

Arlington, MA

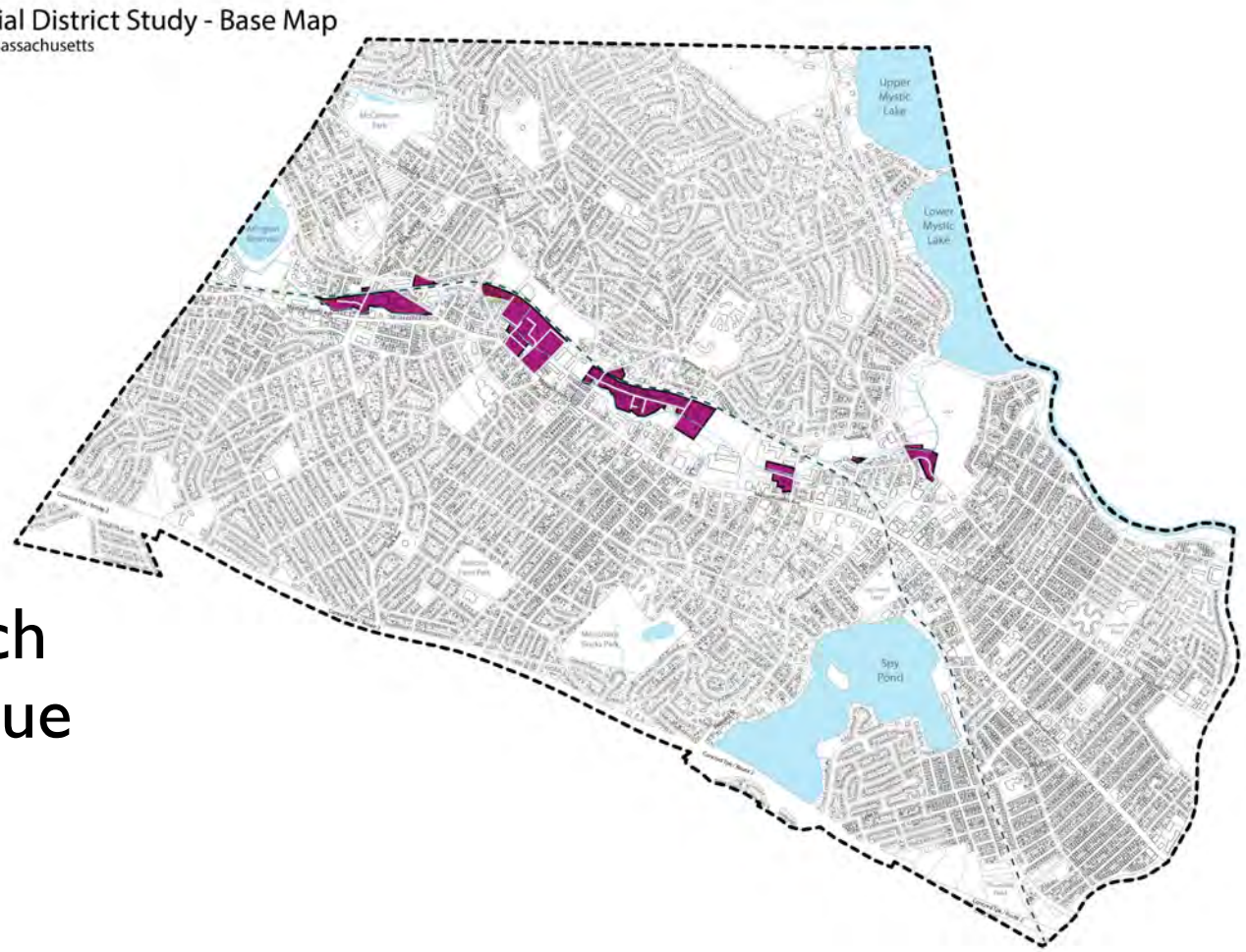
Economic Analysis Of Industrial Zoning Districts

Presentation to the Arlington Redevelopment Board
December 21, 2020

RKG HARRIMAN

Project Goals

- Position Arlington to attract new businesses and jobs in emerging growth industries to the Industrial District; and
- Create opportunities through which Arlington can realize greater revenue with strategic amendments to the Zoning Bylaw and Zoning Map.



Project Background

September 2019:

RFP for an Economic Analysis of Industrial Zoning Districts released.

RKG Associates and Harriman selected as contractor.

December 2019:

Project Kickoff.

2020:

Completion of an economic analysis.

Preparation of zoning recommendations.

Public Engagement – Video Presentation and Survey.

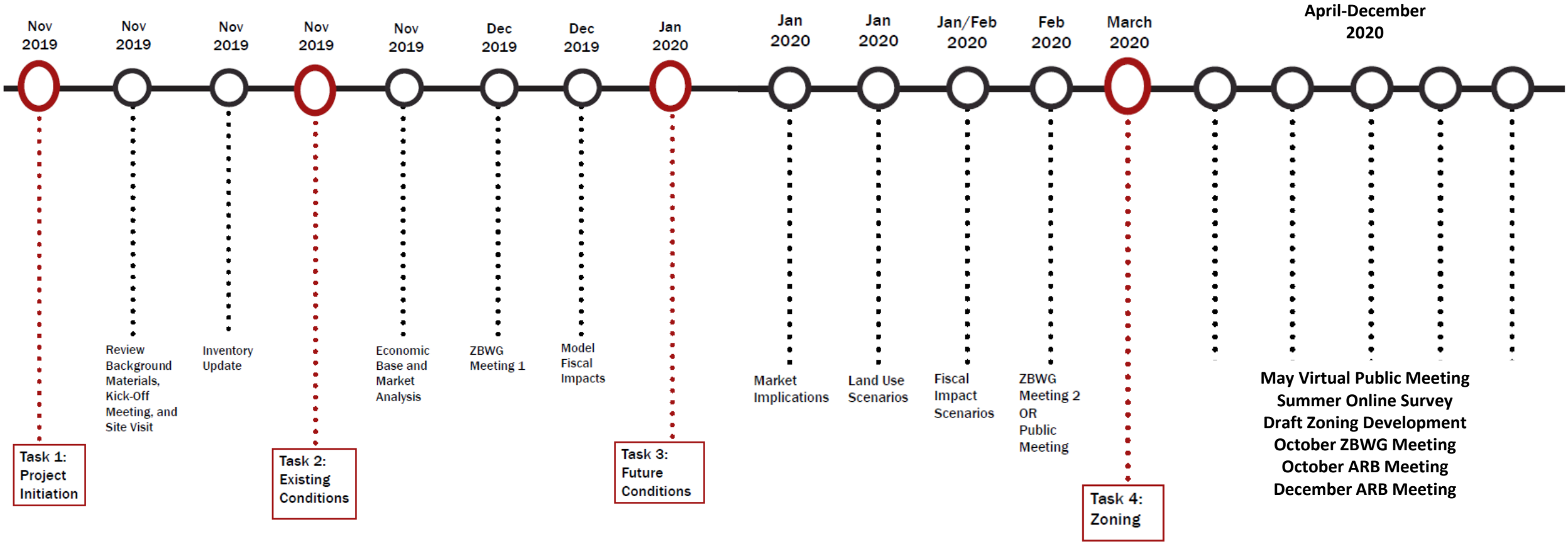
Preparation of draft zoning amendments.

Zoning Bylaw Working Group

Mike Byrne
Adam Chapdelaine
Pamela Heidell
Charles Kalauskas
Christian Klein
Steven Revilak
David Watson
Ralph Willmer
John Worden

Jenny Raitt
Erin Zwirko

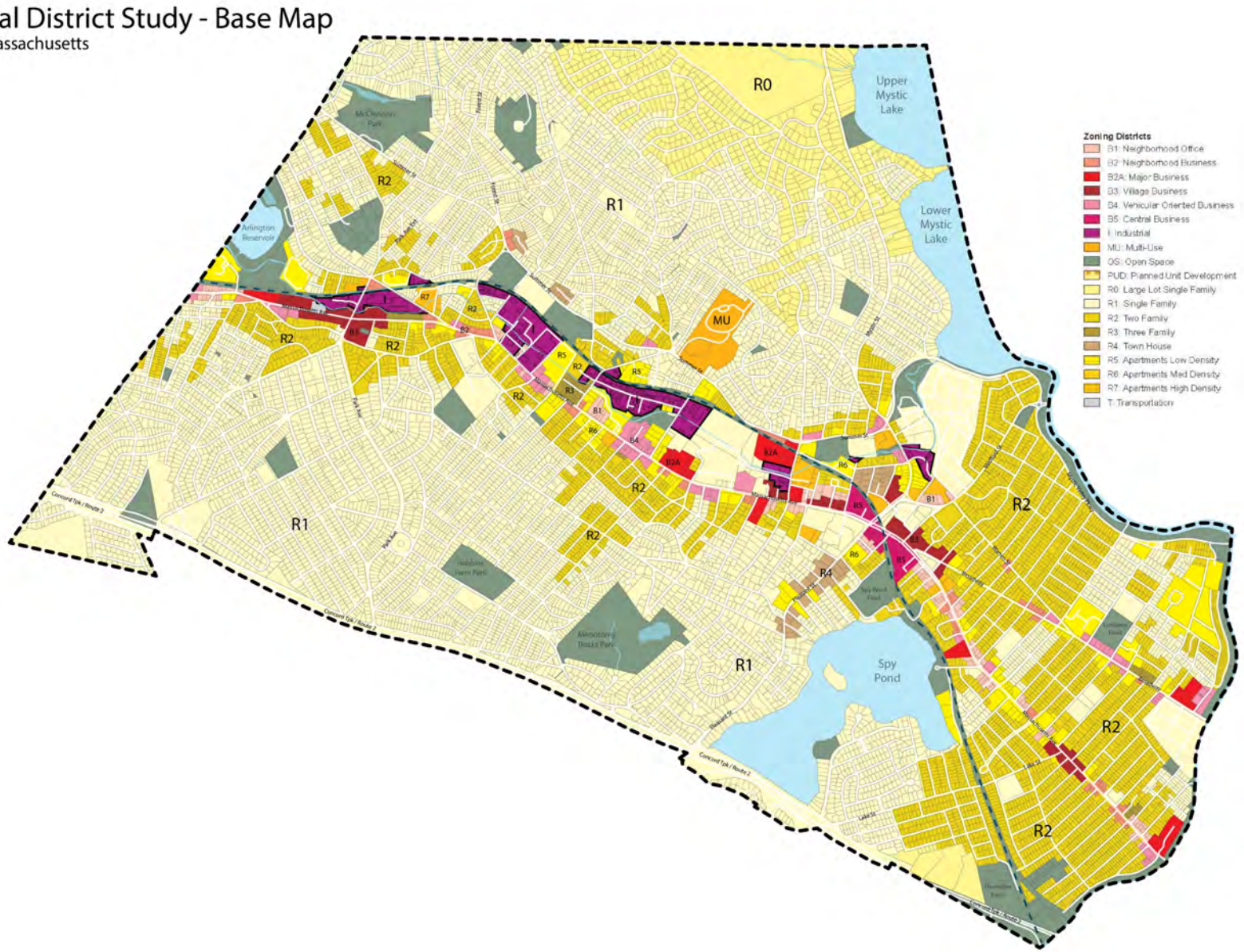
Timeline


Nov 2019
Task 1: Project Initiation
Nov 2019
Review Background Materials, Kick-Off Meeting, and Site Visit
Nov 2019
Inventory Update
Nov 2019
Task 2: Existing Conditions
Nov 2019
Economic Base and Market Analysis
Dec 2019
ZBWG Meeting 1
Dec 2019
Model Fiscal Impacts
Jan 2020
Task 3: Future Conditions
Jan 2020
Market Implications
Jan 2020
Land Use Scenarios
Jan/Feb 2020
Fiscal Impact Scenarios
Feb 2020
ZBWG Meeting 2 OR Public Meeting
March 2020
Task 4: Zoning
April-December 2020
May Virtual Public Meeting
Summer Online Survey
Draft Zoning Development
October ZBWG Meeting
October ARB Meeting
December ARB Meeting



Arlington's Industrial Zones – Market Findings

Arlington's Existing Zoning Districts



What kind of demand for commercial space could emerge in Arlington?

Middlesex County Projected New Jobs, Present to 2029

Selected job growth categories, 4-Digit NAICS

	Jobs 2018	Net New Jobs by 2029	Space Required
Middlesex County Total	1,035,000	85,000	21,250,000 sf
Scientific Research & Development Serv.	49,800	19,000	4,750,000 sf
Management of Companies	33,000	10,000	2,000,000 sf
Colleges, Universities & Prof. Schools	66,700	8,900	1,790,000 sf
Management & Scientific Consulting Serv.	22,600	6,300	1,270,000 sf
Restaurants	53,300	5,400	940,000 sf
Computer Systems Design	44,200	3,700	735,000 sf

Sources: EMSI Industry Table Projections; US Bureau of Labor Statistics; RKG Associates.

Arlington today comprises

1%

of Middlesex County jobs

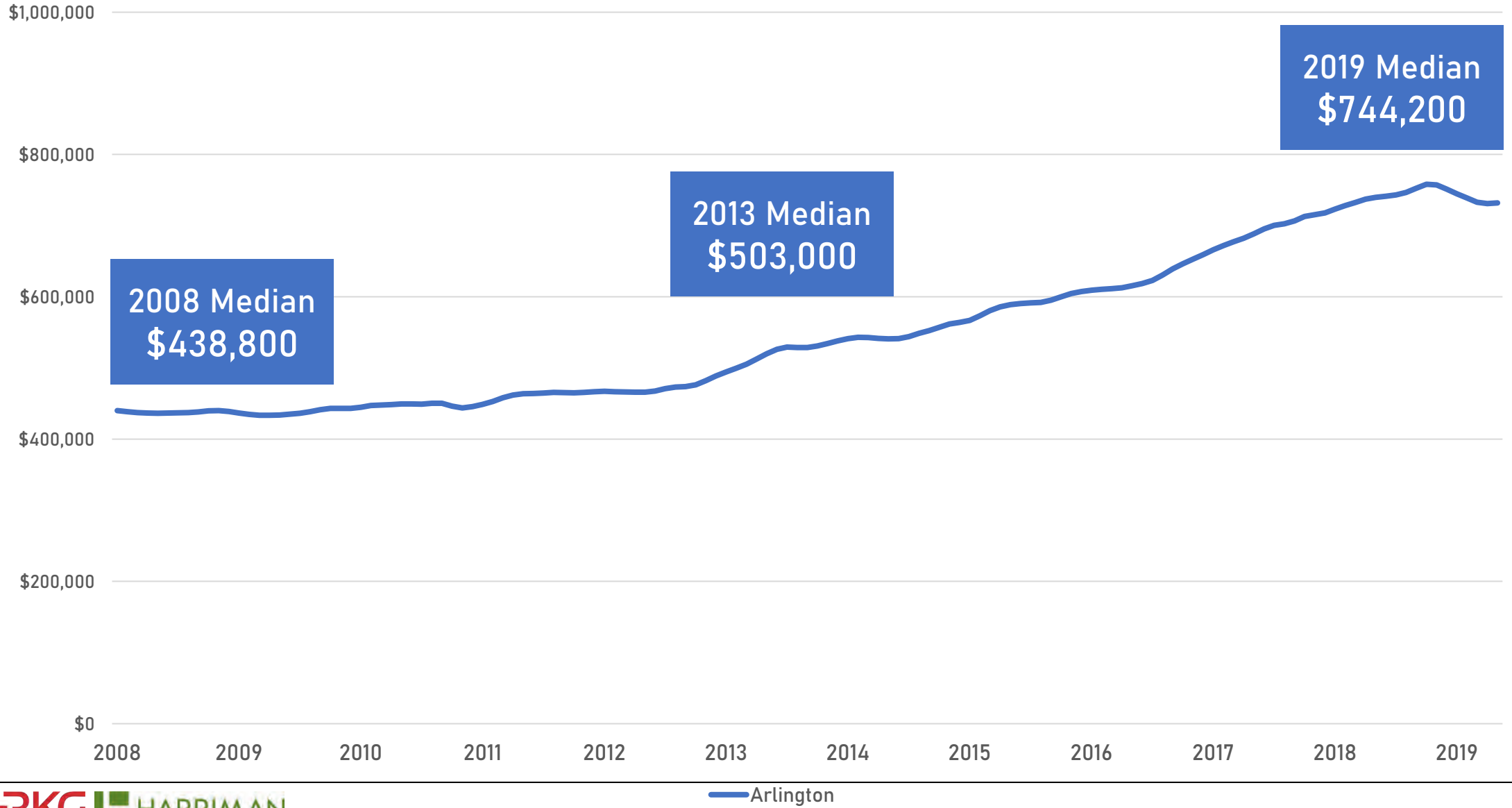
"Fair Share"

Potential demand for

+/- 200,000 sf

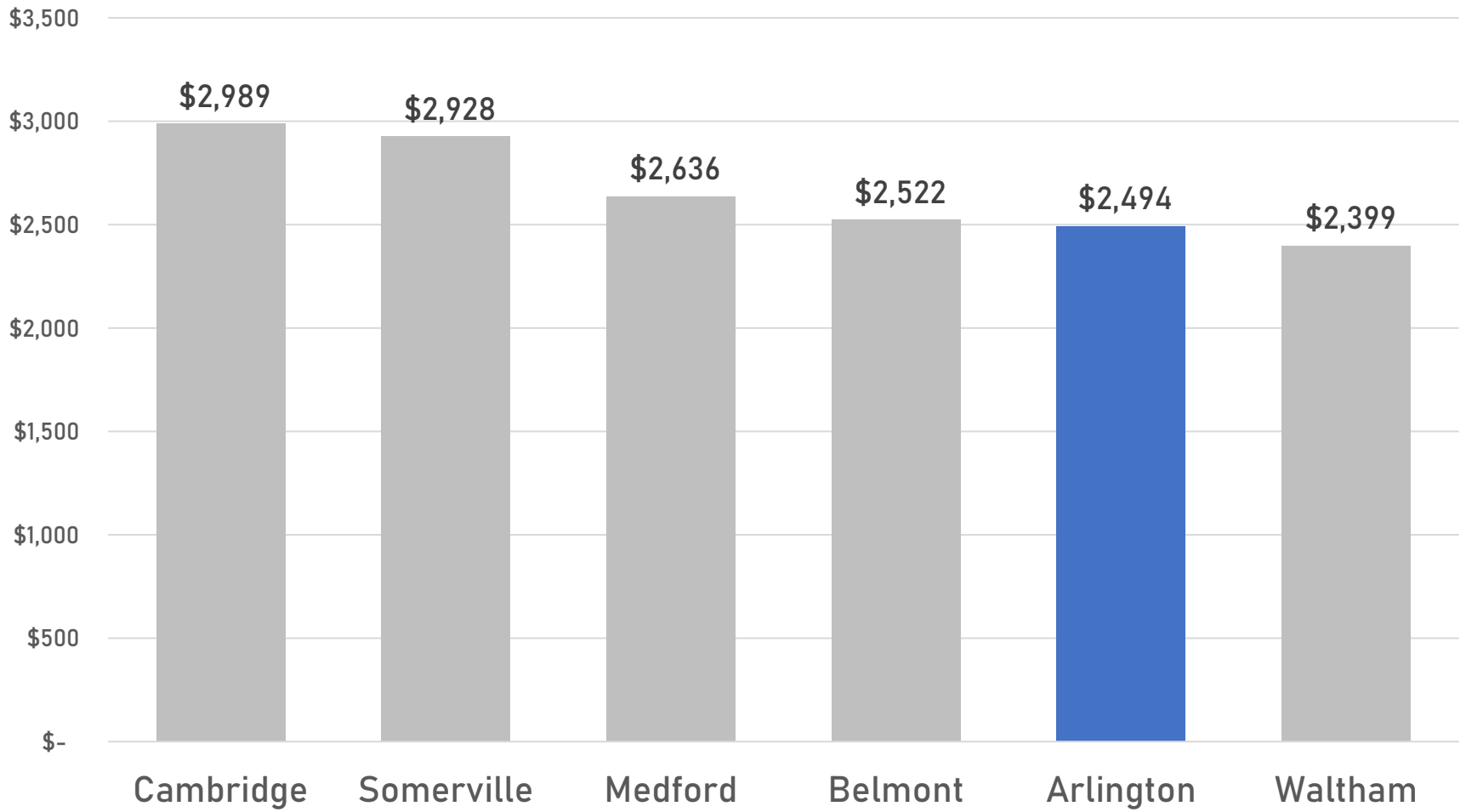
of commercial space over 10 years

Median Home Value Trend



Sources: Zillow Research Housing Value Index Time Series; RKG Associates.

Median Monthly Rent, 2019



Sources: Zillow Research Rental Index; RKG Associates.

Key Takeaways

Arlington's relatively small job base mostly consists of lower-paying jobs held by residents of other communities.

Existing jobs in industrial zones are highly diverse, with most in sectors that pay above the town average salary.

Middlesex County's hot housing market is exerting pressure on industrial zones – especially those with aged structures.

Firms in legacy industrial sectors are struggling to financially justify Arlington rents.

Higher-tech industrial firms may see Arlington as a desirable, less-expensive option, although recruitment may be a challenge.







Arlington's Industrial Zones – Proposed Zoning

Considerations for Development Standards

- Responsibility: Developer vs. tenant
- Enforceability of standard at implementation and over time
- Temporary vs. permanent impact
- Relationship of cost to benefit
- Relationship of private benefit to public impact

Considerations for Height Bonus

- Link to community values around sustainability and goals for NetZero energy usage

Considerations for Parking Standards

- Encouragement of public transit or non-vehicular methods of transportation
- Reduction of the impact of heat island effect
- Reduction or elimination of stormwater runoff to protect brooks

Proposed Development Standards

- Buildings must be solar-ready
  - ARB can adjust height and setbacks to allow the installation of equipment for renewable energy
- Yards
  - Buildings no more than 10 feet from the front lot line
  - Low-impact stormwater management
- Transparency and Access
  - Ground floor windows
  - Equal treatment of all façades
  - Connections from public sidewalk to front entry;
- Lighting
  - Dark-Sky friendly

Solar-ready building design, as the name suggests, refers to designing and constructing a building in a way that facilitates and optimizes the installation of a rooftop **solar** photovoltaic (PV) system at some point after the building has been constructed. www.nrel.gov

Proposed Development Standards

Pedestrian Amenities (Choices)

Choose 1



https://www.showcase.com/4957-allison-pky-vacaville- ca-95688/18095269/

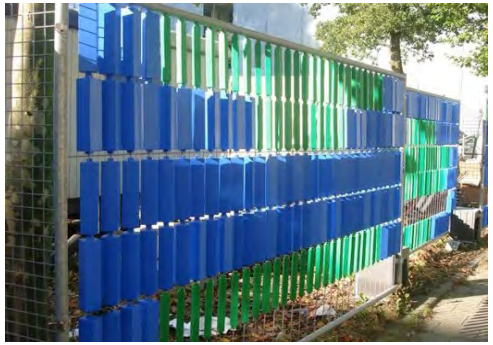
OR



http://www.landscapearchitecture.com/datsheet/tournesolsiteworks/tournesolsiteworks.html

+

Choose 1



https://www.pinterest.ch/pin/140807925826545553/

OR



http://cbbel.com/madison-street-streetscape/

OR



https://artfulrainwaterdesign.psu.edu/project/southwest-

Proposed Height Bonus

Choose 1

Vegetated Landscape



https://www.youtube.com/watch?v=6XApzoTZS6k

Highly Reflective



https://www.networx.com/article/reflective-roof-coatings-for-asphalt-roo

Solar power



https://www.everguardsolar.com/uncategorized/is-ballast-mounted-solar-right-for-your-flat-roof/

High Albedo Concrete



https://www.buildings.com/article-details/articleid/21182/ title/are-cool-pavements-all-they-re-cracked-up-to-be-

Blue roof



Unknown

+

100% On-site Stormwater Management



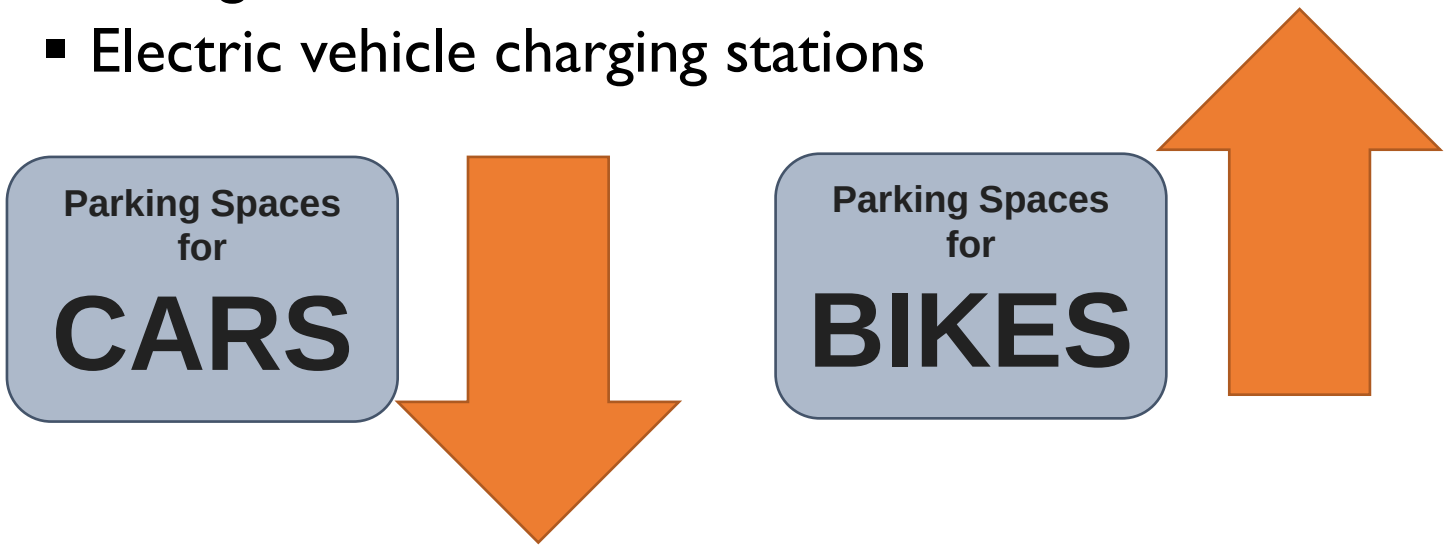
Parking Lot Landscaping Ordinance-Village of Glenview

Parking Standards

- Pervious surfaces for excess parking
- Required for impervious surfaces
  - Highly reflective surface
  - Shade (trees or solar panels)
- Encouraged
  - Rain gardens, bioswales, etc.
  - Electric vehicle charging stations



https://waylandstudentpress.com/51402/articles/solar- panels-installed-in-whs-parking-lots/



Changes to Recommended Modifications

- Section 2. Definitions
  - Add Self-service storage facility
  - Moved standards by use to Section 5.9
- 5.3.7 Dimensional Regulations
  - Clarified screening along Minuteman Bikeway
- 5.6.2 Dimensional and Density Regulations
  - Clarified screening along Minuteman Bikeway
  - Clarified standards for solar readiness, accessibility, lighting, and pedestrian amenities
- 5.6.3 Use Regulations (Table of Uses)
  - Added self-service storage facility and requires a special permit
  - Note that mixed-use can include residential, subject to 5.9.10
- 5.9 Supplemental Regulations for Permitted Uses
  - Moved standards by use from Section 2
  - Limits residential uses to a component of a mixed-use development.
    - Can be either vertical or horizontal
    - Ground floor of principal building must be industrial or commercial
    - Residential use is limited with respect to the ground floor area of the principal industrial use.



Arlington's Industrial Zones – Proforma Analysis

Proforma Analysis

Site 1: Mystic St.



Proforma Analysis

Scenario One: Industrial Retrofit

Development scenario adds two additional stories of office space and includes 65 surface parking spaces.

Total development cost is nearly $6.6M.

The financial return under this scenario is positive as potential revenues gained from undertaking the project outstrip initial development and operational costs.

Net present value under this scenario is $200,755 indicating an existing owner may be willing to undertake this project.

This project could potentially carry additional mitigation costs.

Scenario Development Program
Source: RKG Associates, Inc.

Land Use	Development Square Feet	Parking Spaces
Residential	N/A	N/A
Office	26,000	52
Flex/ Industrial	13,000	13
Total	**39,000**	**65**

Scenario Financial Return
Source: RKG Associates, Inc.

Key Financial Metrics	
Equity	$1,638,105
Debt	$4,914,314
Total Development Cost	**$6,552,419**
Desired IRR	**10%**
Actual IRR	**11.5%**
Cash on Cash Return	**7%**
Net Present Value	**$200,755**
Net Fiscal Impact of New Dev't	**$74,971**

Proforma Analysis

Site 2: Ryder St.



Proforma Analysis

Scenario Two: New Industrial Development

Development scenario is entirely Flex/ Industrial and includes 26 surface parking spaces.

Total development cost is nearly $7M.

The financial return under this scenario is negative as costs significantly outstrip potential revenues gained from undertaking the project.

Net present value under this scenario is negative $2.5M indicating developers would be better off allocating their resources elsewhere as significant subsidy would be required to make the project feasible.

This project could not carry additional mitigation costs.

Scenario Development Program
Source: RKG Associates, Inc.

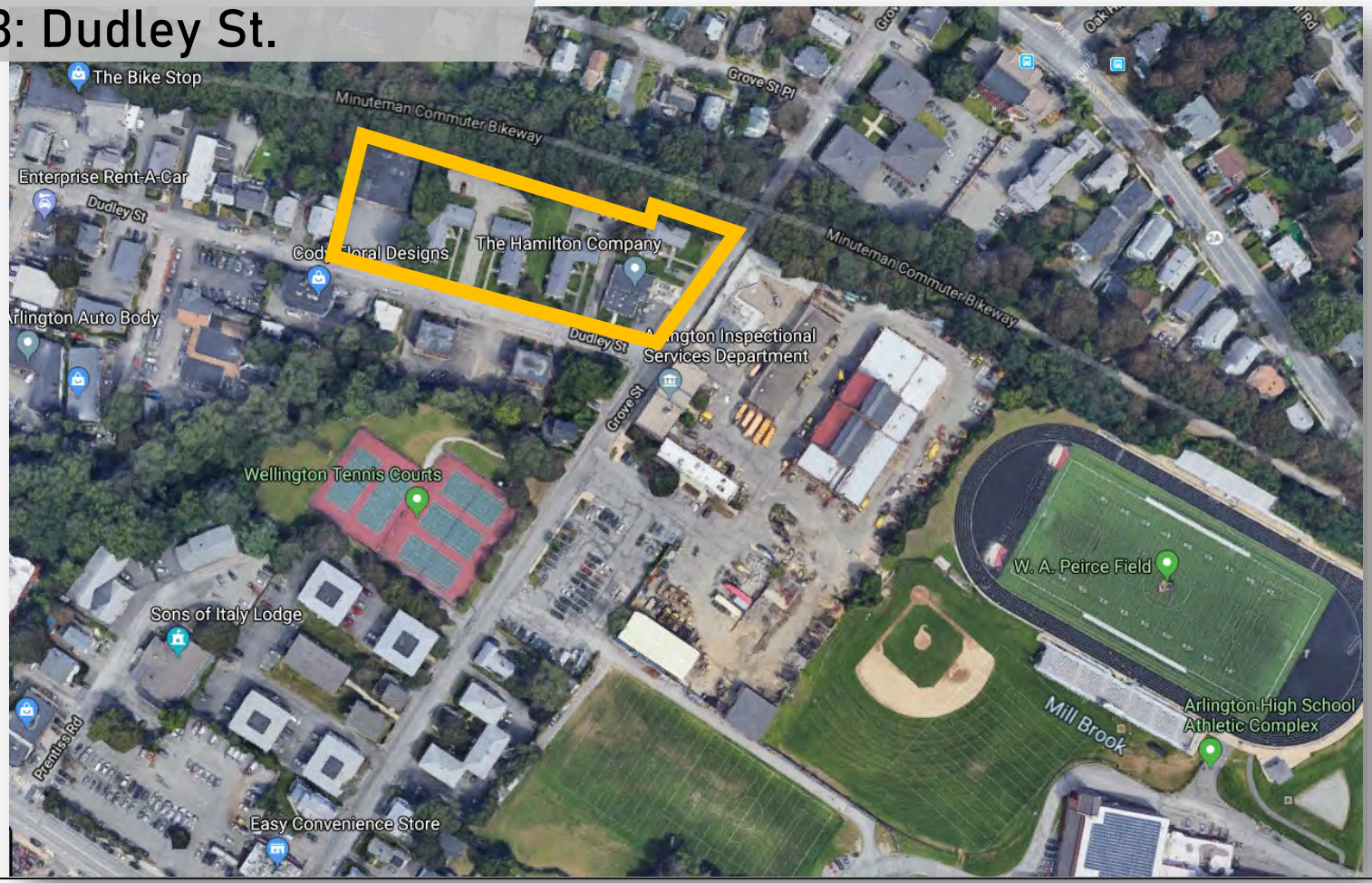
Land Use	Development Square Feet	Parking Spaces
Residential	N/A	N/A
Office	N/A	N/A
Flex/ Industrial	26,000	26
Total	**26,000**	**26**

Scenario Financial Return
Source: RKG Associates, Inc.

Key Financial Metrics	
Equity	$1,722,523
Debt	$5,167,572
Total Development Cost	**$6,980,095**
Desired IRR	**10%**
Actual IRR	**N/A**
Cash on Cash Return	**-7%**
Net Present Value	**-$2,483,488**
Net Fiscal Impact of New Dev't	**$65,386**

Proforma Analysis

Site 3: Dudley St.



Proforma Analysis

Scenario Three: Mixed-Use Development (Flex/Industrial and Office)

Development scenario is a mix of Flex/ Industrial and Office and includes 88 surface parking spaces.

Total development cost is nearly $16.7M.

The financial return under this scenario is negative as costs outstrip potential revenues gained from undertaking the project.

Net present value under this scenario is negative $1.86M indicating developers would be better off allocating their resources elsewhere as significant subsidy would be required to make the project feasible.

This project could not carry additional mitigation costs.

Scenario Development Program
Source: RKG Associates, Inc.

Land Use	Development Square Feet	Parking Spaces
Residential	N/A	N/A
Office	34,000	68
Flex/ Industrial	19,500	20
Total	**53,500**	**88**

Scenario Financial Return
Source: RKG Associates, Inc.

Key Financial Metrics	
Equity	$4,171,607
Debt	$12,514,820
Total Development Cost	**$16,686,427**
Desired IRR	**10%**
Actual IRR	**4.5%**
Cash on Cash Return	**1%**
Net Present Value	**-$1,715,442**
Net Fiscal Impact of New Dev't	**$210,389**

Proforma Analysis

Site 4: Park Ave.



Proforma Analysis

Scenario Four: Mixed-Use Development (Flex/Industrial & Residential)

Development scenario is a mix of Flex/ Industrial and Residential and includes 141 surface parking spaces.

Total development cost is around $17M.

The financial return under this scenario is positive as potential revenues gained from undertaking the project outstrip initial development and operational costs.

Net present value under this scenario is $6.7M indicating developers would be willing to undertake this project.

This project could carry additional mitigation costs.

Scenario Development Program
Source: RKG Associates, Inc.

Land Use	Development Square Feet	Parking Spaces
Residential	52,000 (68 units)	89
Office	N/A	N/A
Flex/ Industrial	52,000	52
Total	**104,000**	**141**

Scenario Financial Return
Source: RKG Associates, Inc.

Key Financial Metrics	
Equity	$4,258,271
Debt	$12,774,813
Total Development Cost	**$17,033,085**
Desired IRR	**12%**
Actual IRR	**23.4%**
Cash on Cash Return	**15%**
Net Present Value	**$6,727,824**
Net Fiscal Impact from New Dev't	**$87,710**



Arlington's Industrial Zones – Next Steps

Next steps

- Final meeting of the Zoning Bylaw Working Group on January 6
- Present zoning to Town Meeting for approval at 2021 ATM



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