200,000 : 213 Agricultural Land	Pistachio #7786		Property Type: Crop: Tenant:	Permanent Planting Almond and Pistachio None			
Considerati	ons		Quality P	arameters		Score	Weight	Weighted
		Poor		Good	Excellent			Score
Economic			1		Above Market		40%	1.80
	Cap Rate	Below Market Average	At Marke	et Average	Average	5	10%	0.50
	Total Return	Below Market Average	At Marke	et Average	Above Market Average	5	5%	0.25
Einansial	Volatility	Below Market Average	At Marke	et Average	Above Market Average	3	5%	0.15
Financial	Crop Market Growth Projections	Below 2%	2% to 49	6	Above 4%	3	5%	0.15
	Crop Market Prospects	1 to 2 Buyers	2 to 4 Bu	iyers	Over 4 Buyers	5	5%	0.25
	Management	Less than 10 Years' Experience	10 to 20 Experien	Years' ce	Over 20 Years' Experience	5	10%	0.50
Environme	ntal						55%	2.55
	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting or Less	Within 20 Miles	Plantings Within 10 Miles or Less	5	3%	0.15
1	Climate Fit to Targeted Crops	Not Known	Appropriate		Optimum Condition	5	5%	0.25
Location	Crop Yield	Below State Average by 15%	State Average +/- 15%		Above State Average by 15% or More	5	10%	0.50
	Government Interference/ Control		Government Controls on Price/Volume/ Payments		Free Market	5	1%	0.05
	Soil Quality	Class 4 of Lower	Class 1, 2	2, 3 and 4	Mix Class 1 to 2	5	496	0.20
Soil	Soil Condition		Only For	Row Crops	For Both Row and Permanent Crops	5	4%	0.20
	Soil Depth	2 feet or less	2 to 3 fe	et	3 feet or more	5	4%	0.20
	Soil Texture	> 60% Clay	50% to 6	0% Clay	< than 50% Clay	3	2%	0.06
	Water Sources	1 Source but Unreliable	1 Reliabl	e Source	2 Reliable Sources	5	9%	0.45
	Affordability	\$80 plus/acre/foot	\$40 to 8	0 acre/foot	Below \$40 acre/foot	3	5%	0.15
Water	Reliability History	Not Reliable	Do Not H Drought	lave to Fallow in Year	Reliable in Drought Year	3	3%	0.09
	Irrigation System		Flood Irr	igation	Drip or Sprinkler Irrigation	5	2%	0.10
Hazards	Hail and/or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years			No History Last 10 Years	5	3%	0.15
Social	Free Martin		_		A		5%	0.21
	Farm Worker Availability		Shortage	25	Acceptable/ Available	5	3%	0.15
	Farm Worker Housing	Poor Living Conditions Locally	Conditio	ns Are Good	Portion Available at Farm	3	2%	0.06
Scoring: 1	Not Acceptable = 0, P	oor = 1, Good = 3, Excelle	nt = 5		Total Score		100%	4.56

### APPENDIX D EXAMPLE EVALUATIONS FOR COMMERCIAL PROPERTIES

### Panasonic Avionics Corp.

Property Brochure

Weight Input and Final Score

### Walgreens Pharmacy

Property Brochure

Weight Input and Final Score

**EXCLUSIVE NET-LEASED OFFERING** 

# Marcus & Millichap

PANASONIC AVIONICS CORP. 26211 ENTERPRISE WAY LAKE FOREST, CA 92630

OFFERING SUMMARY					
Price	\$17,400,000				
Net Operating Income	\$1,038,510				
Capitalization Rate	5.97%				
Price/SF	\$296.12				
Net Cash Flow After Debt Service	5.39% / \$422,024				
Down Payment	45% / \$7,830,000				
Loan Amount	\$9,570,000				
Loan Type	Financed - New Loan				
Interest Rate / Amortization	5.00% / 30 Years				
Cash on Cash Return	5.39%				
Rent/SF	\$17.67				
Gross Leasable Area	58,760 SF				
Year Built/Renovated	1999				
Lot Size	3.79 acre(s)				



LEASE SUMMARY					
Tenant	Panasonic Avionics Corporation				
Credit Rating	S&P "A-"				
Lease Type	NNN				
Lease Commencement	2/1/2012				
Lease Expiration	1/31/2022				
Lease Term Remaining	3.2 Years				
Options	Two 5-year options at 95% fair market rent.				

This information has been secured from sources we believe to be reliable, but we make no representations or warranties, express or implied, as to the accuracy of the information. References to square footage or age are approximate. Buyer must verify the information and bears all risk for any inaccuracies. Marcus & Millichap is a service mark of Marcus & Millichap Real Estate Investment Services, Inc. Å© 2018 Marcus & Millichap. All rights reserved. (Activity ID: 20091341 Property ID: 4887203)

# Marcus & Millichap

### EXCLUSIVE NET-LEASED OFFERING

PANASONIC AVIONICS CORP. 26211 ENTERPRISE WAY LAKE FOREST, CA 92630

С

RENT SCHEDULE						
Annual Rent	Annual Rent/SF	Monthly Rent	Year	Percent Increase		
\$1,038,510	\$17.67	\$86,543	Current	N/A		
\$1,038,510	\$17.67	\$86,543	2019	0.00%		
\$1,038,510	\$17.67	\$86,543	2020	0.00%		
\$1,038,510	\$17.67	\$86,543	2021	0.00%		
\$96,543	\$1.64	\$8,045	2022	-90.70%		



### INVESTMENT HIGHLIGHTS

- NNN Leased to Panasonic Avionics Corp (Division of Panasonic Corp, S&P A-)
- Mission Critical: Connectivity Hub For Global HQ Campus
- Price per square foot in line with market and well below replacement cost
- Rent is 13% Below Market
- Low 3.0% Vacancy Rate
- Excellent Access to Major Freeways, Including I-5, I-405, 133 and 241

	DEMOGRAPHICS				
	1 Miles	3 Miles	5 Miles		
2018 Population	10,722	99,483	236,638		
2010 Population	8,938	89,672	206,550		
2018 Households	4,210	35,955	90,497		
2010 Households	3,451	31,825	76,146		
Average HH Income	\$111,047	\$133,646	\$126,378		

This information has been secured from sources we believe to be reliable, but we make no representations or warranties, express or implied, as to the accuracy of the information. References to square footage or age are approximate. Buyer must verify the information and bears all risk for any inaccuracies. Marcus & Millichap Is a service mark of Marcus & Millichap Real Estate Investment Services, Inc. Å© 2018 Marcus & Millichap. All rights reserved. (Activity ID: 20091341 Property ID: 4887203)

Page 1 of 2 Property Selection Tool Worksheet: Commercial Investments - Panasonic Avionics Corp.							
Property:	Panasonic Avionics Corp	). F	Property Type: Industrial				
Asking Price	: \$17,400,000	9	Sector (Industry): Technology				
Size (Sq. Ft.)	: 58,760	1	enant: Panasonic A	vionics Corp.			
Market:							
	Considerations		Quality Parameters		Contra		Weighted
	Considerations	Poor	Good	Excellent	Score	weight	Score
Economic						70%	2.20
	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average	5	10%	0.50
	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average	5	8%	0.40
Financial	NCREIF Income Return Volatility	Below Market Average	At Market Average,	Above Market Average	3	1%	0.03
	Years Left on Lease/Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years	1	7%	0.07
	S&P Tenant Credit Rating	Below High Grade	AA+ -AA- (High Grade)	AAA (Prime)	3	10%	0.30
	Tenant Industry	Highly Volatile/Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth	1	5%	0.05
	Market Employment Growth	Below Market Average	At Market Average,	Above Market Average	3	5%	0.15
Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average	3	5%	0.15
	Market Rent Growth	Below Market Average	At Market Average,	Above Market Average	5	1%	0.05
	Market Vacancy Rate	Above State Average	At State Average	Below State Average	5	1%	0.05
	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints	5	2%	0.10
Drepartu	Building Location Quality	Sub-Standard Location, Very Difficult to Re-Tenant	Good Location, Easy to Re- Tenant	Prime Location with Best Access/ Irreplaceable Sites	3	10%	0.30
Level	Building Specialization	High Level of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade	1	5%	0.05
Scoring: No	t Acceptable = 0, Poor = 1, Go	ood = 3, Excellent = 5					

4.07

\_

Page 2 of 2	Property Selection Tool Worksheet: Commercial Investments - Panasonic Avionics Corp.										
Property:	Panasonic Avionics Corp.		Property Type: Industrial								
Asking Price: \$17,400,000			Sector (Industry): Technology								
Size (Sq. Ft.): 58,760			Tenant: Panasonic Avionics Corp.								
Market:											
Considerations		Quality Parameters					Wa:-64	Weighted			
		Poor	Good		Excellent	Score	weight	Score			
Environmental							15%	0.33			
	LEED Certification	Not Applicable	Not Applicable		Investment Has LEED Certification (All Other Projects Receive a "0")	0	4%	0.00			
	Public Transit/ Walkability Impact	Negative Impact	No Impact		Positive Impact*	3	4%	0.12			
	Traffic Congestion Impact	Negative Impact	No Impact		Positive Impact*	3	4%	0.12			
	Other Environmental Impacts	Negative Impact	No Impact		Positive Impact*	3	3%	0.09			
Social							15%	0.53			
	Benefits To Underserved Community	Negative Impact	No Impact		Positive Impact*	3	4%	0.12			
	Gentrification Impact	Negative Impact	No Impact		Positive Impact*	3	4%	0.12			
	Jobs Impact	Negative Impact	No Impact		Positive Impact*	5	4%	0.20			
	Other Social Impacts	Negative Impact	No Impact		Positive Impact*	3	3%	0.09			
					Total Score		100%	3.06			
*Based on Qualitative Assessment											
Scoring: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5											

# Marcus & Millichap

10 W MAIN ST WOODLAND, CA 95695	
OFFERI	NG SUMMARY
Price	\$6,502,381
Net Operating Income	\$341,375
Capitalization Rate	5.25%
Price/SF	\$467.63
Down Payment	All Cash
Gross Leasable Area	13,905 SF
Year Built/Renovated	2000
ot Size	1.43 acre(s)

### **EXCLUSIVE NET-LEASED OFFERING**



This information has been secured from sources we believe to be reliable, but we make no representations or warranties, express or implied, as to the accuracy of the information. References to square footage or age are approximate. Buyer must verify the information and bears all risk for any inaccuracies. Marcus & Millichap is a service mark of Marcus & Millichap Real Estate Investment Services, Inc. A© 2018 Marcus & Millichap. All rights reserved. (Activity ID: ZAB0940051 Property ID: 5297672)

# Marcus & Millichap

### EXCLUSIVE NET-LEASED OFFERING

WALGREENS PHARMACY (SACRAMENTO MSA) 10 W MAIN ST WOODLAND, CA 95695



### INVESTMENT HIGHLIGHTS

- Rare Walgreens Lease with Rent Increases
- New 15-Year Absolute NNN Lease
- Investment Grade Tenant (Walgreens Co.)
- Well-Established Location
- Essential Retailer Operating and Assisting U.S. Authorities During the COVID-19 Pande

	DEMOGRAPHICS					
	1 Miles	3 Miles	5 Miles			
2019 Population	22,286	55,975	63,117			
2010 Population	21,304	52,702	58,407			
2019 Households	8,198	19,014	21,311			
2010 Households	7,831	17,908	19,768			
Average HH Income	\$71,810	\$84,067	\$86,284			
2010 Households Average HH Income	7,831 \$71,810	17,908 \$84,067	19,768 \$86,284			

This information has been secured from sources we believe to be reliable, but we make no representations or warranties, express or implied, as to the accuracy of the information. References to square footage or age are approximate. Buyer must verify the information and bears all risk for any inaccuracies. Marcus & Millichap is a service mark of Marcus & Millichap Real Estate Investment Services, Inc. Al@ 2018 Marcus & Millichap. All rights reserved. (Activity ID: ZAB0940051 Property ID: 5297672)
Page 1 of 2	Prope	erty Selection Tool Workshe	et: Commercial Investment	s - Walgreens Pharmacy			
Property:	Walgreens Pharmacy	P	Property Type: Single Tenan	t			
Asking Pric	e: \$6,502,381	5	Sector (Industry): Retail				
Size (Sq. Ft	.): 13,905	Т	enant: Walgreens P	harmacy			
Market:		1					
	Considerations		Quality Parameters	1	Score	Weight	Weighted
	considerations	Poor	Good	Excellent	50010	weight	Score
Economic	I		I	1		70%	2.46
	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average	3	10%	0.30
	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average	3	8%	0.24
Financial	NCREIF Income Return Volatility	Below Market Average	At Market Average	Above Market Average	3	1%	0.03
	Years Left on Lease/Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years	5	7%	0.35
	S&P Tenant Credit Rating	Below High Grade	AA+ -AA- (High Grade)	AAA (Prime)	1	10%	0.10
	Tenant Industry	Highly Volatile/Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth	5	5%	0.25
	Market Employment Growth	Below State Average	At State Average	Above State Average	5	5%	0.25
Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average	3	5%	0.15
	Market Rent Growth	Below State Average	At State Average	Above State Average	5	1%	0.05
	Market Vacancy Rate	Above State Average	At State Average	Below State Average	3	1%	0.03
	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints	3	2%	0.06
Dranasty	Building Location Quality	Sub-Standard Location, Very Difficult to Re-Tenant	Good Location, Easy to Re- Tenant	Prime Location with Best Access/ Irreplaceable Sites	5	10%	0.50
Property- Level	Building Specialization	High Level of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade	3	5%	0.15
Scoring: N	ot Acceptable = 0, Poor = 1, G	ood = 3, Excellent = 5					

Page 2 of 2	Property Selection Tool	Worksheet: Commercial Inv	vestments - Walgreens Pharmacy			
Property: Walgreens Pha	irmacy	Property Type:				
Asking Price: \$6,502,381		Sector (Industry):	Retail			
Size (Sq. Ft.): 13,905		Tenant:	Walgreens Pharmacy			
Market:						
Constituentions		Quality Param	neters		14/_:_L	Weighted
Considerations	Poor	Good	Excellent	Score	weight	Score
Environmental					15%	0.33
LEED Certification	n Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")	0	4%	0.00
Public Transit/ Walkability Impac	ct Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Traffic Congestion Impact	n Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Other Environme Impacts	Negative Impact	No Impact	Positive Impact*	3	3%	0.09
Social					15%	0.45
Benefits To Unde Community	Preserved Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Gentrification Imp	pact Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Jobs Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Other Social Impa	acts Negative Impact	No Impact	Positive Impact*	3	3%	0.09
			Total Score	,	100%	3.24
*Based on Qualitative Assess	sment					
Scoring: Not Acceptable = 0	), Poor = 1, Good = 3, Excellent	t = 5				

## APPENDIX E BLANK PROPERTY EVALUATION TOOL WORKSHEETS

Blank Evaluation Form for Agricultural Property

Blank Evaluation Form for Commercial Property

Property Selection Tool Worksheet: Agricultural Investments								
Property:	Property: Property Type:							
Asking Price	e:		Crop: Tenant:					
Market:	•		renanci					
			Quality Parameters					
Considerati	ons	Poor	Good	Excellent	Score	Weight	Weighted Score	
Economic	1					40%		
	Cap Rate	Below Market Average	At Market Average	Above Market Average		10%		
	Total Return	Below Market Average	At Market Average	Above Market Average		5%		
	Volatility	Below Market Average	At Market Average	Above Market Average		5%		
Financial	Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%		5%		
	Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers		5%		
	Management	Less than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience		10%		
Environme	ntal					55%		
	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less		3%		
	Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition		5%		
Location	Crop Yield	Below State Average by 15%	State Average +/- 15%	Above State Average by 15% or More		10%		
	Government Interference/ Control		Government Controls on Price/Volume/ Payments	Free Market		1%		
	Soil Quality	Class 4 of Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2		4%		
Soil	Soil Condition		Only For Row Crops	For Both Row and Permanent Crops		4%		
	Soil Depth	2 feet or less	2 to 3 feet	3 feet or more		4%		
	Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay		2%		
	Water Sources	1 Source but Unreliable	1 Reliable Source	2 Reliable Sources		9%		
Water	Affordability	\$80 plus/acre/foot	\$40 to 80 acre/foot	Below \$40 acre/foot		5%		
water	Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year		3%		
	Irrigation System		Flood Irrigation	Drip or Sprinkler Irrigation		2%		
Hazards	Hail and/or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years		No History Last 10 Years		3%		
Social			-			5%		
	Farm Worker Availability		Shortages	Acceptable/ Available		3%		
	Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm		2%		
Scoring: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5			Total Score		100%			

Page 1 of 2		Property Selection Tool Worksheet: Commercial Investments					
Property: Asking Pric Size (Sq. Ft Market:	xe: .):	Property Type: Sector (Industry): Tenant:					
	Considerations	Quality Parameters				Woight	Weighted
	Considerations	Poor	Good	Excellent	30016	weight	Score
Economic						70%	
	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average		10%	
	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average		8%	
Financial	NCREIF Income Return Volatility	Below Market Average	At Market Average	Above Market Average		1%	
Thancia	Years Left on Lease/ Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years		7%	
	S&P Tenant Credit Rating	Below High Grade	AA+ -AA- (High Grade)	AAA (Prime)		10%	
	Tenant Industry	Highly Volatile/Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth		5%	
	Market Employment Growth	Below State Average	At State Average	Above State Average		5%	
Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average		5%	
	Market Rent Growth	Below State Average	At State Average	Above State Average		1%	
	Market Vacancy Rate	Above State Average	At State Average	Below State Average		1%	
	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints		2%	
	Building Location Quality	Sub-Standard Location, Very Difficult to Re-Tenant	Good Location, Easy to Re-Tenant	Prime Location with Best Access/ Irreplaceable Sites		10%	
Property- Level	Building Specialization	High Level of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade		5%	
Scoring: N	ot Acceptable = 0, Poor = 1, Good	d = 3, Excellent = 5					

\_\_\_

Page 2 of 2 Property Selection Tool Worksheet: Commercial Investments							
Property: Asking Pric Size (Sq. Ft Market:	e: .):	Property Type: Sector (Industry): Tenant:					
	Considerations		Quality Parameters		Score	Weight	Weighted Score
	Considerations	Poor	Good	Excellent			
Environm	ental					15%	
	LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")		4%	
	Public Transit/Walkability Impact	Negative Impact	No Impact	Positive Impact*		4%	
	Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*		4%	
	Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*		3%	
Social						15%	
	Benefits To Underserved Community	Negative Impact	No Impact	Positive Impact*		4%	
	Gentrification Impact	Negative Impact	No Impact	Positive Impact*		4%	
	Jobs Impact	Negative Impact	No Impact	Positive Impact*		4%	
	Other Social Impacts	Negative Impact	No Impact	Positive Impact*		3%	
*Based on qualitative assessment Total Score					100%		
Scoring:	Scoring: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5						

## APPENDIX F SCHOOL LANDS AND AFFORDABLE HOUSING

## 1.0 Background

The Commission's primary management focus for the land and resulting funds provided by the School Land Bank Act is to support the State Teachers' Retirement System. The School Land Bank Fund monies can be invested to carry out the mandate. The primary focus of a study commissioned by the Commission was to determine the feasibility of investing the fund in longterm commercial property and agricultural land.

Due to the severe shortage of affordable housing within the State, the issue has been raised as to whether investing in the affordable housing sub-sector should also be considered.

## 1.1 Definition of Affordable (Low Income) Housing

The Federal Department of Housing and Urban Development (HUD) defines an "affordable dwelling" (including utilities) as one that a household can obtain for 30 percent or less of its gross income. By this definition, a dwelling is considered affordable for lowincome families if it costs less than 24 percent of the area median income. According to the California Department of Housing and Community Development, the California median income was \$90,100 as of April 2021, with significant variance by county, ranging from less than \$75,000 in many Central California counties to \$150,000 in major San Francisco Bay Area counties.

## 2.0 Key Issues

Several issues related to commercial property investment excluded housing and particularly affordable housing from the original terms of reference:

Developing a building, owning, and managing affordable housing is one of the most complicated and expensive forms of real estate investing. The development of affordable housing is complicated by the need to utilize funds, most often at below market rates, to deliver housing that is offered at below market rents.

Low Income Housing Tax Credit Investments (LIHTC) are the primary financing mechanism used to finance affordable housing. LIHTC provides equity for affordable housing development. Municipal, state, and federal governments can offer tax benefits to the funder, but a public agency such as the Commission is not able to provide tax relief to developers.

Providing land and funding for low-income housing is usually carried out by institutions, particularly non-profit organizations, as a mission related investment and funding is often provided at below market rates.

## 2.1 Discussion

There is no doubt that a shortage of affordable housing exists in California. The issue is being addressed by federal and state governments with new funding through the American Rescue

Plan. Many public pension funds, foundations, and endowments have also considered and invested in low-income housing projects.

The School Land Bank Act and the School Land Bank Fund's primary focus is to provide financial support to the State Teachers' Retirement System. In this context, an opportunity can be visualized for the Commission to become a financial partner in the development of low-cost housing for teachers. Investment of this nature could help bridge the gap between teacher salaries and the high cost of living in the state and strengthen efforts to attract and retain educators in California schools. An analysis of California teacher salaries in 2019 by EdSource reveals the sizable pool of educators facing housing affordability issues. Rural areas are significantly more affordable, but many face rental housing shortages and would therefore also benefit from investment in a housing inventory targeted to teachers.

## 2.2 California Teacher Housing Act of 2016 and Amendments

The California's Teacher Housing Act provides the legal basis for school districts to establish affordable housing for its employees. The Act authorizes *"a school district to establish and implement programs, as provided, that address the housing needs of teachers and school district employees who face challenges in securing affordable housing."* The purpose is to facilitate the acquisition, construction, rehabilitation, and preservation of affordable rental housing for teachers and school district employees and to allow them to access and maintain housing stability. An investment in a school district housing project for teachers would earn income and be an investment focused on education in California. There are several projects in the Bay Area in development for teachers.

As the following map indicates there is a pressing need for affordable housing for teachers, particularly in coastal urban areas.



Figure 16. Cost of One-Bedroom Units for Teachers on Starting Salary

Source: EdSource, a nonprofit media organization

A policy to focus on affordable housing by the Commission would require:

A decision as to whether the objective is to (1) own a property and hire a developer and property manager to manage the project, or (2) become an investor/partner or lender and not take on the role of property owner/manager.

A determination of acceptable below market financial return parameters for funding of affordable housing.

Research and evaluation of potential non-profit and for-profit partners focused and experienced in the development and management of California affordable housing projects.

Selection of specific affordable housing projects in which to participate.

## 3.0 Affordable Housing Sector

A determination as to whether affordable housing investments fit within the mandate and policy of the Commission will take further research, particularly discussions with major affordable housing organizations which could become potential partners. Such discussions should further clarify the role, terms, and conditions that the Commission could play. Listed below are three non-profit organizations that play an important role in the affordable housing industry.

## 3.1 Bridge Housing Corporation

Bridge is one of the oldest, most successful, and largest affordable housing organizations in the state. It has operations and investments in California, Oregon, and Washington. It is a mission driven organization established in 1983. It has approximately 12,300 apartments under property and/or asset management, with \$3.9 billion in total development cost under construction and in the pipeline.

Bridge covers all facets of affordable housing from planning/development, rehabilitation of existing real property, property management and debt and equity investment. A discussion with Jim Mather and Brad Wiblin indicated that there are opportunities to participate in specific affordable housing projects. Bridge is continually developing projects, and some are focused on teacher housing. I indicated that the Commission might feel most comfortable in owning the property under an affordable housing project on a long-term leaseback basis. Bridge indicated that there are opportunities to play that role, although it may require a 25 to 50-year lease term. This becomes a very safe long-term investment. Due to the complexity of a new project, it could 2 or more years from concept to project completion.

It should be noted that Bridge is already working with the State of California General Services Administration on projects utilizing surplus state-owned property to convert to affordable housing. Bridge is very familiar with the Governor's effort to expand affordable housing.

Jim Mather, Executive Vice President and Chief Investment Officer Brad Wiblin, Executive Vice President, Business Development Bridge Housing Corporation 600 California St., Suite 900 San Francisco, CA, 94108 (415) 989-1111

## 3.2 Community Housing Developer, Inc. (CHD)

The non-profit formed in 1979 and is based in San Jose. CHD focuses on providing affordable housing in the greater Silicon Valley and fulfills its mission by developing and managing high quality housing. Since its establishment, CHD has developed 2,182 units and assisted more than 90,000 families throughout the Bay Area. It is one of the largest non-profit developers in the San Francisco Bay Area.

Anand Shah, Vice President Business Development Community Housing Developer, Inc. 96 S. Market Street, Suite 619 San Jose, CA 95113 (408) 279-7657

## 3.3 Mutual Housing California

The firm is a non-profit with 19 affordable mutual housing communities in Sacramento and Yolo Counties. The CEO, Roberto Jimenez, has broad experience with real estate management in Southern California. He was previously Executive Director of the Farmworker Housing Development Corporation in Woodburn, Oregon from 2005 to 2015.

Roberto Jimenez, CEO Mutual Housing California 3321 Power Inn Road, Suite 320 Sacramento, CA 95826 (916) 453 8400

## 4.0 Dedicated Funds

As the need for affordable housing grows throughout California, several funds have emerged in recent years that focus on providing workforce housing for low- and middle-income workers. These funds aim to offer investors solid returns while meeting a broader social mission. They commonly seek to secure funding from a combination of private, non-profit, and public agency investors. Examples of funds specifically targeting teachers housing include:

Affordable Teacher Housing Real Estate Investment Fund Geographic Region: San Francisco Bay Area (650) 658-1644 Status: Fundraising Stage

Catalyst Housing Group, Essential Housing Fund Geographic Region: Marin County 21 Ward Street, Suite 2 Larkspur, CA 94939 (415) 886-8958 Status: Established, has acquired several properties across Marin County

## 5.0 Conclusion

The Commission will have to investigate and meet with organizations such as Bridge to better understand the affordable housing sector and determine the property type and mechanism most suitable for the School Land Bank Fund. The Commission will also need to develop a term of reference for a study to conduct a more detailed evaluation, defining investment mechanisms coupled with identification of specific investment projects, in the affordable housing sector.

## APPENDIX G TYPICAL COMMERCIAL PROPERTY LEASE STRUCTURES

Property Type	Average Lease Length	Cost Passthroughs	Comments
Hotels	1 day	None directly	-
Apartments	Month-to-Month or Annual	Partially	Some utilities are paid by tenant, landlord pays real estate taxes and remaining utilities
Suburban Office	3 to 5 years	Partially under full service lease	Tenant pays increases in real estate taxes and operating expenses
CBD Retail	3 to 7 years	Yes, if triple net lease/% rents	Triple net lease structure and percentage rents provide protection
Industrial - Warehouse	3 to 7 years	None	-
Industrial - R&D	3 to 7 years	Varies	Assumes tenant invested large amount of capital
CBD Office	5 to 7 years	Partially under full service lease	Tenant pays increases in real estate taxes and operating expenses
Shopping Centers	5 to 10 years	Yes, if triple net lease/% rents	Triple net lease structure and percentage rents provide protection
Malls	5 to 10 years	Yes, if Triple net lease/% rents	Triple net lease structure and percentage rents provide protection
Net Lease	10 years	Yes	Most often full passthroughs
Ground Lease	30 to 99 years	Yes	Most often full passthroughs

Source: Rosen Consulting Group

### APPENDIX H AGRICULTURAL PROPERTY EVALUATION & ACQUISITION CHECKLIST

The diversity of crops and land within California makes it difficult to define or develop "ironclad" investment rules and a rating system for agricultural property. A property can be described and evaluated under four key subject headings:

- Property Description
- Objective Considerations
- Subjective Considerations
- Financial Evaluation

The information and answers that emerge from this property analysis should provide the basis for a purchase decision. The financial evaluation is often the principal information utilized in a decision, but it is important, particularly for long- term investments, to consider other non-financial factors. Certain factors such as soil quality, water cost and availability, environmental problems, and permanent crop plantings have a long-term impact on future income and property value.

Checklist Item	Description	User Comment	٧
Name & Address			
Nearest Town			
Property Size			
Gross Acres			
Net Irrigated Acres			
Improvements			
Buildings			
Equipment			
Topography	Topography will influence the type of irrigation systems that can be utilized		
Drainage	Good drainage of the soil and the property is important for maintaining soil quality. Some		

### **Property Description**

## Strategic Land Investment Considerations for the School Land Bank Fund

Checklist Item	Description	User Comment	٧
	poorly drained soils require tile drains.		
Open Ditch			
Tile Drains			
Principal Crops			
Annual	Most properties will have a history of producing a certain crop mix. Obtaining historical information will be useful.		
Permanent			
Pasture			

# **Objective Considerations**

Checklist Items	Description	User Comment	٧			
<b>Climate</b> If records are available, this is useful information to maintain. They should indicate crops that can be grown on the property						
Monthly Average						
Minimum Temp.						
Maximum Temp.						
Natural Hazards	Rain, hail, frost					
Soil Quality			1			
Soil Types (Name and # of acres)	Most agriculture soils have been mapped and classified.					
Soil Classes	Soils are ranked a Class 1 to 5.					
Storie Index Rating						
Hardpan	Some soils have impermeable layers known as hardpan. This layer must be broken using a 'ripping' technique, particularly when planting permanent crops.					
Land Leveled	Land is often leveled for use of furrow or flood irrigation. Land should be leveled after long periods of use. It is also done to prevent 'puddling'.					
Soil PH	The PH of the soil influences the ability of plants to utilize nutrients as well and effects how water penetrates the soil.					
Water	·	·				
Price	Price of water varies considerably throughout California from \$30 to					

Checklist Items	Description	User Comment	٧
	\$1,000. per acre/ft. Poor water quality not only harms the long-term quality of the land, but it also reduces crop yields.		
Reliability	Water reliability is a key issue in California. Understand the history of water reliability for a piece of land, especially during periods of drought.		
Irrigation Systems			
Flood	Flood or gravity systems have been the traditional, low capital method of irrigating crops.		
Sprinkler	A sprinkler system is more efficient, in terms of water use per acre, than a flood system.		
Drip	A drip system is most efficient, (in terms of water use per acre,) than a sprinkler or flood system. Some crops such as wine grapes have found that grape quality is improved with the use of drip irrigation.		
Water Sources			1
Water District (Canal)	Canal water is delivered through local districts. Local district offices can provide information of cost, reliability, etc. of the water source.		
Bureau of Reclamation Regulation	Water delivered through federal water projects is subject to a 960- acre ownership limitation per owner.		
Well			
Depth & Pump Rating	Size of pump and depth of pumping directly influence the cost required		

Checklist Items	Description	User Comment	٧
	to deliver water.		
Well Test	A standard test can be conducted on wells to evaluate the efficiency, condition, rate of water delivery, etc.		
Standing Water Level	Guide to depth and energy required to deliver water.		
Status of Water Rights	Landowners need to understand the water rights on file for specific properties.		
Number of Sources of Water and Amounts of Water	It is valuable insurance to have at least two sources of water for a specific property. For example, canal and well water.		
On-Farm Reservoirs	For farms not receiving canal water, often reservoirs are utilized to hold water for summer irrigation.		
Suitable Crops Understand suitable grown on a property	crops grown in the region. The more crops grown in the region. The more crops the more flexible and valuable the prop	ops that can be economically perty.	
Field Crops			
Permanent Crops			
Mineral Rights	Understand whether mineral rights come with a property.		
Property Zoning	Zoning influences the use of the prope	erty	
Williamson Act Conservation Easements	The Williamson Act allows agricultural property owners to keep property taxes at agricultural levels.		
Other Easements			

# Subjective Considerations

Checklist Items	Description	User Comment	V
Lessee Management			
Prior Property Operator / Manager	The prior operator / manager is a good source of information about a property.		
Experience and Past Record of Proposed Lessee and / or Manager	Prior experience and background of lessees and managers should be researched and considered.		
Financial Position of Lessee	The lessee needs to finance the operation of the property and check the financial background.		
Management Compensation Structure	Is management compensation tied to the financial returns of the lessee? Crop share and profit sharing often provide the highest returns to the lessee, particularly for permanent crops.		
Market			
Crop Prices and Trends Over the Last Five Years	Prior prices are important indicators of future trends.		
Crop Price Variability Over Five Years	Price volatility is an important indicator of future trends.		
On Farm Storage	Determine whether crop storage is required and/or available.		
Co-Op Membership	Determine whether a processing or marketing co-op is beneficial to the operation.		
Contracts	Contracts may vary for different kinds of crops. Long-term contracts are important when		

Checklist Items	Description	User Comment	V
	buying or planting permanent crops.		
Forward Contracting	Forward contracts can provide price insurance.		
Mechanization	Mechanically harvested crops place California in a more competitive position in the global marketplace.		
Harvest Labor	Harvest labor is particularly important for fruit and vegetable crops.		
Premium Prices and Quality Bonus	Lessees who obtain premium prices can provide higher returns to the lessor.		
Environmental Issues			
Environmental Assessment	New landowners may be liable for prior environmental damage to property. It is important to have a specialist examine property prior to purchase.		
Water Run-off	Landowners are liable for contamination in water run-off.		
Well Contamination	Related to water run-off, is the risk of underground contamination of neighboring wells or property.		
Environmental Hazaro	ls		
Frost	Certain crops are subject to spring frosts or winter freezes. Note that crop insurance is available for some crops. Citrus is a prime example of a crop subject to freezing temperatures.		

Checklist Items	Description	User Comment	V
Disease	Disease can destroy crops. Grapes in California are now facing the threat of the Glassy Winged Sharpshooter. Determine relative disease risks for crops.		
Wind	Wind scaring can create a problem for product where appearance is important.		
Flooding	Determine whether the property is located on a flood plain.		
Hail	Damage from hail can also damage product. Understand the potential hail conditions in the region.		

## Financial Evaluation Checklist

Checklist Items	Description	User Comment	٧
Purchase Price			
Cost of Additional Improvements	Determine whether the property is for sale because the property needs improvements, or the crop changed. Certain crops or crop varieties pass their prime production phase and become obsolete.		
Cost Per Acre Benchmarking	A key part of an appraisal is to evaluate the price in relation to nearby similar properties.		
Five-Year Gross Crop Revenue	Determine expected gross revenue for a crop over a time horizon of at least five years.		
Five-Year Historical Land Rent and / or Income	If possible, locate financial records and financial results for a property for use in evaluation.		

Checklist Items	Description	User Comment	٧
Overhead Expenses	Deduct expected overhead expense from the gross lease payments.		
Property Taxes			
Management Fee			
Depreciation	Assets such as wells and permanent crops depreciate. At some point they need to be replaced. Depreciation should factor into agricultural land evaluation.		
Permanent Crop			
Equipment	(The lessee or operator typically owns farm equipment.)		
Irrigation System	Туре		
Financial Projection	5 to 10 years		
Projected Net Income	Projections are for net income are most useful if projected over a 10- year period (as the discount factor has a minimal impact after 10 years)		

### **Other Property Information Needs**

### Location

- Assessor's parcel numbers
- County, section, township, and range distance to nearest town, city, and major airport
- Road conditions to and on the parcel
- Easements to and over the parcel

### Soils

- Series
- ASCS description Productivity class
- Soil profile rooting depth, chemistry texture
- Water table depth

#### Water

- Irrigation District quantity, quality, assessments, cost, rules, conveyance system, delivery priority, availability confidence and boundary map of the district
- Wells quantity, quality, size, age, log, pump efficiency, drawdown, replacement cost.
- Rainfall weekly, monthly, and annually with isobar map for the area.
- Irrigation system map mainline and lateral locations and sizes, etc.
- California Groundwater Sustainability Agency (GSA) boundary map, neighboring GSAs, and irrigation districts

### Climate

- Hourly temperatures
- Daily min-max or daily average temperatures monthly chilling hours between 32-45° F

### **Historical Crops**

• Block map yield quality

### **Permanent Plantings**

- Variety / clone / rootstock
- Pre-plant ground preparations (depth and type of tillage)
- Soil amendments applied (type and quantity)

### **Government Impacts**

- Program acres
- Program yields
- Historical payments

• Bureau of Reclamation rules regarding zoning

#### Taxes

- Property tax rate
- Property tax deferral program description and, if applicable, assessments

#### Illustrations

- Aerial photo flood zone map
- Topographical map
- Drainage map
- Soil map with soil descriptions
- Photos of buildings

#### Other

- Irrigation equipment and buildings
- Existing leases / offtake agreements
- Storage facilities
- Phase I ESA

### APPENDIX I DATA TABLES FOR FIGURES FOR ACCESSIBILITY

### Table 41. Data in Figure 1 NCREIF Farmland Index

Year	Total Return	Income Return	Appreciation Return
2005	33.90%	11.14%	21.74%
2006	21.15%	8.59%	11.95%
2007	15.90%	8.36%	7.13%
2008	15.84%	6.99%	8.46%
2009	6.32%	5.50%	0.78%
2010	8.81%	7.32%	1.44%
2011	15.16%	6.96%	7.87%
2012	18.58%	8.08%	9.99%
2013	20.91%	8.73%	11.50%
2014	12.63%	7.92%	4.47%
2015	10.35%	5.69%	4.48%
2016	7.09%	5.15%	1.86%
2017	6.19%	4.61%	1.54%
2018	6.74%	4.47%	2.19%
2019	4.81%	4.41%	0.39%
2020	3.08%	3.29%	-0.20%

Year	Total Return	Income Return	Appreciation Return
2005	55.700%	23.360%	30.070%
2006	24.620%	10.690%	13.050%
2007	12.820%	9.600%	2.960%
2008	12.500%	7.010%	5.290%
2009	5.590%	7.030%	-1.420%
2010	11.960%	12.240%	-0.210%
2011	16.120%	9.130%	6.720%
2012	16.980%	11.620%	5.070%
2013	32.050%	16.690%	13.980%
2014	22.980%	12.790%	9.480%
2015	18.470%	7.960%	9.970%
2016	10.940%	6.650%	4.050%
2017	8.040%	6.160%	1.810%
2018	8.660%	6.340%	2.230%
2019	5.480%	6.270%	-0.780%
2020	2.570%	3.460%	-0.860%

Table 43. Data in	Figure 3 - NCREIF	Annual Cror	oland Pacific	West Index
	Inguic 5 New			WCSt mack

Year	Total Return	Income Return	Appreciation Return
2005	40.620%	4.290%	35.250%
2006	10.070%	3.790%	6.110%
2007	19.030%	3.630%	15.010%
2008	9.310%	3.110%	6.070%
2009	1.970%	3.680%	-1.670%
2010	5.580%	4.740%	0.820%
2011	7.970%	3.160%	4.700%
2012	7.160%	4.190%	2.890%
2013	21.960%	4.750%	16.670%
2014	12.000%	3.410%	8.380%
2015	10.500%	3.240%	7.100%
2016	14.530%	3.720%	10.530%
2017	4.650%	3.630%	0.990%
2018	5.010%	3.950%	1.030%
2019	3.880%	3.710%	0.160%
2020	7.680%	3.920%	3.650%

# Table 44. Data in Figure 4 - NCREIF Permanent Cropland Pacific West Index

Year	Total Return	Income Return	Appreciation Return
1992	8.210%	5.020%	3.080%
1993	14.040%	11.920%	2.270%
1994	6.710%	7.150%	-0.470%
1995	9.930%	10.930%	-0.870%
1996	9.380%	8.450%	0.920%
1997	8.280%	9.480%	-1.080%
1998	9.290%	5.680%	3.500%
1999	10.890%	6.290%	4.480%
2000	11.830%	7.660%	3.970%
2001	-3.490%	3.860%	-7.210%
2002	9.530%	10.190%	-0.620%
2003	9.690%	9.440%	0.270%
2004	20.200%	18.390%	7.470%
2005	59.190%	27.780%	28.970%
2006	27.550%	11.960%	14.470%
2007	11.760%	10.770%	0.860%
2008	13.040%	7.800%	5.090%
2009	6.480%	7.920%	-1.410%
2010	13.650%	14.230%	-0.470%
2011	19.950%	11.870%	7.730%
2012	21.250%	14.820%	6.010%
2013	36.200%	21.710%	12.960%

## Strategic Land Investment Considerations for the School Land Bank Fund

Year	Total Return	Income Return	Appreciation Return
2014	24.730%	14.620%	9.380%
2015	20.230%	8.910%	10.660%
2016	10.330%	7.370%	2.770%
2017	8.830%	6.750%	2.000%
2018	9.530%	6.900%	2.510%
2019	5.790%	6.710%	-0.910%
2020	1.600%	3.360%	-1.720%

Table 45. Data in Figure 7 - U.S. Average Changes in Rent

Year	Quarter	Net Lease	CBD Office	Suburban Office	Industrial Warehouse	Regional Mall	Power Center
2003	1Q	2.7%	0.7%	0.1%	1.3%	2.6%	2.5%
2003	2Q	2.7%	0.5%	0.0%	1.5%	2.7%	2.4%
2003	3Q	2.6%	0.6%	0.0%	1.5%	2.5%	2.4%
2003	4Q	2.6%	0.7%	0.2%	1.6%	2.5%	2.4%
2004	1Q	2.6%	0.8%	0.2%	1.6%	2.5%	2.4%
2004	2Q	2.8%	0.9%	0.4%	1.7%	2.5%	2.6%
2004	3Q	2.1%	0.9%	0.5%	1.5%	2.5%	2.8%
2004	4Q	2.2%	1.1%	0.7%	1.6%	2.5%	2.5%
2005	1Q	1.9%	1.2%	0.7%	1.6%	2.5%	2.5%
2005	2Q	2.2%	1.2%	0.9%	1.8%	2.5%	2.5%
2005	3Q	2.2%	1.5%	1.4%	2.0%	2.5%	2.6%
005	4Q	2.2%	2.1%	1.7%	2.0%	2.8%	2.6%
2006	1Q	2.2%	2.4%	1.9%	2.2%	2.8%	2.9%

Year	Ouarter	Net	CBD	Suburban	Industrial	Regional	Power
		Lease	Office	Office	Warehouse	Mall	Center
2006	2Q	2.2%	2.9%	2.3%	2.3%	2.8%	2.9%
2006	3Q	2.7%	3.0%	2.4%	2.4%	3.0%	3.2%
2006	4Q	2.7%	3.3%	2.7%	2.7%	2.9%	3.0%
2007	1Q	2.7%	3.5%	2.8%	2.7%	2.9%	3.1%
2007	2Q	2.8%	3.9%	3.1%	2.8%	3.0%	3.1%
2007	3Q	2.9%	4.1%	3.1%	3.0%	3.0%	2.9%
2007	4Q	3.0%	4.0%	3.1%	3.2%	2.9%	2.9%
2008	1Q	2.3%	4.1%	3.1%	3.2%	2.6%	2.9%
2008	2Q	2.3%	3.6%	2.6%	2.9%	2.6%	2.4%
2008	3Q	2.3%	3.2%	2.4%	2.9%	2.5%	2.3%
2008	4Q	2.0%	2.2%	1.9%	2.1%	1.9%	1.4%
2009	1Q	0.9%	0.6%	-0.3%	1.1%	1.7%	0.0%
2009	2Q	0.8%	-1.4%	-1.2%	0.2%	0.9%	0.3%
2009	3Q	0.5%	-1.9%	-2.4%	-0.3%	0.5%	-1.5%
2009	4Q	0.3%	-2.0%	-2.4%	-0.9%	0.3%	-1.7%
2010	1Q	0.6%	-1.0%	-2.5%	-0.9%	-0.2%	-1.7%
2010	2Q	1.5%	-0.6%	-2.2%	-0.4%	0.6%	-0.7%
2010	3Q	1.9%	-0.2%	-0.6%	0.0%	0.6%	-0.7%
2010	4Q	1.4%	0.6%	-0.2%	0.0%	0.7%	-0.7%
2011	1Q	1.1%	1.3%	0.4%	0.4%	1.3%	0.6%
2011	2Q	1.1%	1.4%	0.6%	0.9%	1.6%	0.8%
2011	3Q	1.1%	2.0%	1.3%	1.4%	1.5%	0.8%

Voor	Quartar	Net CBD Suburban Industrial				Regional	Power
fear	Quarter	Lease	Office	Office	Warehouse	Mall	Center
2011	4Q	1.0%	2.1%	1.3%	1.2%	1.5%	0.8%
2012	1Q	0.8%	2.2%	1.5%	1.5%	1.6%	1.0%
2012	2Q	0.8%	2.6%	1.4%	1.7%	1.6%	1.2%
2012	3Q	0.9%	2.6%	1.4%	1.9%	2.0%	1.1%
2012	4Q	0.9%	2.6%	1.6%	1.9%	2.6%	1.2%
2013	1Q	1.4%	2.4%	1.4%	1.9%	2.8%	1.2%
2013	2Q	1.4%	2.4%	1.6%	2.4%	3.1%	1.2%
2013	3Q	1.4%	2.6%	1.6%	2.4%	3.1%	1.2%
2013	4Q	1.4%	2.6%	1.8%	2.4%	2.8%	1.2%
2014	1Q	1.9%	2.6%	2.1%	2.4%	3.0%	1.2%
2014	2Q	1.9%	2.4%	2.2%	2.5%	3.0%	1.4%
2014	3Q	1.9%	2.4%	2.5%	2.5%	2.7%	1.4%
2014	4Q	1.9%	2.6%	2.6%	2.6%	2.6%	1.7%
2015	1Q	1.9%	2.4%	2.6%	2.7%	2.7%	1.7%
2015	2Q	1.8%	2.4%	2.6%	3.0%	2.9%	1.8%
2015	3Q	1.8%	2.9%	2.9%	2.8%	3.0%	1.8%
2015	4Q	1.8%	3.0%	2.9%	3.0%	2.8%	1.9%
2016	1Q	1.8%	2.9%	2.8%	3.1%	2.7%	2.0%
2016	2Q	1.8%	2.9%	2.3%	2.4%	2.7%	2.0%
2016	3Q	1.8%	2.6%	2.3%	2.5%	2.9%	2.0%
2016	4Q	1.7%	2.7%	2.1%	2.6%	2.6%	2.0%
2017	1Q	1.7%	2.6%	2.0%	2.5%	2.6%	2.0%

Year	Quarter	Net Lease	CBD Office	Suburban Office	Industrial Warehouse	Regional Mall	Power Center
2017	2Q	1.9%	2.6%	2.0%	2.6%	2.5%	2.0%
2017	3Q	1.9%	2.5%	2.0%	2.6%	2.5%	2.0%
2017	4Q	1.9%	2.6%	1.9%	2.5%	2.4%	1.7%
2018	1Q	2.0%	2.5%	1.9%	2.3%	2.4%	1.7%
2018	2Q	2.0%	2.4%	1.9%	2.4%	2.4%	1.6%
2018	3Q	2.0%	2.4%	1.9%	2.6%	2.3%	1.9%
2018	4Q	2.0%	2.5%	1.9%	2.8%	2.3%	1.9%
2019	1Q	1.7%	2.5%	1.9%	2.8%	1.6%	1.9%
2019	2Q	1.6%	2.6%	1.9%	2.8%	1.3%	2.0%
2019	3Q	1.3%	2.4%	1.9%	2.8%	1.2%	1.9%
2019	4Q	1.2%	2.5%	1.9%	2.8%	1.1%	1.8%
2020	1Q	1.3%	2.4%	2.0%	2.7%	1.1%	1.5%
2020	2Q	-0.2%	0.5%	1.0%	0.6%	-1.6%	-0.2%
2020	3Q	-0.6%	1.0%	0.8%	0.6%	-1.6%	-0.4%
2020	4Q	-0.9%	60.0%	0.8%	0.9%	-1.8%	0.0%

 Table 46. Investment Comparison: Agricultural Land Categories

Characteristics (Economic, Environment, Soil and Social)	Measurement Metric	Commission Criteria/Goals	Ground Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Economic: Yield	Cap Rate from NCREIF Data	Annual Cash Return Above 2% and Appreciation at or Above Inflation	2% to 4%	5% to 7%	8% to 12%	Minimal
Economic: Volatility	Standard Deviation	Stable Revenue Generation Through Economic Cycles	Low	Low	Medium	High
<b>Economic</b> : Total Investment Pool in Designated Capital Range	Variable	Stable Investment Pool in \$5 to \$15 million range	High	Limited	Limited	Medium
<b>Economic</b> : Credit Tenant Pool in Designated Capital Range	Establish Farm Owner/Managers and Professional Managers	Minimum 10 Years' Experience	High	High	High	Low
Economic: Lease Terms	Average Lease Term	Long-Term with 45- Year Maximum	5 to 10 Years	20 to 25 Years	20 to 30 Years	Unknown
Economic: Management Intensity	Qualitative Score Based on Lease Terms	Minimal Management Role	Low	Low	Medium	Medium
Environment: Climate	Adaptability of Crop	Minimal Impact from Climate Change	Property Specific	Property Specific	Property Specific	Property Specific

Characteristics (Economic, Environment, Soil and Social)	Measurement Metric	Commission Criteria/Goals	Ground Net Lease	Land Net Lease Under Permanent Crop	Land and Permanent Crop Net Lease	Unimproved Range Land
Soil: Soil Quality	Soil Quality	Sustainable, Class 1 or 2 Soils Preferred	Property Specific	Property Specific	Property Specific	Property Specific
Soil: Water	Availability and Quality	Sustainable in Periods of Drought	Property Specific	Property Specific	Property Specific	Property Specific
Soil: Hazards	Historical Records of Hazards	Minimize Risk	Property Specific	Property Specific	Property Specific	Property Specific
<b>Social</b> : Farm Worker Availability	Agriculture Extension Service Estimate	Preference for Mechanized Crops	Not a Concern	Not a Concern	Consideration	Not a Concern
<b>Social</b> : Farm Worker Housing	Agriculture Extension Service Estimate	Local Availability	County Specific	County Specific	County Specific	Not a Concern

# Table 47. Investment Comparison: Commercial Categories

Characteristics (Economic, Environmental or Social)	Measurement Metric	Commission Criteria/Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
	Cap Rate from Real	Annual Cash Return Above 2% and				Specific Data Unavailable, But Loss Than
Economic: Yield	2020 to First Half 2021	Above Inflation	High-5%	Low-5%	High-5%	5%
Economic: Volatility	NCREIF Income Return Standard Deviation 2004 To 2019	Stable Revenue Generation Through Economic Cycles	0.8%	0.9%	0.9%	Specific Data Unavailable, But Less Than 5%
<b>Economic</b> : Total Investment Pool in Designated Capital Range	RCA Deal Volume (2010 to 2020)	Sizable Investment Pool in \$5 to \$15 Million Range with Limited Competition from Institutional Investors	\$9.7 Billion in 1,226 Deals	\$10.9 Billion in 1,249 Deals	\$4.2 Billion in 475 Deals	Less Than \$6 Billion
<b>Economic</b> : High Credit Tenant Pool in Designated Capital Range	Qualitative Based on RCA Database for \$5 to \$15 Million Historical Transactions	Sizable Investment Pool in \$5 to \$15 Million Range with Desirable, Low-Risk Tenants	Large	Medium	Medium	Small
<b>Economic</b> : Lease Terms	Avg. Lease Term	Long-Term with 49- Year Maximum	10 to 25 Years	10 to 25 Years	10 to 25 Years	50 to 99 Years
<b>Economic</b> : Management	Qualitative Score Based on Operational	Minimize	Low	Low	Low	Very Low

Characteristics (Economic, Environmental or Social)	Measurement Metric	Commission Criteria/Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
Intensity	Obligations Related to Lease Structure	Management Role				
			Property	Property	Property	Property
			Specific, But	Specific, But	Specific, But	Specific, But
			Major Impacts	Major Impacts	Major Impacts	Major Impacts
			Can Include:	Can Include:	Can Include:	Can Include:
			Positive:	Positive:	Positive:	Positive:
			Public Transit	Public Transit	Public Transit	Public Transit
			and	and	and	and
			Walkability	Walkability	Walkability	Walkability
			Enhancement,	Enhancement,	Enhancement,	Enhancement,
			Green	Green	Green	Green
			Building	Building	Building	Building
			Practices	Practices	Practices	Practices
			Which	Which	Which	Which
			Promote	Promote	Promote	Promote
			Resource	Resource	Resource	Resource
			Usage	Usage	Usage	Usage
			Efficiencies	Efficiencies	Efficiencies	Efficiencies
			and Worker	and Worker	and Worker	and Worker
			Health	Health	Health	Health
			Negative:	Negative:	Negative:	Negative:
	Qualitative Score		Traffic	Traffic	Traffic	Traffic
	Based on LEED		Congestion,	Congestion,	Congestion,	Congestion,
Environmental:	Certification and Other	Minimize Carbon	Production-	Production-	Production-	Production-
Energy Consumption /	Environmental Impact	Footprint, Promote	Related	Related	Related	Related
CO2 Emissions	Factors	Sustainable Practices	Emissions,	Emissions,	Emissions,	Emissions,
			Inefficient	Inefficient	Inefficient	Inefficient

Characteristics (Economic, Environmental or Social)	Measurement Metric	Commission Criteria/Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
			Energy Usage	Energy Usage	Energy Usage	Energy Usage
<b>Social</b> : Jobs Impact	Qualitative	Promote High-Quality Job Creation	Tenant Specific, But Sector Has Weaker Potential	Tenant Specific, But Sector Has Moderate Potential	Tenant Specific, But Sector Has Stronger Potential	Tenant Specific, But Sector Has Stronger Potential
			Property and Market / Location Specific, But Major Impacts Can Include:	Property and Market / Location Specific, But Major Impacts Can Include:	Property and Market / Location Specific, But Major Impacts Can Include:	Property and Market / Location Specific, But Major Impacts Can Include:
			Positive: Provides Needed Goods / Services for Underserved Community	Positive: Provides Needed Goods / Services for Underserved Community	Positive: Provides Needed Goods / Services for Underserved Community	Positive: Provides Needed Goods / Services for Underserved Community
<b>Social</b> : Affordability / Community Impact	Qualitative	Provide and Enhance Benefits to Local Community	Negative: Contributes to Gentrification by Diminishing Housing Affordability	Negative: Contributes to Gentrification by Diminishing Housing Affordability	Negative: Contributes to Gentrification by Diminishing Housing Affordability	Negative: Contributes to Gentrification by Diminishing Housing
Characteristics (Economic, Environmental or Social)	Measurement Metric	Commission Criteria/Goals	Single Tenant Net Lease Retail	Single Tenant Net Lease Industrial	Single Tenant Net Lease Office	Ground Net Lease
--	--------------------	------------------------------	--------------------------------------	--	--------------------------------------	---------------------------------------
			Local Businesses	Local Businesses	Local Businesses	or Pricing Out Local Businesses

Characteristics (Economic, Environmental or Social)	Subset	Specifics
Economic	N/A	NCREIF Cap Rate
Economic	N/A	NCREIF Income Return
Economic	N/A	
Economic	N/A	Crop Market Growth Projections, Subjective
Economic	N/A	Crop Prospects, Subjective
Economic	N/A	Management, Subjective
Environmental	Location	Close To Same or Similar Productive Crops
Environmental	Location	Climate Fit to Targeted Crop, Subjective
Environmental	Location	Crop Yield Per Acre, State and County Information
Environmental	Location	Government Interference/Control, Federal Gov.
Environmental	Soil	Soil Quality, Appraisal
Environmental	Soil	Soil Condition, Appraisal
Environmental	Soil	Soil Depth, Appraisal
Environmental	Soil	Soil Texture, Appraisal
Environmental	Water	Water Sources, Surface, Well, SGMA Data
Environmental	Water	Affordability, Total Water Cost

# Table 48. Property Selection Tool Worksheet: Agricultural Investments

Characteristics (Economic, Environmental or Social)	Subset	Specifics
Environmental	Water	Reliability History, Historical, Local Irrigation District
Environmental	Water	Irrigation System, Type
Environmental	Hazards	Hail Or Frost Risk, Wind Damage, Flooding or Major Diseases, Historical Records
Social	N/A	Farm Worker Availability, Subjective
Social	N/A	Farm Worker Housing, Subjective

#### **Property Selection Tool Worksheet: Agricultural Investments**

This worksheet has space at the top to fill in the following information about an investment:

- Property:
- Asking Price:
- Size (Acres):
- Market:
- Property Type:
- Crop:
- Tenant:

Next the worksheet contains a table which details the characteristics of a property (economic, environmental and social) broken down by subset if applicable. A quality parameter is specified for each variable (poor, good and excellent.)

Table 49. Breakdown of Property Selection Tool Worksheet Fields: Agricultural Investments

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality
Economic	N/A	Cap Rate	Below Market Average	At Market Average	Above Market Average
Economic	N/A	Total Return	Below Market Average	At Market Average	Above Market Average
Economic	N/A	Volatility	Below Market Average	At Market Average	Above Market Average

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality
Economic	N/A	Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%
Economic	N/A	Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers
Economic	N/A	Management	Less Than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience
Environmental	Location	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less
Environmental	Location	Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition
Environmental	Location	Crop Yield	Below State Average by 15%	State Average Plus or Minus 15%	Above State Average by 15% or More
Environmental	Location	Government Interference/Control	-	Government Controls on Price/Volume/Payments	Free Market
Environmental	Soil	Soil Quality	Class 4 or Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2
Environmental	Soil	Soil Condition	-	Only for Row Crops	For Both Row and Permanent
Environmental	Soil	Soil Depth	2 Ft. or Less	2 Ft. to 3 Ft.	3 Ft. or More
Environmental	Soil	Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality
Environmental	Water	Water Sources	1 Source, but Unreliable	1 Reliable Source	2 Reliable Sources
Environmental	Water	Affordability	\$80+ Acre/Ft.	\$40 to \$80 Acre/Ft.	Below \$80 Acre/Ft.
Environmental	Water	Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year
Environmental	Water	Irrigation System	BLANK	Flood Irrigation	Drip or Sprinkler Irrigation
Environmental	Hazards	Hail or Frost Risk, Wind Damage, Flooding or Major Diseases	History Of Problem in Last 10 Years	-	No History Last 10 Years
Social	N/A	Farm Worker Availability	N/A	Shortages	Acceptable/Available
Social	N/A	Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm

## Property Selection Tool Worksheet Summary Results: Agricultural Investments (Section 8)

Table 50. Data Fields for Property Selection Tool: Agricultural Investments Worksheet

Characteristic (Economic, Environmental or Social)	Subset	Measurement	Score (1-5)	Weight (0-100%)	Weighted Score
Economic	N/A	Cap Rate	To be input	To be input	To be input
Economic	N/A	Total Return	To be input	To be input	To be input
Economic	N/A	Volatility	To be input	To be input	To be input
Economic	N/A	Crop Market Growth Projections	To be input	To be input	To be input
Economic	N/A	Crop Market Prospects	To be input	To be input	To be input
Economic	N/A	Management	To be input	To be input	To be input
Environmental	Location	Close to Same or Similar Productive Crops	To be input	To be input	To be input
Environmental	Location	Climate Fit to Targeted Crops	To be input	To be input	To be input
Environmental	Location	Crop Yield	To be input	To be input	To be input
Environmental	Location	Government Interference/Control	To be input	To be input	To be input
Environmental	Soil	Soil Quality	To be input	To be input	To be input

Characteristic (Economic, Environmental or Social)	Subset	Measurement	Score (1-5)	Weight (0-100%)	Weighted Score
Environmental	Soil	Soil Condition	To be input	To be input	To be input
Environmental	Soil	Soil Depth	To be input	To be input	To be input
Environmental	Soil	Soil Texture	To be input	To be input	To be input
Environmental	Water	Water Sources	To be input	To be input	To be input
Environmental	Water	Affordability	To be input	To be input	To be input
Environmental	Water	Reliability History	To be input	To be input	To be input
Environmental	Water	Irrigation System	To be input	To be input	To be input
Environmental	Hazards	Hail or Frost Risk, Wind Damage, Flooding or Major Diseases	To be input	To be input	To be input
Social	N/A	Farm Worker Availability	To be input	To be input	To be input
Social	N/A	Farm Worker Housing	To be input	To be input	To be input
	To be input				

Weights from 0%-100% and property scores from 1-5 are entered into the Excel tool based on defined parameters. Final score is calculated based on individual variable scores

#### Data in Figure 8 - Property Selection Tool Worksheet: Commercial Investments

This worksheet has space at the top to fill in the following information about an investment:

- Property:
- Asking Price:
- Size (Sq. Ft.):
- Market:
- Property Type:
- Sector (Industry):
- Tenant:

Next the worksheet contains a table which details the considerations of a property (economic, environmental and social) broken down by subset if applicable. A quality parameter is specified for each variable (poor, good and excellent.)

Table 51. Breakdown of Property Selection Tool Worksheet Fields: Commercial

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality
Economic	Financial	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average
Economic	Financial	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average
Economic	Financial	NCREIF Income Return Volatility	Below Market Average	At Market Average	Above Market Average
Economic	Financial	Years Left on Lease/Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years
Economic	Financial	S&P Tenant Credit Rating	Below High Grade	AA+ to AA- (High	AAA (Prime)

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality
				Grade)	
Economic	Market- Level	Tenant Industry	Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth
Economic	Market- Level	Market Employment Growth	Below State Average	At State Average	Above State Average
Economic	Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average
Economic	Market- Level	Market Rent Growth	Below State Average	At State Average	Above State Average
Economic	Market- Level	Market Vacancy Rate	Above Market Average	At Market Average	Below Market Average
Economic	Market- Level	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints
Economic	Property- Level	Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re-Tenant	Prime Location with Best Access/Irreplaceable Sites
Economic	Property- Level	Building Specialization	High-Level Of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to	Virtually No Specialization and Expense to Upgrade

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality
				Upgrade	
Environmental	N/A	LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")
Environmental	N/A	Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*
Environmental	N/A	Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*
Environmental	N/A	Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*
Social	N/A	Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*
Social	N/A	Gentrification Impact	Negative Impact	No Impact	Positive Impact*
Social	N/A	Jobs Impact	Negative Impact	No Impact	Positive Impact*
Social	N/A	Other Social Impacts	Negative Impact	No Impact	Positive Impact*

\*Based on qualitative assessment

## Property Selection Tool Summary Results: Commercial Investments (Section 8)

## Table 52. Data Fields for Property Selection Tool Worksheet: Commercial Investments

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Score (1-5)	Weight (0-100%)	Weighted Score
Economic	Financial	RCA Cap Rate	To be input	To be input	To be input
Economic	Financial	NCREIF Income Return	To be input	To be input	To be input
Economic	Financial	NCREIF Income Return Volatility	To be input	To be input	To be input
Economic	Financial	Years Left on Lease / Renewal Provisions	To be input	To be input	To be input
Economic	Financial	S&P Tenant Credit Rating	To be input	To be input	To be input
Economic	Market- Level	Tenant Industry	To be input	To be input	To be input
Economic	Market- Level	Market Employment Growth	To be input	To be input	To be input
Economic	Market- Level	Market Employment Growth Volatility	To be input	To be input	To be input
Economic	Market- Level	Market Rent Growth	To be input	To be input	To be input
Economic	Market- Level	Market Vacancy Rate	To be input	To be input	To be input

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Score (1-5)	Weight (0-100%)	Weighted Score
Economic	Market- Level	Market Supply Constraints	To be input	To be input	To be input
Economic	Property- Level	Building Location Quality	To be input	To be input	To be input
Economic	Property- Level	Building Specialization	To be input	To be input	To be input
Environmental	N/A	LEED Certification	To be input	To be input	To be input
Environmental	N/A	Public Transit / Walkability Impact	To be input	To be input	To be input
Environmental	N/A	Traffic Congestion Impact	To be input	To be input	To be input
Environmental	N/A	Other Environmental Impacts	To be input	To be input	To be input
Social	N/A	Benefits to Underserved Community	To be input	To be input	To be input
Social	N/A	Gentrification Impact	To be input	To be input	To be input
Social	N/A	Jobs Impact	To be input	To be input	To be input
Social	N/A	Other Social Impacts	To be input	To be input	To be input

Weights from 0%-100% and property scores from 1-5 are entered into the Excel tool based on defined parameters. Final score is calculated based on individual variable scores.

## Data Input for Property Selection Tool: Agricultural Investments (Section 8)

This table has space at the top to fill in the following information about an investment:

- Property:
- Asking Price:
- Size (Acres):
- Market:
- Property Type:
- Crop:
- Tenant:

The total weight of all the economic characteristics (6 count) is 40%.

The total weight of all the environmental characteristics (13 count) is 55%.

The total weight of all the social characteristics (2 count) is 5%.

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

Table 53. Data for Property Selection Tool Worksheet: Agricultural

Characteristics	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	N/A	Cap Rate	Below Market Average	At Market Average	Above Market Average	To be input	10%	To be input
Economic	N/A	Total Return	Below Market Average	At Market Average	Above Market Average	To be input	5%	To be input
Economic	N/A	Volatility	Below Market	At Market	Above Market	To be	5%	To be

Characteristics	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
			Average	Average	Average	input		input
Economic	N/A	Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%	To be input	5%	To be input
Economic	N/A	Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers	To be input	5%	To be input
Economic	N/A	Management	Less Than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience	To be input	10%	To be input
Environmental	Location	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less	To be input	3%	To be input
Environmental	Location	Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition	To be input	5%	To be input
Environmental	Location	Crop Yield	Below State Average by 15%	State Average Plus or Minus 15%	Above State Average by 15% or More	To be input	10%	To be input
Environmental	Location	Government Interference / Control	-	Government Controls on Price / Volume / Payments	Free Market	To be input	1%	To be input
Environmental	Soil	Soil Quality	Class 4 or Lower	Class 1, 2, 3 and	Mix Class 1 to 2	To be	4%	To be

Characteristics	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
				4		input		input
Environmental	Soil	Soil Condition	-	Only for Row Crops	For Both Row and Permanent	To be input	4%	To be input
Environmental	Soil	Soil Depth	2 Ft. or Less	2 Ft. to 3 Ft.	3 Ft. or More	To be input	4%	To be input
Environmental	Soil	Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay	To be input	2%	To be input
Environmental	Water	Water Sources	1 Source, but Unreliable	1 Reliable Source	2 Reliable Sources	To be input	9%	To be input
Environmental	Water	Affordability	\$80+ Acre/Ft.	\$40 to \$80 Acre/Ft.	Below \$40 Acre/Ft.	To be input	5%	To be input
Environmental	Water	Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year	To be input	3%	To be input
Environmental	Water	Irrigation System	-	Flood Irrigation	Drip or Sprinkler Irrigation	To be input	2%	To be input
Environmental	Hazards	Hail or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years	-	No History Last 10 Years	To be input	3%	To be input
Social	N/A	Farm Worker	-	Shortages	Acceptable /	To be	3%	To be

Characteristics	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
		Availability			Available	input		input
Social	N/A	Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm	To be input	2%	To be input
			-		Total Score	To be input	100%	To be input

### Data Input for Property Selection Tool Worksheet: Commercial Investments (Section 8)

This table has space at the top to fill in the following information about an investment:

- Property:
- Asking Price:
- Size (Sq. Ft.):
- Market:
- Property Type:
- Sector (Industry):
- Tenant:

The total weight of all the economic characteristics (13 count) is 70%.

The total weight of all the environmental characteristics (4 count) is 15%.

The total weight of all the social characteristics (4 count) is 15%.

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

Table 54. Data for Property Selection Tool Worksheet: Commercial

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Financial	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average		10%	
Economic	Financial	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average		8%	

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Financial	NCREIF Income Return Volatility	Below Market Average	At Market Average	Above Market Average		1%	
Economic	Financial	Years Left on Lease / Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years		7%	
Economic	Financial	S&P Tenant Credit Rating	Below High Grade	AA+ to AA- (High Grade)	AAA (Prime)		10%	
Economic	Market- Level	Tenant Industry	Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth		5%	
Economic	Market- Level	Market Employment Growth	Below State Average	At State Average	Above State Average		5%	
Economic	Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average		5%	
Economic	Market- Level	Market Rent Growth	Below State Average	At State Average	Above State Average		1%	
Economic	Market- Level	Market Vacancy Rate	Above Market Average	At Market Average	Below Market Average		1%	

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Market- Level	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints		2%	
Economic	Property- Level	Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re- Tenant	Prime Location with Best Access / Irreplaceable Sites		10%	
Economic	Property- Level	Building Specialization	High-Level Of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade		5%	
Environmental	N/A	LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")		4%	
Environmental	N/A	Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*		4%	
Environmental	N/A	Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*		4%	

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Environmental	N/A	Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*		3%	
Social	N/A	Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*		4%	
Social	N/A	Gentrification Impact	Negative Impact	No Impact	Positive Impact*		4%	
Social	N/A	Jobs Impact	Negative Impact	No Impact	Positive Impact*		4%	
Social	N/A	Other Social Impacts	Negative Impact	No Impact	Positive Impact*		3%	
					Total Score		100%	

#### Avenue 16 Almonds Information Data in Property Selection Tool Worksheet: Agricultural Investments (Appendix C)

- Asking Price: \$4,250,000
- Size (Acres): 320
- Market: Agricultural Land
- Property Type: Permanent Type
- Crop: Almonds
- Tenant: None

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

The total weight of all the economic characteristics (6 count) is 40%. The weighted score for this property is 1.80

The total weight of all the environmental characteristics (13 count) is 55%. The weighted score for this property is 2.09.

The total weight of all the social characteristics (2 count) is 5%. The weighted score for this property is 0.21.

The TOTAL score for this property is 4.10.

Table 55. Avenue 16 Almonds Data in Property Selection Tool Worksheet

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	N/A	Cap Rate	Below Market Average	At Market Average	Above Market Average	5	10%	0.50
Economic	N/A	Total Return	Below Market Average	At Market Average	Above Market Average	5	5%	0.25

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	N/A	Volatility	Below Market Average	At Market Average	Above Market Average	3	5%	0.15
Economic	N/A	Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%	3	5%	0.15
Economic	N/A	Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers	5	5%	0.25
Economic	N/A	Management	Less Than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience	5	10%	0.50
Environmental	Location	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less	5	3%	0.15
Environmental	Location	Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition	5	5%	0.25
Environmental	Location	Crop Yield	Below State Average by 15%	State Average Plus or Minus 15%	Above State Average by 15% or More	3	10%	0.30
Environmental	Location	Government Interference / Control	-	Government Controls on Price / Volume	Free Market	3	1%	0.05

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
				/ Payments				
Environmental	Soil	Soil Quality	Class 4 or Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2	3	4%	0.12
Environmental	Soil	Soil Condition	-	Only for Row Crops	For Both Row and Permanent	5	4%	0.20
Environmental	Soil	Soil Depth	2 Ft. or Less	2 Ft. to 3 Ft.	3 Ft. or More	5	4%	0.20
Environmental	Soil	Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay	3	2%	0.06
Environmental	Water	Water Sources	1 Source, but Unreliable	1 Reliable Source	2 Reliable Sources	3	9%	0.27
Environmental	Water	Affordability	\$80+ Acre/Ft.	\$40 to \$80 Acre/Ft.	Below \$40 Acre/Ft.	3	5%	0.15
Environmental	Water	Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year	3	3%	0.09
Environmental	Water	Irrigation System	-	Flood Irrigation	Drip or Sprinkler Irrigation	5	2%	0.10
Environmental	Hazards	Hail or Frost Risk, Wind Damage, Flooding or	History of Problem in Last 10 Years	-	No History Last 10 Years	5	3%	0.15

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
		Major Diseases						
Social	N/A	Farm Worker Availability	-	Shortages	Acceptable / Available	5	5%	0.15
Social	N/A	Farm Worker Housing	Poor Living Conditions Locally	Conditions are Good	Portion Available at Farm	3	2%	0.06
	•		•	•	Total Score		100%	4.10

### Shafter Almond and Pistachio #7786 Data in Property Selection Tool Worksheet: Agricultural Investments (Appendix C)

- Asking Price: \$7,200,000
- Size (Acres): 213
- Market: Agricultural Land
- Property Type: Permanent Type
- Crop: Almond and Pistachio
- Tenant: None

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

The total weight of all the economic characteristics (6 count) is 40%. The weighted score for this property is 1.80.

The total weight of all the environmental characteristics (13 count) is 55%. The weighted score for this property is 2.55.

The total weight of all the social characteristics (2 count) is 5%. The weighted score for this property is 0.21

The TOTAL score for this property is 4.56.

Table 56. Shafter Almond and Pistachio #7786 Data in Property Selection Tool Worksheet

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	N/A	Cap Rate	Below Market Average	At Market Average	Above Market Average	5	10%	0.50
Economic	N/A	Total Return	Below Market Average	At Market Average	Above Market Average	5	5%	0.25
Economic	N/A	Volatility	Below Market Average	At Market Average	Above Market Average	3	5%	0.15

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	N/A	Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%	3	5%	0.15
Economic	N/A	Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers	5	5%	0.25
Economic	N/A	Management	Less Than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience	5	10%	0.50
Environmental	Location	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less	5	3%	0.15
Environmental	Location	Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition	5	5%	0.25
Environmental	Location	Crop Yield	Below State Average by 15%	State Average Plus or Minus 15%	Above State Average by 15% or More	3	10%	0.50
Environmental	Location	Government Interference / Control	-	Government Controls on Price / Volume / Payments	Free Market	5	1%	0.05
Environmental	Soil	Soil Quality	Class 4 or Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2	3	4%	0.20

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Environmental	Soil	Soil Condition	-	Only for Row Crops	For Both Row and Permanent	5	4%	0.20
Environmental	Soil	Soil Depth	2 Ft. or Less	2 Ft. to 3 Ft.	3 Ft. or More	5	4%	0.20
Environmental	Soil	Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay	3	2%	0.06
Environmental	Water	Water Sources	1 Source, but Unreliable	1 Reliable Source	2 Reliable Sources	5	9%	0.45
Environmental	Water	Affordability	\$80+ Acre/Ft.	\$40 to \$80 Acre/Ft.	Below \$40 Acre/Ft.	3	5%	0.15
Environmental	Water	Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year	3	3%	0.09
Environmental	Water	Irrigation System	-	Flood Irrigation	Drip or Sprinkler Irrigation	5	2%	0.10
Environmental	Hazards	Hail or Frost Risk, Wind Damage, Flooding or Major Diseases	History of Problem in Last 10 Years	_	No History Last 10 Years	5	3%	0.15
Social	N/A	Farm Worker Availability	-	Shortages	Acceptable/Ava ilable	5	3%	0.15

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Social	N/A	Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm	3	2%	0.06
					Total Score		100%	4.56

## Panasonic Avionics Corp. Data in Property Selection Tool Worksheet: Commercial Investments (Appendix D)

- Asking Price: Panasonic Avionics Corp.
- Size (Sq. Ft.): 58,760
- Market:
- Property Type: Industrial
- Sector: Technology
- Tenant: Panasonic Avionics Corp.

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

The total weight of all the economic characteristics (13 count) is 70%. The weighted score for this property is 2.20.

The total weight of all the environmental characteristics (4 count) is 15%. The weighted score for this property is 0.33.

The total weight of all the social characteristics (4 count) is 15%. The weighted score for this property is 0.53.

The TOTAL score for this property is 3.06.

Table 57. Panasonic Avionics Corp Data in Property Selection Tool Worksheet

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Financial	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average	5	10%	0.50
Economic	Financial	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average	5	8%	0.40
Economic	Financial	NCREIF Income Return	Below Market	At Market	Above Market	3	1%	0.03

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
		Volatility	Average	Average	Average			
Economic	Financial	Years Left on Lease / Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years	1	7%	0.07
Economic	Financial	S&P Tenant Credit Rating	Below High Grade	AA+ to AA- (High Grade)	AAA (Prime)	3	10%	0.30
Economic	Market- Level	Tenant Industry	Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth	1	5%	0.05
Economic	Market- Level	Market Employment Growth	Below State Average	At State Average	Above State Average	3	5%	0.15
Economic	Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average	3	5%	0.15
Economic	Market- Level	Market Rent Growth	Below State Average	At State Average	Above State Average	5	1%	0.05
Economic	Market- Level	Market Vacancy Rate	Above Market Average	At Market Average	Below Market Average	5	1%	0.05

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Market- Level	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints	5	2%	0.10
Economic	Property- Level	Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re- Tenant	Prime Location with Best Access / Irreplaceable Sites	3	10%	0.30
Economic	Property- Level	Building Specialization	High-Level Of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade	1	5%	0.05
Environmental	N/A	LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")	0	4%	0.00
Environmental	N/A	Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Environmental	N/A	Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Environmental	N/A	Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*	3	3%	0.09
Social	N/A	Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Social	N/A	Gentrification Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Social	N/A	Jobs Impact	Negative Impact	No Impact	Positive Impact*	5	4%	0.20
Social	N/A	Other Social Impacts	Negative Impact	No Impact	Positive Impact*	3	3%	0.09
			•		Total Score		100%	3.06

### Walgreens Pharmacy Data in Property Selection Tool Worksheet: Commercial Investments (Appendix D)

- Asking Price: \$6,502,381
- Size (Sq. Ft.): 13,905
- Market:
- Property Type: Single Tenant
- Sector: Retail
- Tenant: Walgreens

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

The total weight of all the economic characteristics (13 count) is 70%. The weighted score is 2.46.

The total weight of all the environmental characteristics (4 count) is 15%. The weighted score is 0.33.

The total weight of all the social characteristics (4 count) is 15%. The weighted score is 0.45

The TOTAL score for this property is 3.24.

Table 58. Walgreens Pharmacy Data in Property Selection Tool Worksheet

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Financial	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average	3	10%	0.30
Economic	Financial	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average	3	8%	0.24
Economic	Financial	NCREIF Income Return	Below Market	At Market	Above Market	3	1%	0.03

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
		Volatility	Average	Average	Average			
Economic	Financial	Years Left on Lease / Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years	5	7%	0.35
Economic	Financial	S&P Tenant Credit Rating	Below High Grade	AA+ to AA- (High Grade)	AAA (Prime)	1	10%	0.10
Economic	Market- Level	Tenant Industry	Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth	5	5%	0.25
Economic	Market- Level	Market Employment Growth	Below State Average	At State Average	Above State Average	5	5%	0.25
Economic	Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average	3	5%	0.15
Economic	Market- Level	Market Rent Growth	Below State Average	At State Average	Above State Average	5	1%	0.05
Economic	Market- Level	Market Vacancy Rate	Above Market Average	At Market Average	Below Market Average	3	1%	0.03

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Market- Level	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints	3	2%	0.06
Economic	Property- Level	Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re- Tenant	Prime Location with Best Access / Irreplaceable Sites	5	10%	0.50
Economic	Property- Level	Building Specialization	High-Level Of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade	3	5%	0.15
Environmental	N/A	LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")	0	4%	0.00
Environmental	N/A	Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Environmental	N/A	Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
--	--------	---	------------------------	------------------------	-----------------------------	-------	--------	-------------------
Environmental	N/A	Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*	3	3%	0.09
Social	N/A	Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Social	N/A	Gentrification Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Social	N/A	Jobs Impact	Negative Impact	No Impact	Positive Impact*	3	4%	0.12
Social	N/A	Other Social Impacts	Negative Impact	No Impact	Positive Impact*	3	3%	0.09
			•		Total Score		100%	3.24

#### Blank Evaluation Form for Agricultural Property (Appendix E)

- Asking Price:
- Size (Acres):
- Market:
- Property Type:
- Crop:
- Tenant:

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

The total weight of all the economic characteristics (6 count) is 40%. The weighted score for this property is

The total weight of all the environmental characteristics (13 count) is 55%. The weighted score for this property is

The total weight of all the social characteristics (2 count) is 5%. The weighted score for this property is

The TOTAL score for this property is

Table 59. Blank Property Selection Tool Worksheet: Agricultural

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	N/A	Cap Rate	Below Market Average	At Market Average	Above Market Average	To be input	10%	To be input
Economic	N/A	Total Return	Below Market Average	At Market Average	Above Market Average	To be input	5%	To be input
Economic	N/A	Volatility	Below Market	At Market	Above Market	To be	5%	To be

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
			Average	Average	Average	input		input
Economic	N/A	Crop Market Growth Projections	Below 2%	2% to 4%	Above 4%	To be input	5%	To be input
Economic	N/A	Crop Market Prospects	1 to 2 Buyers	2 to 4 Buyers	Over 4 Buyers	To be input	5%	To be input
Economic	N/A	Management	Less Than 10 Years' Experience	10 to 20 Years' Experience	Over 20 Years' Experience	To be input	10%	To be input
Environmental	Location	Close to Same or Similar Productive Crops	No Plantings Within 20 Miles	Planting Within 20 Miles or Less	Plantings Within 10 Miles or Less	To be input	3%	To be input
Environmental	Location	Climate Fit to Targeted Crops	Not Known	Appropriate	Optimum Condition	To be input	5%	To be input
Environmental	Location	Crop Yield	Below State Average by 15%	State Average Plus or Minus 15%	Above State Average by 15% or More	To be input	10%	To be input
Environmental	Location	Government Interference / Control	-	Government Controls on Price / Volume / Payments	Free Market	To be input	1%	To be input

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Environmental	Soil	Soil Quality	Class 4 or Lower	Class 1, 2, 3 and 4	Mix Class 1 to 2	To be input	4%	To be input
Environmental	Soil	Soil Condition	BLANK	Only for Row Crops	For Both Row and Permanent	To be input	4%	To be input
Environmental	Soil	Soil Depth	2 Ft. or Less	2 Ft. to 3 Ft.	3 Ft. or More	To be input	4%	To be input
Environmental	Soil	Soil Texture	> 60% Clay	50% to 60% Clay	< than 50% Clay	To be input	2%	To be input
Environmental	Water	Water Sources	1 Source, but Unreliable	1 Reliable Source	2 Reliable Sources	To be input	9%	To be input
Environmental	Water	Affordability	\$80+ Acre/Ft.	\$40 to \$80 Acre/Ft.	Below \$40 Acre/Ft.	To be input	5%	To be input
Environmental	Water	Reliability History	Not Reliable	Do Not Have to Fallow in Drought Year	Reliable in Drought Year	To be input	3%	To be input
Environmental	Water	Irrigation System	-	Flood Irrigation	Drip or Sprinkler Irrigation	To be input	2%	To be input
Environmental	Hazards	Hail or Frost Risk, Wind Damage, Flooding or	History of Problem in Last 10 Years	-	No History Last 10 Years	To be input	3%	To be input

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
		Major Diseases						
Social	N/A	Farm Worker Availability	-	Shortages	Acceptable/Ava ilable	To be input	3%	To be input
Social	N/A	Farm Worker Housing	Poor Living Conditions Locally	Conditions Are Good	Portion Available at Farm	To be input	2%	To be input
					Total Score	To be input	100%	To be input

Blank Evaluation Form for Commercial Property Investments (Appendix E)

- Asking Price:
- Size (Sq. Ft.):
- Market:
- Property Type:
- Sector:
- Tenant:

The scoring is as follows: Not Acceptable = 0, Poor = 1, Good = 3, Excellent = 5

The total weight of all the economic characteristics (13 count) is 70%. The weighted score is

The total weight of all the environmental characteristics (4 count) is 15%. The weighted score is

The total weight of all the social characteristics (4 count) is 15%. The weighted score is

The TOTAL score for this property is

Table 60. Blank Property Selection Tool Worksheet: Commercial

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Financial	RCA Cap Rate	Below Market Average	At Market Average	Above Market Average		10%	
Economic	Financial	NCREIF Income Return	Below Market Average	At Market Average	Above Market Average		8%	
Economic	Financial	NCREIF Income Return	Below Market	At Market	Above Market		1%	

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
		Volatility	Average	Average	Average			
Economic	Financial	Years Left on Lease / Renewal Provisions	Less Than 15 Years	15 to 25 Years	25+ Years		7%	
Economic	Financial	S&P Tenant Credit Rating	Below High Grade	AA+ to AA- (High Grade)	AAA (Prime)		10%	
Economic	Market- Level	Tenant Industry	Volatile / Highly Correlated with GDP Growth	Moderate Volatility and Correlation	Least Volatile and Correlated to GDP Growth		5%	
Economic	Market- Level	Market Employment Growth	Below State Average	At State Average	Above State Average		5%	
Economic	Market- Level	Market Employment Growth Volatility	Above State Average	At State Average	Below State Average		5%	
Economic	Market- Level	Market Rent Growth	Below State Average	At State Average	Above State Average		1%	
Economic	Market- Level	Market Vacancy Rate	Above Market Average	At Market Average	Below Market Average		1%	

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Economic	Market- Level	Market Supply Constraints	Minimal Supply Constraints	Moderate Supply Constraints	Significant Supply Constraints		2%	
Economic	Property- Level	Building Location Quality	Sub-Standard Location, Very Difficult to Re- Tenant	Good Location, Easy to Re- Tenant	Prime Location with Best Access / Irreplaceable Sites		10%	
Economic	Property- Level	Building Specialization	High-Level Of Specialization, Very Expensive to Upgrade	Low Level of Specialization, Minor Expense to Upgrade	Virtually No Specialization and Expense to Upgrade		5%	
Environmental	N/A	LEED Certification	Not Applicable	Not Applicable	Investment Has LEED Certification (All Other Projects Receive a "0")		4%	
Environmental	N/A	Public Transit / Walkability Impact	Negative Impact	No Impact	Positive Impact*		4%	
Environmental	N/A	Traffic Congestion Impact	Negative Impact	No Impact	Positive Impact*		4%	

Characteristics (Economic, Environmental or Social)	Subset	Measurement	Poor Growth Quality	Good Growth Quality	Excellent Growth Quality	Score	Weight	Weighted Score
Environmental	N/A	Other Environmental Impacts	Negative Impact	No Impact	Positive Impact*		3%	
Social	N/A	Benefits to Underserved Community	Negative Impact	No Impact	Positive Impact*		4%	
Social	N/A	Gentrification Impact	Negative Impact	No Impact	Positive Impact*		4%	
Social	N/A	Jobs Impact	Negative Impact	No Impact	Positive Impact*		4%	
Social	N/A	Other Social Impacts	Negative Impact	No Impact	Positive Impact*		3%	
			•		Total Score		100%	

# Property Description (Appendix H)

# Table 61. Property Description Checklist

Checklist Item	Description	User Comment	Done (X)
Name & Address	To be input	To be input	To be input
Nearest Town	To be input	To be input	To be input

Checklist Item	Description	User Comment	Done (X)
Property Size	To be input	To be input	To be input
Gross Acres	To be input	To be input	To be input
Net Irrigated Acres	To be input	To be input	To be input
Improvements	To be input	To be input	To be input
Buildings	To be input	To be input	To be input
Equipment	To be input	To be input	To be input
Topography	Topography will influence the type of irrigation systems that can be utilized	To be input	To be input
Drainage	Good drainage of the soil and the property is important for maintaining soil quality. Some poorly drained soils require tile drains.	To be input	To be input
Open Ditch	-	To be input	To be input
Tile Drains	-	To be input	To be input
Principal Crops	-	To be input	To be input
Annual	Most properties will have a history of producing a certain crop mix. Obtaining historical information will be useful.	To be input	To be input
Permanent	-	To be input	To be input
Pasture	-	To be input	To be input

# **Objective Considerations Checklist (Appendix H)**

If climate records are available, this is useful information to maintain. They should indicate crops that can be grown on the property.

Understand what suitable crops grown in the region. The more crops that can be economically grown on a property the more flexible and valuable the property.

#### Table 62. Objective Considerations Checklist

Consideration	Checklist Item	Description	User Comment	Done (X)
Climate	Monthly Average	-	To be input	To be input
Climate	Minimum Temp.	-	To be input	To be input
Climate	Maximum Temp.	-	To be input	To be input
Climate	Natural Hazards	Rain, hail, frost	To be input	To be input
Soil Quality	Soil Types (Name & # Of Acres)	Most agriculture soils have been mapped and classified.	To be input	To be input
Soil Quality	Soil Classes	Soils are ranked a Class 1 to 5.	To be input	To be input
Soil Quality	Storie Index Rating	-	To be input	To be input
Soil Quality	Hardpan	Some soils have impermeable layers known as hardpan. This layer must be broken using a 'ripping' technique, particularly when planting permanent crops.	To be input	To be input
Soil Quality	Land Leveled	Land is often leveled for use of furrow or flood irrigation. Land should be leveled after long periods of use. It is also done to prevent 'puddling'.	To be input	To be input

Consideration	Checklist Item	Description	User Comment	Done (X)
Soil Quality	Soil PH	The PH of the soil influences the ability of plants to utilize nutrients as well and effects how water penetrates the soil.	To be input	To be input
Water	Price	Price of water varies considerably throughout California from \$30 to \$1,000 per acre/ft. Poor water quality not only harms the long-term quality of the land, but it also reduces crop yields.	To be input	To be input
Water	Reliability	Water reliability is a key issue in California. Understand the history of water reliability for a piece of land, especially during periods of drought.	To be input	To be input
Irrigation Systems	Flood	Flood or gravity systems have been the traditional, low capital method of irrigating crops.	To be input	To be input
Irrigation Systems	Sprinkler	A sprinkler system is more efficient, in terms of water use per acre, than a flood system.	To be input	To be input
Irrigation Systems	Drip	A drip system is most efficient, (in terms of water use per acre) than a sprinkler or flood system. Some crops such as wine grapes have found that grape quality is improved with the use of drip irrigation.	To be input	To be input
Water Sources	Water District (Canal)	Canal water is delivered through local districts. Local district offices can provide information of cost, reliability, etc. of the water source.	To be input	To be input

Consideration	Checklist Item	Description	User Comment	Done (X)
Water Sources	Bureau of Reclamation Regulation	Water delivered through federal water projects is subject to a 960-acre ownership limitation per owner.	To be input	To be input
Water Sources	Well	-	To be input	To be input
Water Sources	Depth & Pump Rating	Size of pump and depth of pumping directly influence the cost required to deliver water.	To be input	To be input
Water Sources	Well Test	A standard test can be conducted on wells to evaluate the efficiency, condition, rate of water delivery, etc.	To be input	To be input
Water Sources	Standing Water Level	Guide to depth and energy required to deliver water.	To be input	To be input
Water Sources	Status of Water Rights	Landowners need to understand the water rights on file for specific properties.	To be input	To be input
Water Sources	Number of Sources of Water and Amounts of Water	It is valuable insurance to have at least two sources of water for a specific property. For example, canal and well water.	To be input	To be input
Water Sources	On-Farm Reservoirs	For farms not receiving canal water, often reservoirs are utilized to hold water for summer irrigation.	To be input	To be input
Suitable Crops	Field Crops	-	To be input	To be input
Suitable Crops	Permanent Crops	-	To be input	To be input
Suitable Crops	Mineral Rights	Understand whether mineral rights come with a property.	To be input	To be input

Consideration	Checklist Item	Description	User Comment	Done (X)
Property Zoning	Williamson Act Conservation Easements	The Williamson Act allows agricultural property owners to keep property taxes at agricultural levels.	To be input	To be input
Property Zoning	Other Easements	-	To be input	To be input

# Subjective Considerations Checklist (Appendix H)

### Table 63. Subjective Considerations Checklist

Consideration	Checklist Item	Description	User Comment	Done (X)
Lessee Management	Prior Property Operator / Manager	The prior operator / manager is a good source of information about a property.	To be input	To be input
Lessee Management	Experience and Past Record of Proposed Lessee and / or Manager	Prior experience and background of lessees and managers should be researched and considered.	To be input	To be input
Lessee Management	Financial Position of Lessee	The lessee needs to finance the operation of the property and check the financial background.	To be input	To be input
Lessee Management	Management Compensation Structure	Is management compensation tied to the financial returns of the lessee? Crop share and profit sharing often provide the highest returns to the lessee, particularly for permanent crops.	To be input	To be input
Market	Crop Prices and Trends Over the Last Five Years	Prior prices are important indicators of future trends.	To be input	To be input
Market	Crop Price Variability Over Five Years	Price volatility is an important indicator of future trends.	To be input	To be input

Consideration	Checklist Item	Description	User Comment	Done (X)
Market	On Farm Storage	Determine whether crop storage is required and / or available.	To be input	To be input
Market	Co-Op Membership	Determine whether a processing or marketing co-op is beneficial to the operation.	To be input	To be input
Market	Contracts	Contracts may vary for different kinds of crops. Long-term contracts are important when buying or planting permanent crops.	To be input	To be input
Market	Forward Contracting	Forward contracts can provide price insurance.	To be input	To be input
Market	Mechanization	Mechanically harvested crops place California in a more competitive position in the global marketplace.	To be input	To be input
Market	Harvest Labor	Harvest labor is particularly important for fruit and vegetable crops.	To be input	To be input
Market	Premium Prices and Quality Bonus	Lessees who obtain premium prices can provide higher returns to the lessor.	To be input	To be input
Environmental Risks	Environmental Assessment	New landowners may be liable for prior environmental damage to property. It is important to have a specialist examine property prior to purchase.	To be input	To be input
Environmental Risks	Water Run-off	Landowners are liable for contamination in water run-off.	To be input	To be input
Environmental Risks	Well Contamination	Related to water run-off, is the risk of underground contamination of neighboring	To be input	To be input

Consideration	Checklist Item	Description	User Comment	Done (X)
		wells or property.		
Environmental Hazards	Frost	Certain crops are subject to spring frosts or winter freezes. Note that crop insurance is available for some crops. Citrus is a prime example of a crop subject to freezing temperatures.	To be input	To be input
Environmental Hazards	Disease	Disease can destroy crops. Grapes in California are now facing the threat of the Glassy Winged Sharpshooter. Determine relative disease risks for crops.	To be input	To be input
Environmental Hazards	Wind	Wind scaring can create a problem for product where appearance is important.	To be input	To be input
Environmental Hazards	Flooding	Determine whether the property is located on a flood plain.	To be input	To be input
Environmental Hazards	Hail	Damage from hail can also damage product. Understand the potential hail conditions in the region.	To be input	To be input

# Financial Evaluation Checklist (Appendix H)

The prior financial performance and future income projects are critical to conduct and evaluate when considering the purchase of an agricultural property.

#### Table 64. Financial Evaluation Checklist

Checklist Items	Description	User Comment	Done (X)
Purchase Price	-	To be input	To be input
Cost of Additional Improvements	Determine whether the property is for sale because the property needs improvements, or the crop changed. Certain crops or crop varieties pass their prime production phase and become obsolete.	To be input	To be input
Cost Per Acre Benchmarking	A key part of an appraisal is to evaluate the price in relation to nearby similar properties.	To be input	To be input
Five-Year Gross Crop Revenue	Determine expected gross revenue for a crop over a time horizon of at least five years.	To be input	To be input
Five-Year Historical Land Rent and / or Income	If possible, locate financial records and financial results for a property for use in evaluation.	To be input	To be input
Overhead Expenses	Deduct expected overhead expense from the gross lease payments.	To be input	To be input
Property Taxes	-	To be input	To be input
Management Fee	-	To be input	To be input
Depreciation	Assets such as wells and permanent crops depreciate. At some point they need to be replaced. Depreciation should factor into agricultural land evaluation.	To be input	To be input
Permanent Crop	-	To be input	To be input

Checklist Items	Description	User Comment	Done (X)
Equipment	(The lessee or operator typically owns farm equipment.)	To be input	To be input
Irrigation System	Туре	To be input	To be input
Financial Projection	5 to 10 years	To be input	To be input
Projected Net Income	Projections are for net income are most useful if projected over a 10-year period (as the discount factor has a minimal impact after 10 years)	To be input	To be input