

An Independent Study  
Commissioned by



RESIDENTIAL AND  
CIVIL  
CONSTRUCTION  
ALLIANCE OF  
ONTARIO

Constructing Ontario's Future

# APPENDIX B

## LOWER-TIER MUNICIPAL RESULTS

BY:



DECEMBER 2018



The GTHA's  
Unbalanced  
Housing Stock:  
Benchmarking Ontario's  
New LPAT System



## RCCAO

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The Residential and Civil Construction Alliance of Ontario (RCCAO) is composed of management and labour groups that represent a wide spectrum of the Ontario construction industry.

The RCCAO's goal is to work in cooperation with governments and related stakeholders to offer realistic solutions to a variety of challenges facing the construction industry and which also have wider societal benefits.

RCCAO has independently commissioned 48 reports on planning, procuring, financing and building infrastructure, and we have submitted position papers to politicians and staff to help influence government decisions.

For more information on the RCCAO or to view copies of other studies and submissions, please visit **[rccao.com](http://rccao.com)**

## RCCAO members include:

- Carpenters' Union
- Greater Toronto Sewer and Watermain Contractors Association
- Heavy Construction Association of Toronto
- International Union of Operating Engineers, Local 793
- International Union of Painters and Allied Trades, District Council 46
- Joint Residential Construction Association
- LiUNA Local 183
- Ontario Formwork Association
- Toronto and Area Road Builders Association

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## **ABOUT THE CANADIAN CENTRE FOR ECONOMIC ANALYSIS**

The Canadian Centre for Economic Analysis (CANCEA) is a socio-economic research and data firm. CANCEA provides objective, independent and evidence-based analysis and is dedicated to a comprehensive, collaborative, and quantitative understanding of the short- and long-term risks and returns behind market changes, policy decisions and economic behaviour.

CANCEA uses modern techniques in data science, including agent-based modelling, for econometric analysis, risk management assessments, demographic forecasts and epidemiology. CANCEA's work includes market analysis, policy evaluation and risk management, business model optimization, cost effectiveness and rate of return analysis, macroeconomic analysis, insurance risk evaluation, land use and infrastructure planning, logistics, and labour market analysis. CANCEA also provides comprehensive Canadian data services.

At the centre of CANCEA's analytical capabilities is an agent-based platform called Prosperity at Risk® that is an extensive, data-driven model of 56,000 locations across Canada. Given the systems focus behind all of CANCEA's work, CANCEA has a one model approach to its analysis which allows various disciplines and stakeholders to be incorporated into a single analysis.

## **ABOUT THIS REPORT**

The design and method of research, as well as the content of this study, were determined solely by CANCEA.

Statistics Canada data and relevant literature were used to inform the computer simulation models used to produce the results of this report.

Forecasts and research often involve numerous assumptions and data sources, and are subject to inherent risks and uncertainties. This information is not intended as specific investment, accounting, legal, or tax advice.

## **ACKNOWLEDGEMENTS**

CANCEA wishes to acknowledge the contributions and recommendations of Ed Sajecki and Michael Fenn during the drafting of this report. The interpretation and reporting of the results remain those of CANCEA and do not necessarily represent the policy positions or the opinions of the above mentioned.

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## APPENDIX B: LOWER-TIER MUNICIPAL RESULTS

In addition to the single- and upper- tier results presented in Sections 1.0 and 2.0 of the report titled **The GTHA's Unbalanced Housing Stock: Benchmarking Ontario's New LPAT System**, (available online at [rccao.com](http://rccao.com)) the analysis can be conducted for the lower-tier municipalities shown on the following pages.

“Housing Starts by Type” refers to dwelling type (Apartments or Other, Row, Semis, Singles).

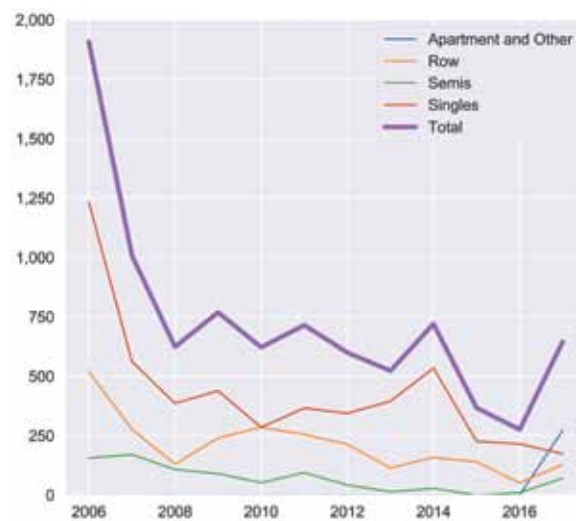
“Housing Starts by Market” refers to tenure type (condo, home ownership, rental).

# DURHAM

**Figure 1A: Ajax – Higher Density**

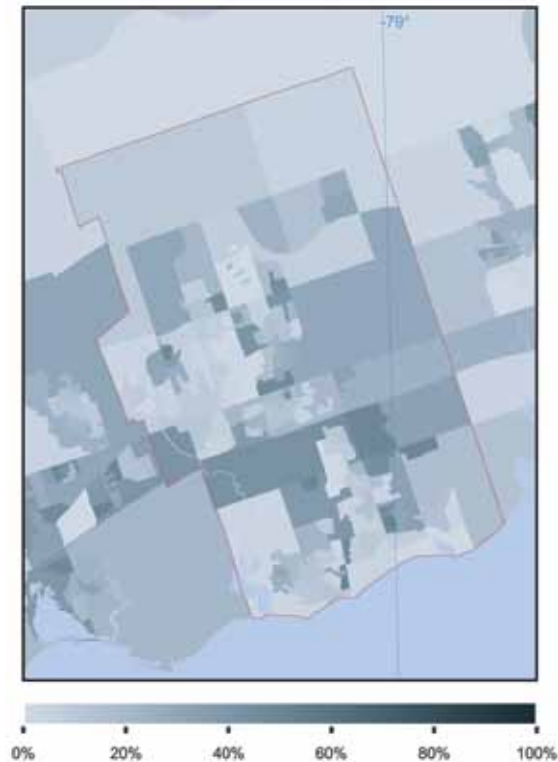


**Figure 1B: Ajax – Housing Starts By Type**

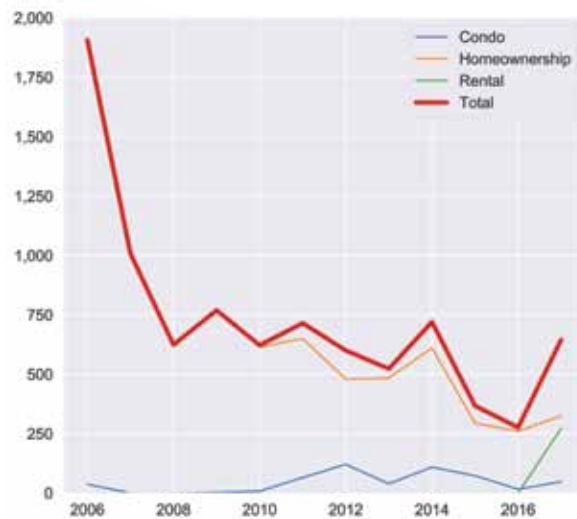


# DURHAM

**Figure 1C: Ajax – Medium Density**

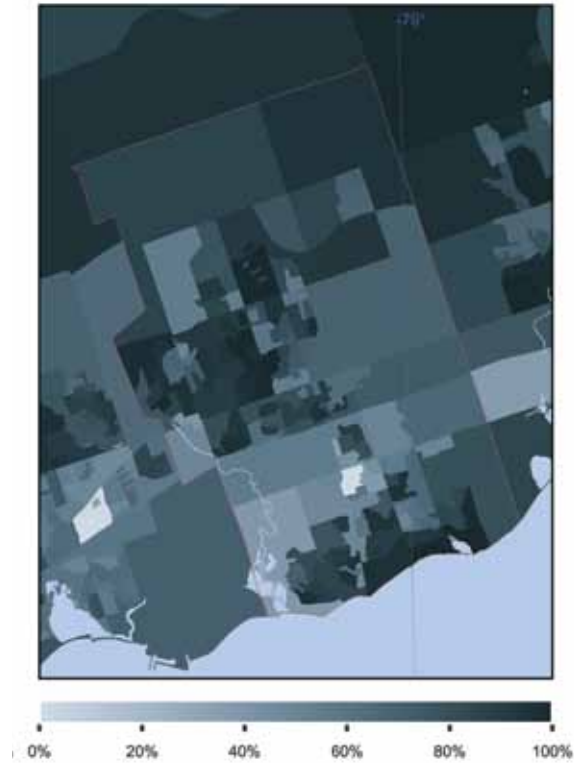


**Figure 1D: Ajax – Housing Starts By Market**

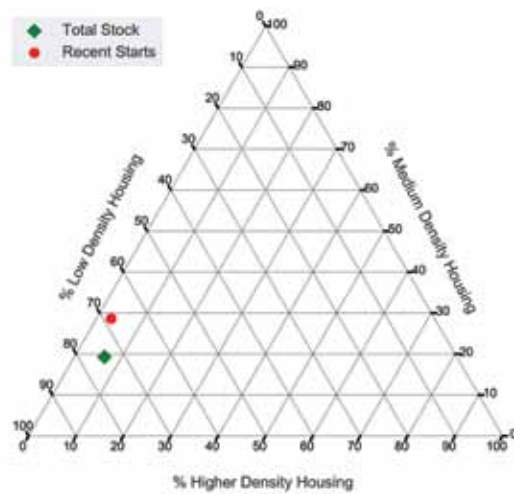


# DURHAM

**Figure 1E:** Ajax – Low Density

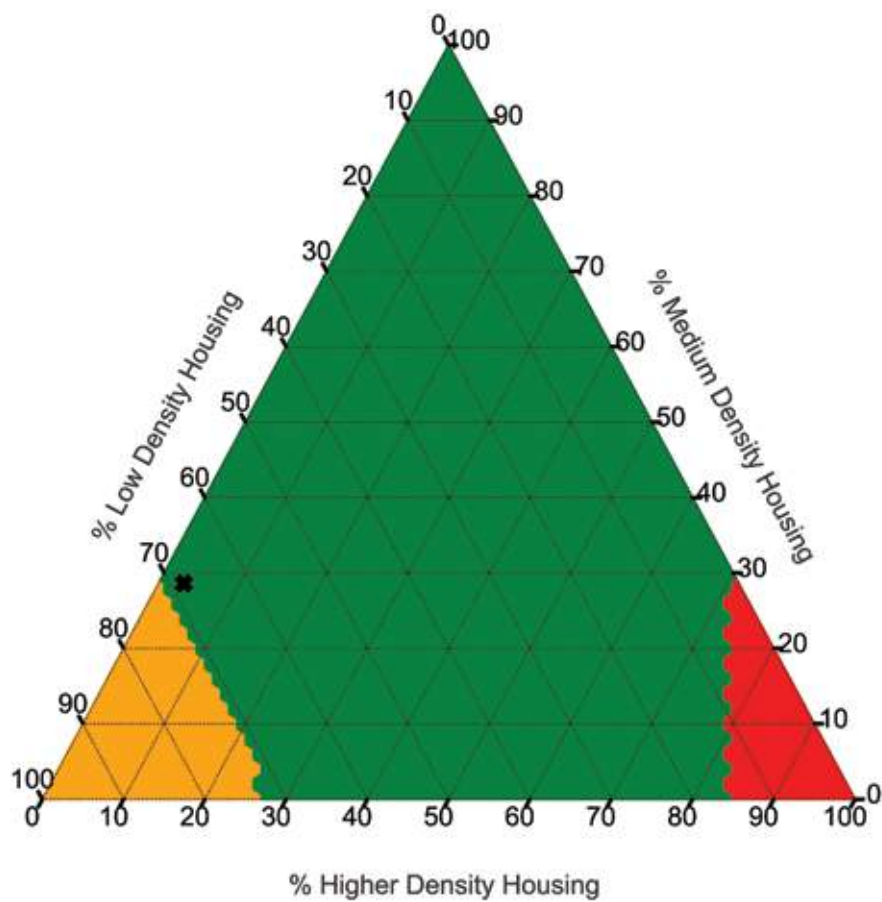


**Figure 1F:** Ajax – Dwelling Mix



# DURHAM

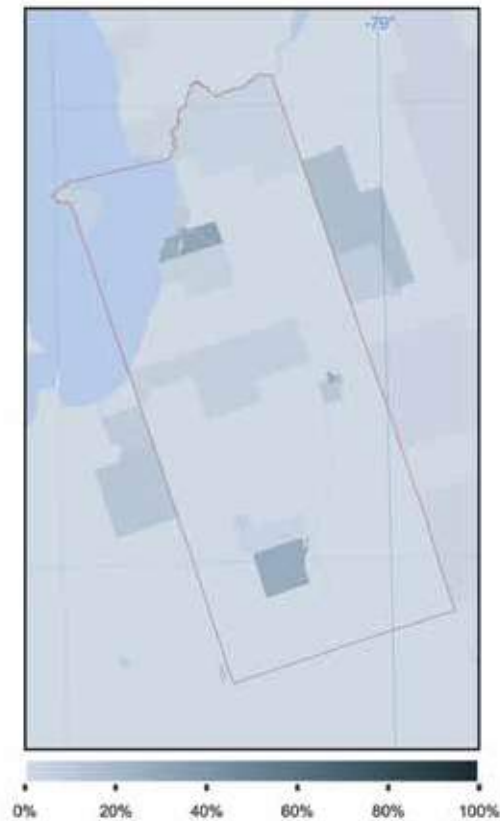
**Figure 1G:** Ajax – Development Mix



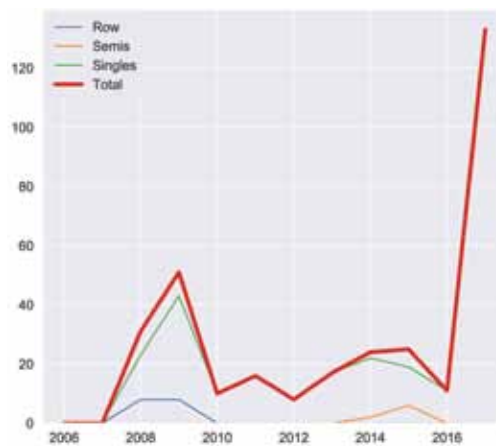


# DURHAM

**Figure 2A:** Brock – Higher Density



**Figure 2B:** Brock – Housing Starts By Type

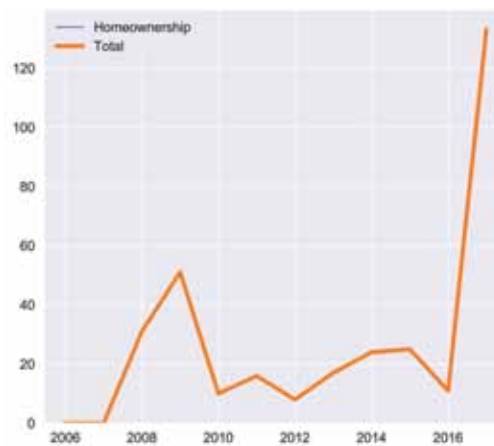


# DURHAM

**Figure 2C:** Brock – Medium Density



**Figure 2D:** Brock – Housing Starts By Market

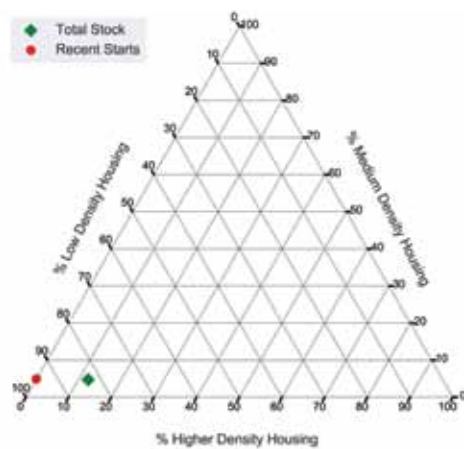


# DURHAM

**Figure 2E:** Brock – Low Density

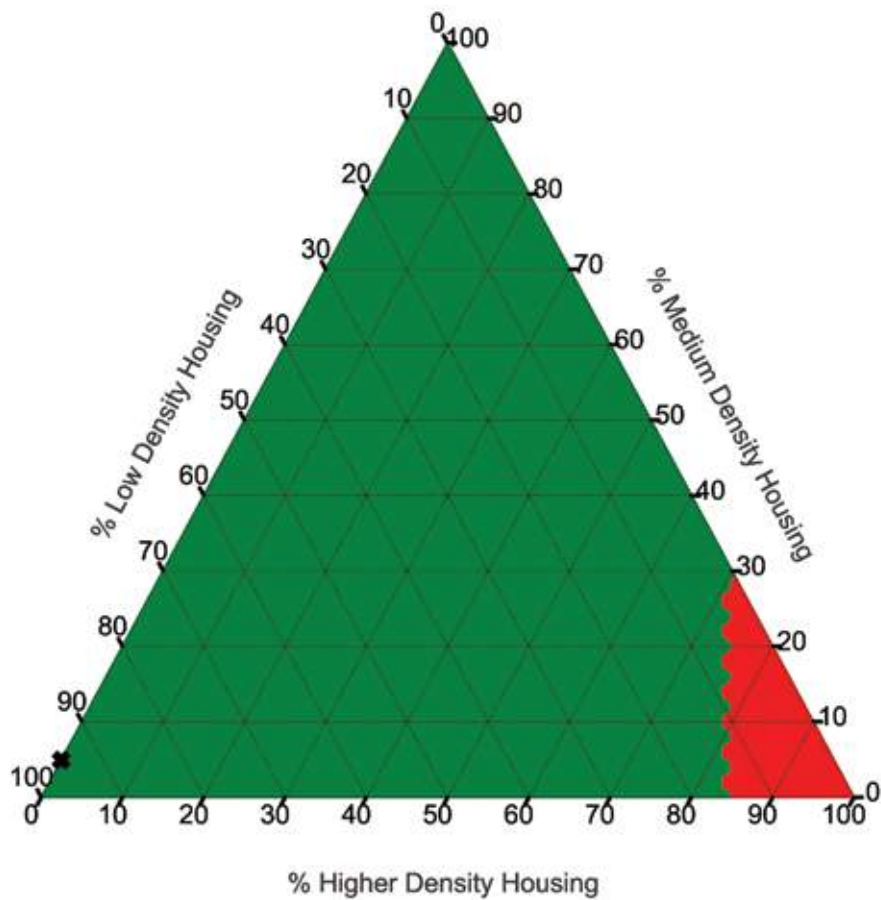


**Figure 2F:** Brock – Dwelling Mix



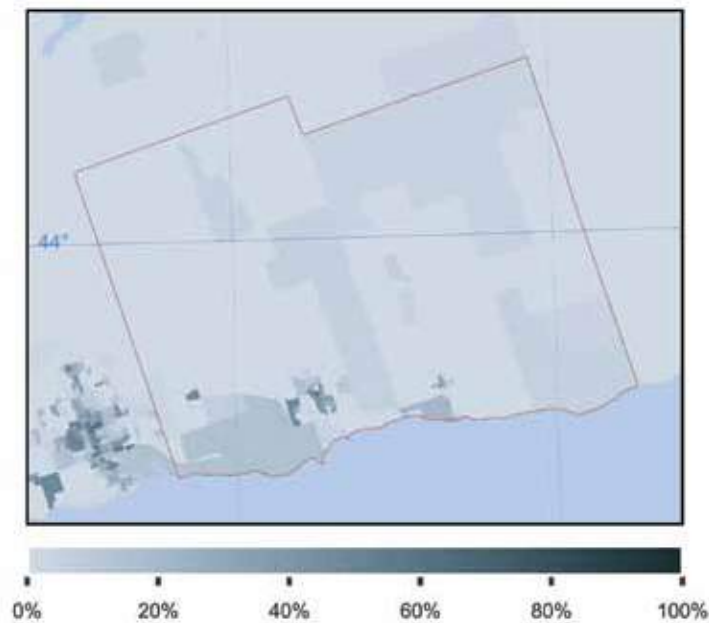
# DURHAM

**Figure 2G:** Brock – Development Mix



# DURHAM

**Figure 3A: Clarington – Higher Density**

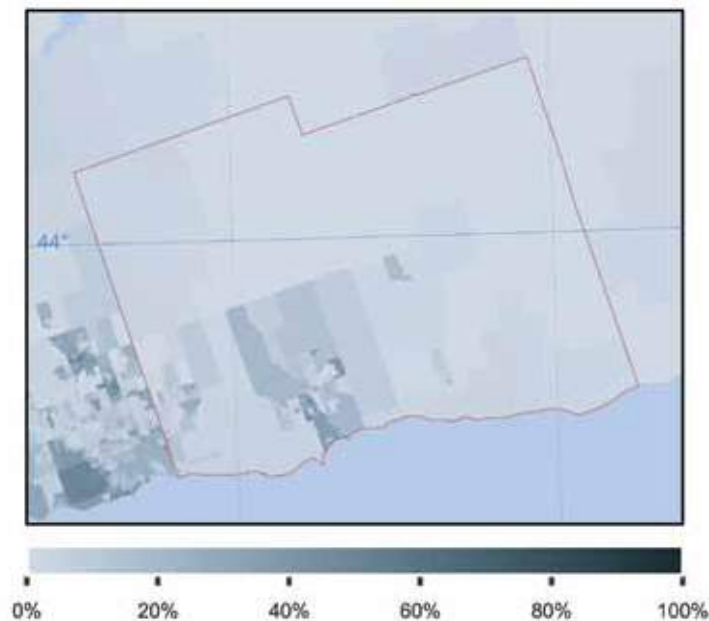


**Figure 3B: Clarington – Housing Starts By Type**

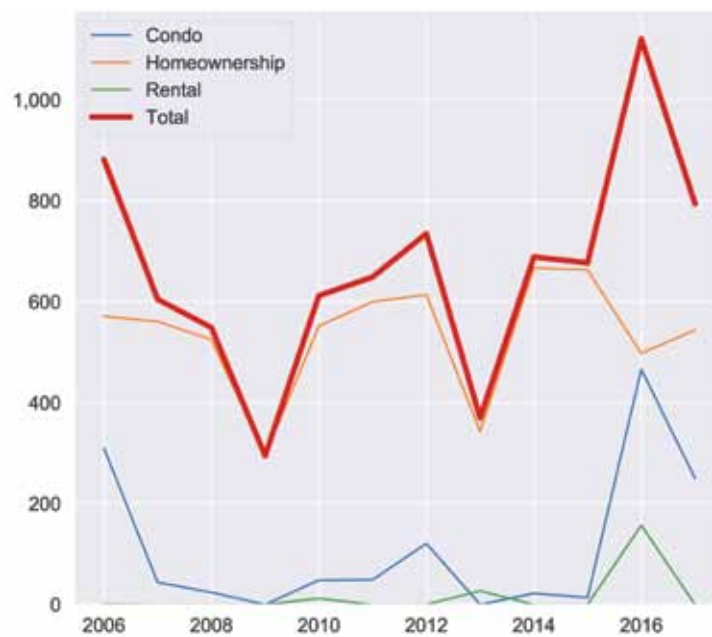


# DURHAM

**Figure 3C:** Clarington – Medium Density

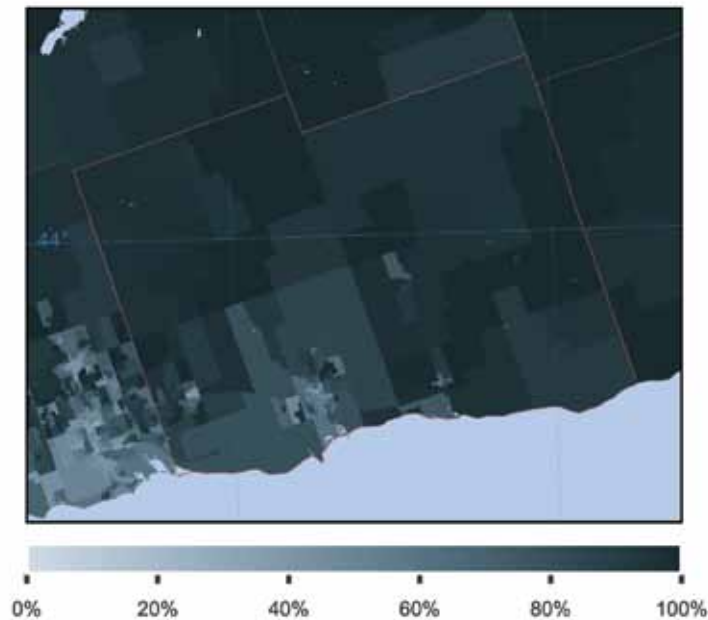


**Figure 3D:** Clarington – Housing Starts By Market

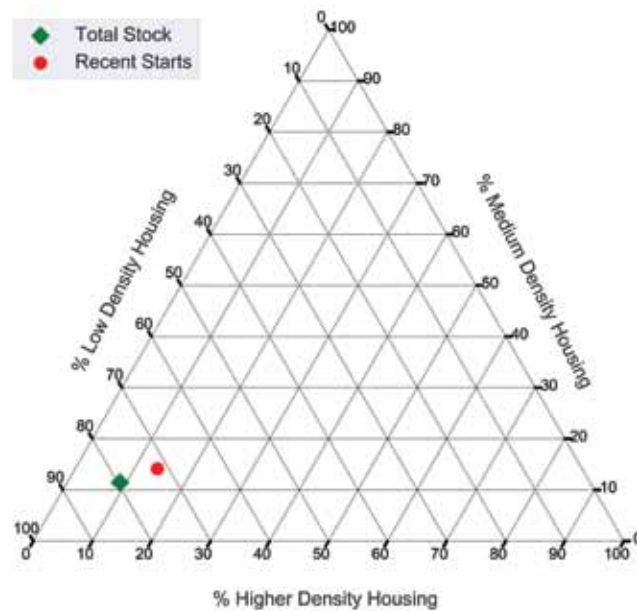


# DURHAM

**Figure 3E:** Clarington – Low Density

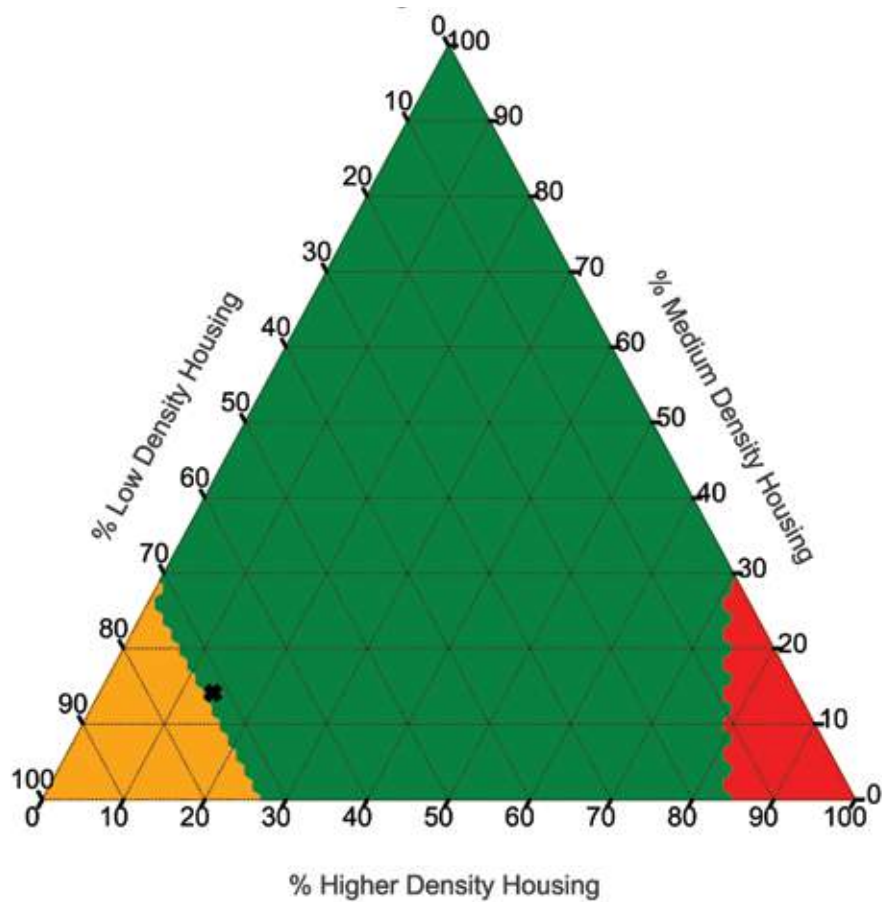


**Figure 3F:** Clarington – Dwelling Mix



# DURHAM

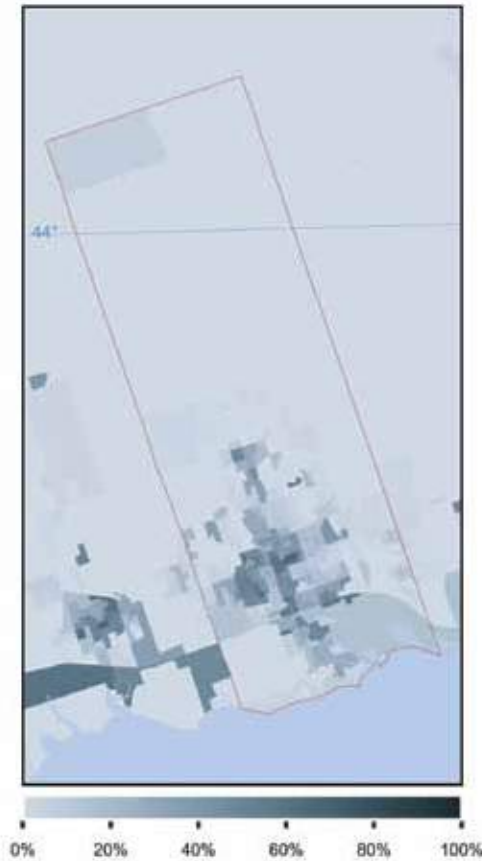
**Figure 3G:** Clarington – Development Mix





# DURHAM

**Figure 4A: Oshawa – Higher Density**

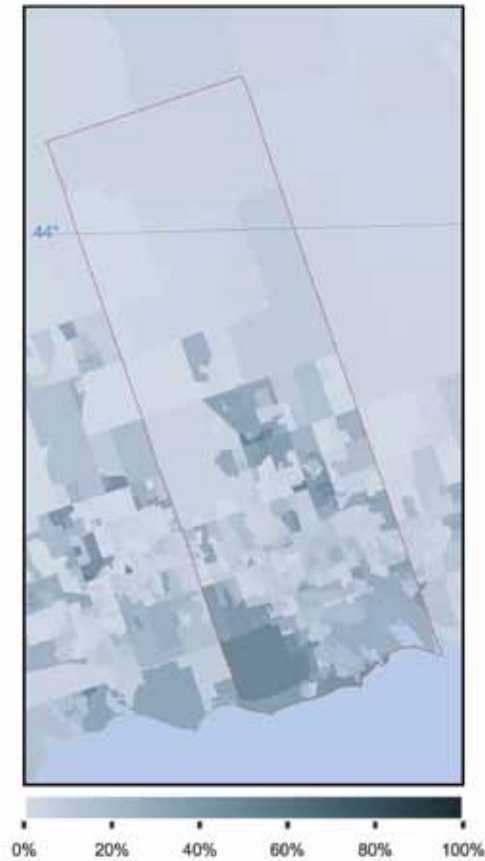


**Figure 4B: Oshawa – Housing Starts By Type**

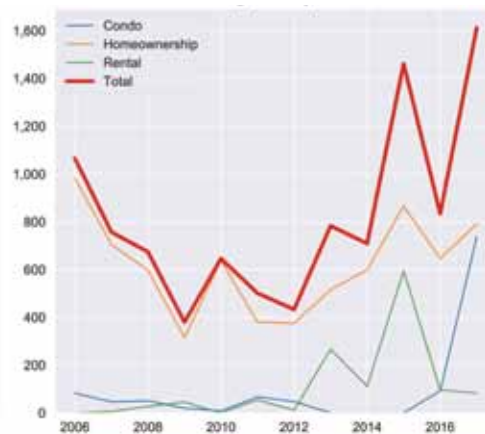


# DURHAM

**Figure 4C:** Oshawa – Medium Density



**Figure 4D:** Oshawa – Housing Starts By Market

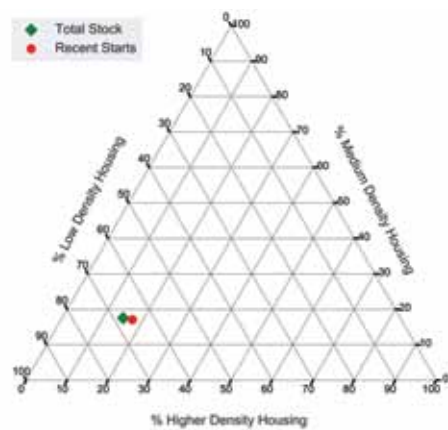


# DURHAM

**Figure 4E:** Oshawa – Low Density

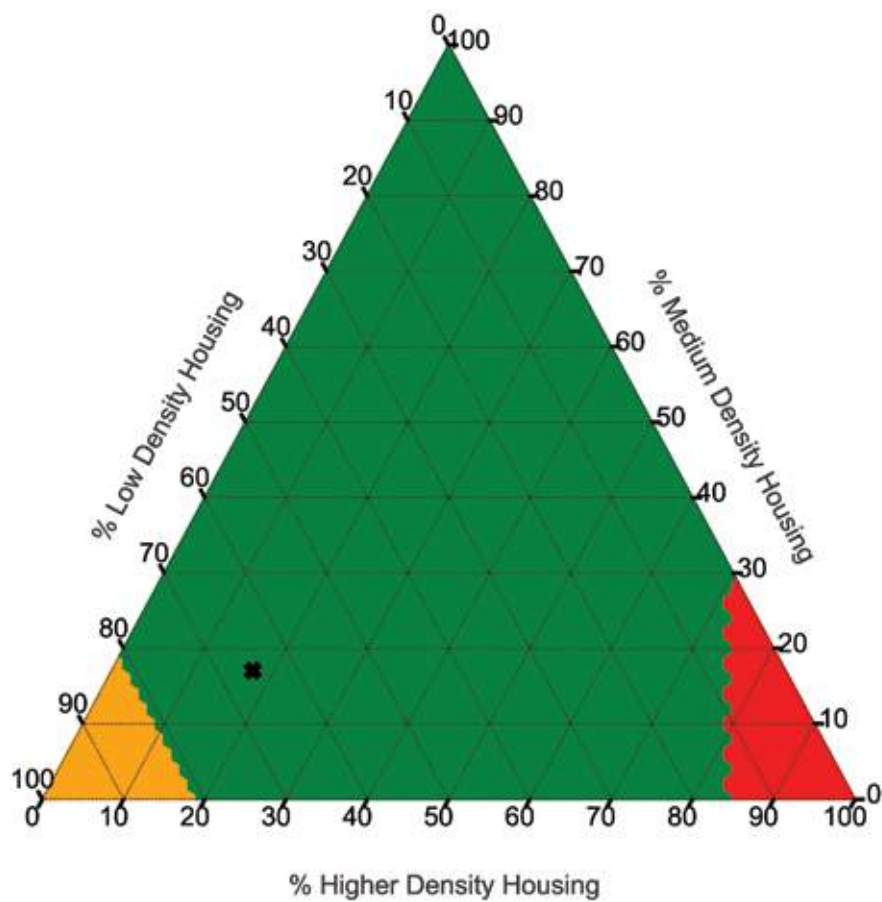


**Figure 4F:** Oshawa – Dwelling Mix



# DURHAM

**Figure 4G:** Oshawa – Development Mix



# DURHAM

**Figure 5A: Pickering – Higher Density**

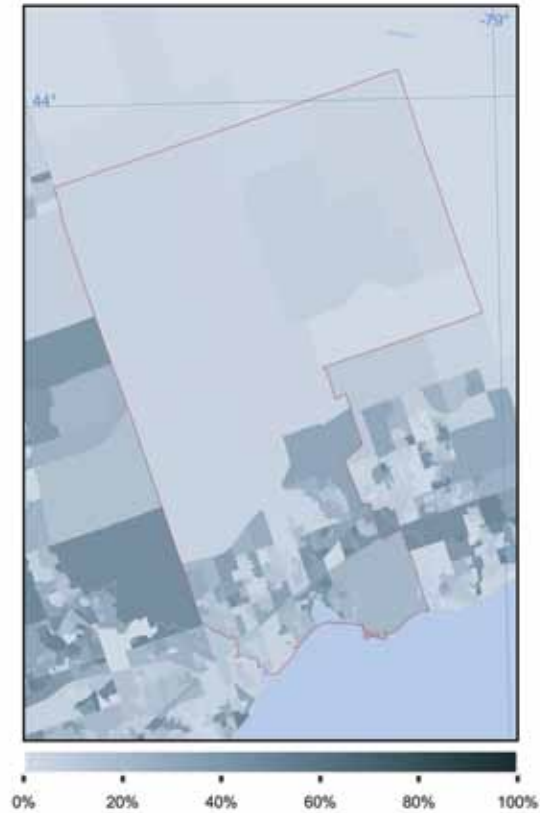


**Figure 5B: Pickering – Housing Starts By Type**

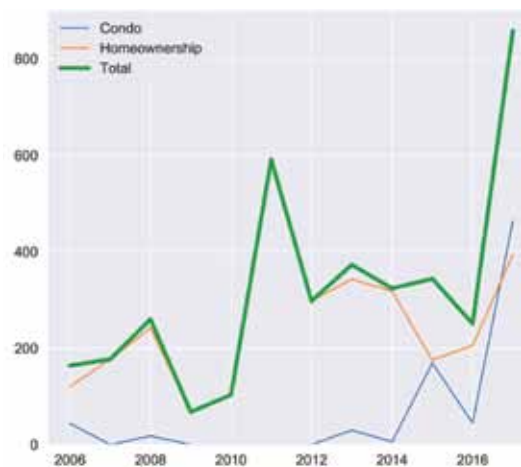


# DURHAM

**Figure 5C:** Pickering – Medium Density



**Figure 5D:** Pickering – Housing Starts By Market

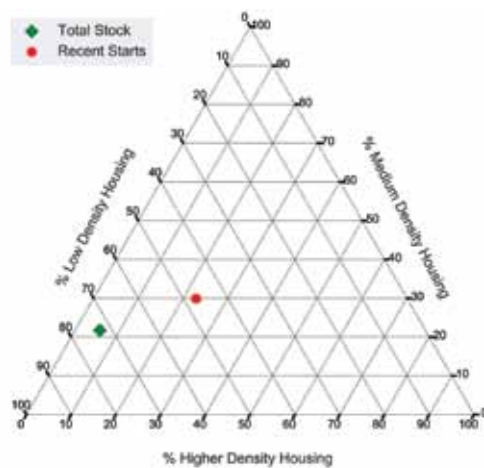


# DURHAM

**Figure 5E: Pickering – Low Density**

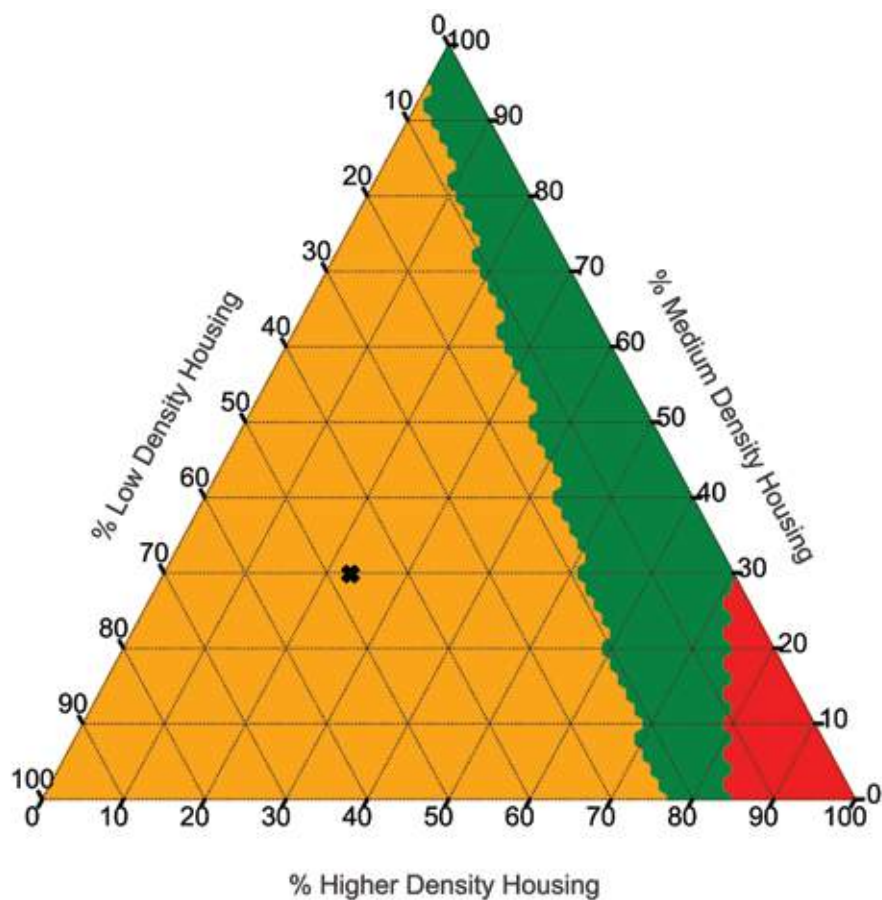


**Figure 5F: Pickering – Dwelling Mix**



# DURHAM

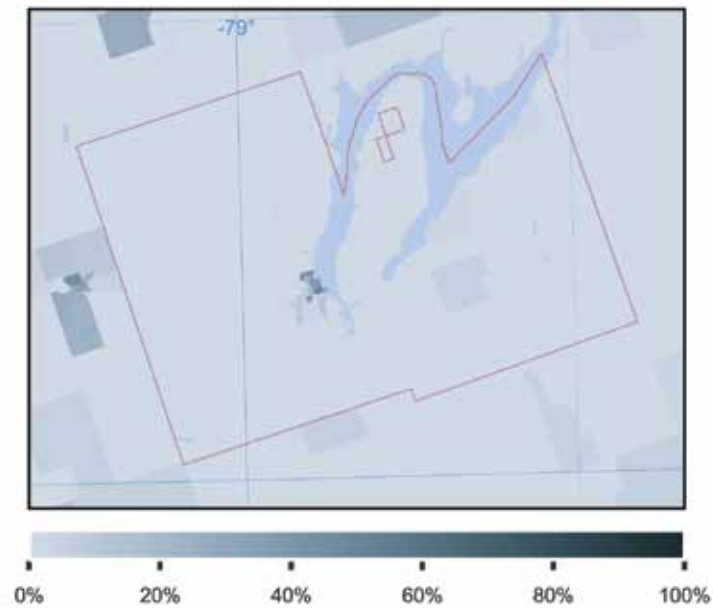
**Figure 5G:** Pickering – Development Mix



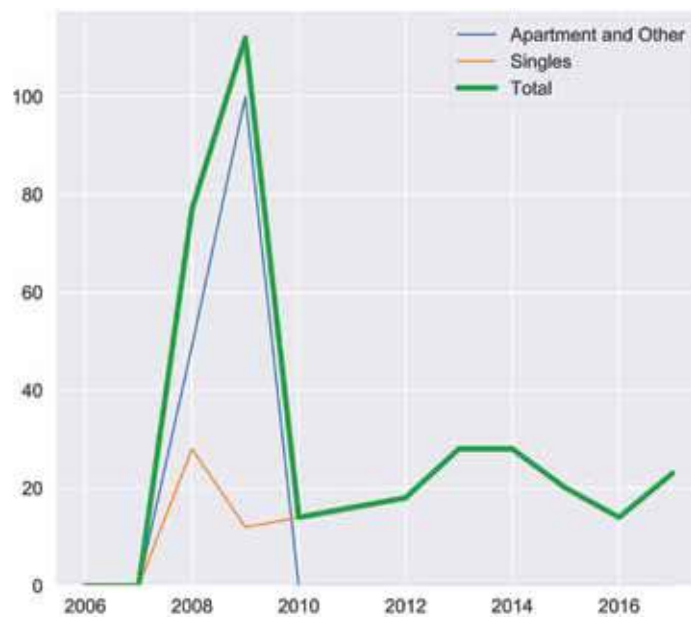


# DURHAM

**Figure 6A: Scugog – Higher Density**

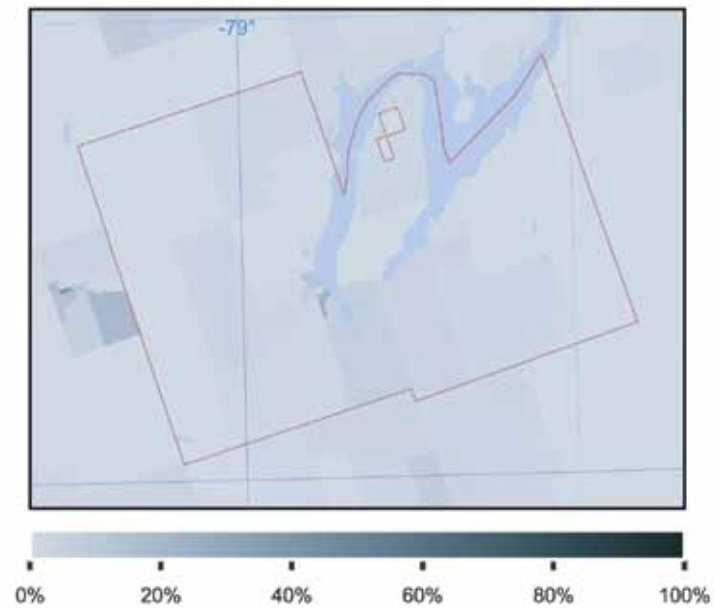


**Figure 6B: Scugog – Housing Starts By Type**

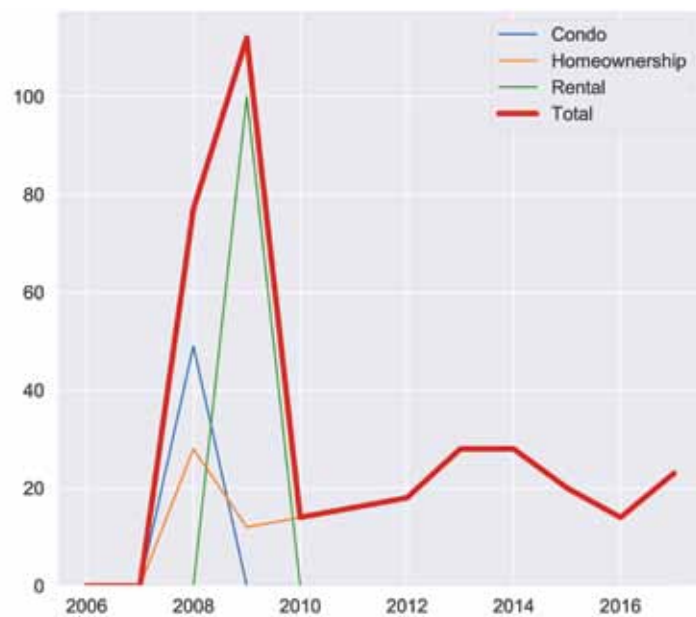


# DURHAM

**Figure 6C: Scugog – Medium Density**

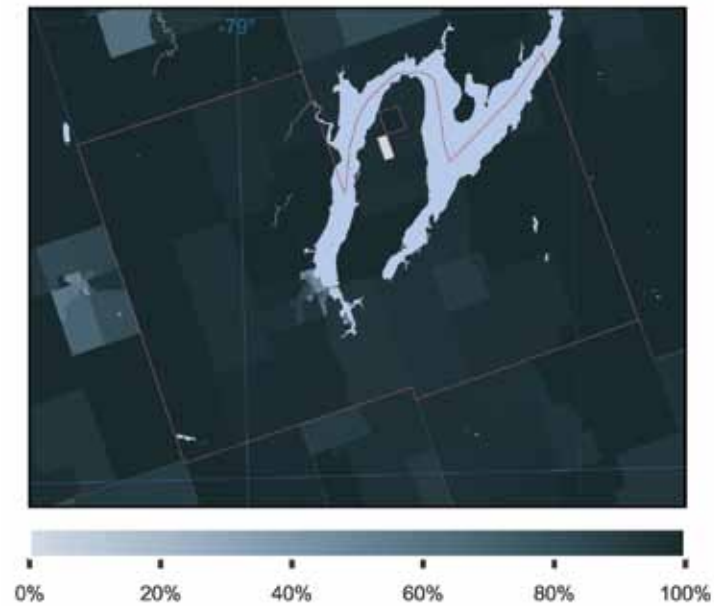


**Figure 6D: Scugog – Housing Starts By Market**

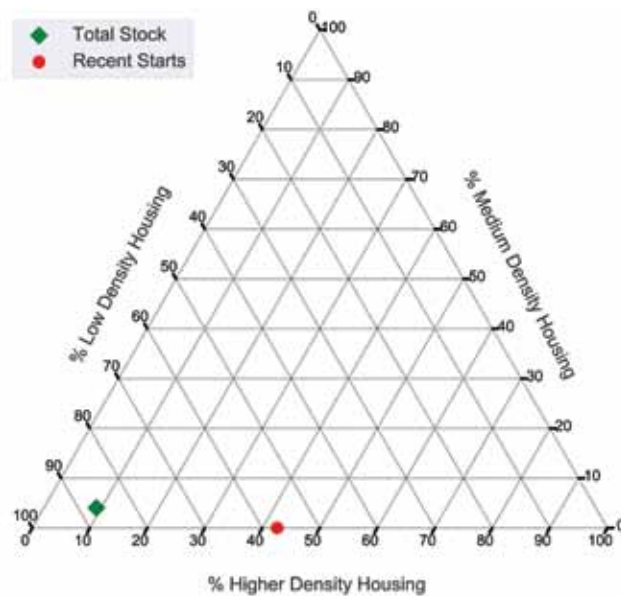


# DURHAM

**Figure 6E: Scugog – Low Density**

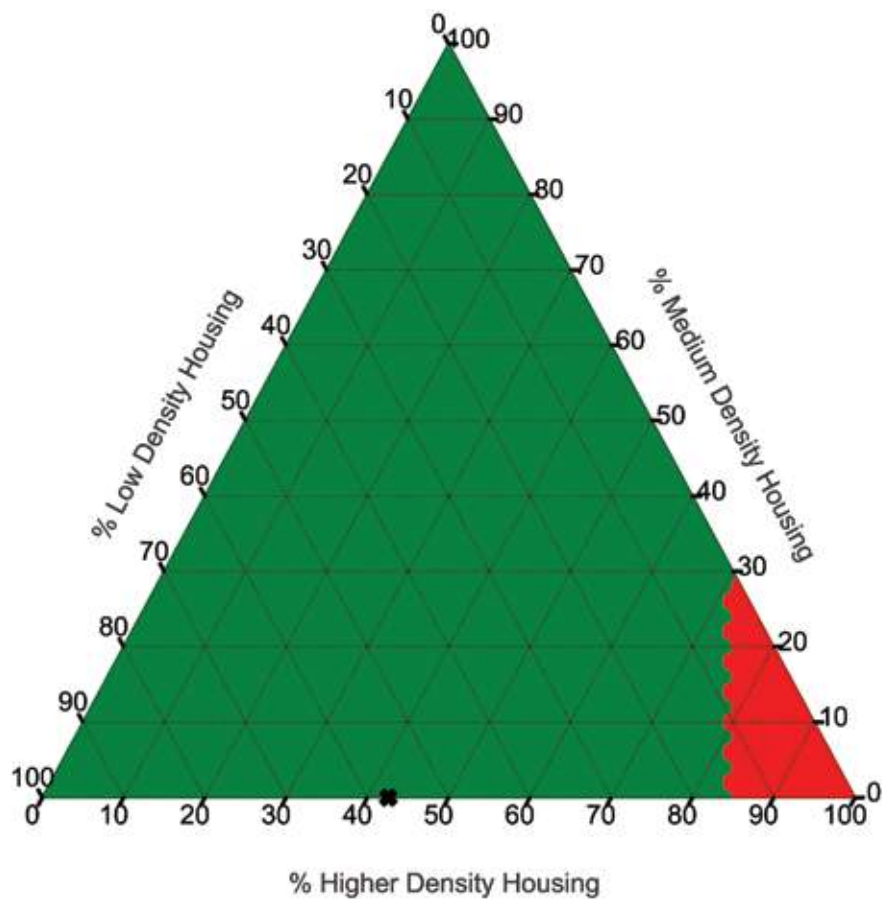


**Figure 6F: Scugog – Dwelling Mix**



# DURHAM

**Figure 6G: Scugog – Development Mix**

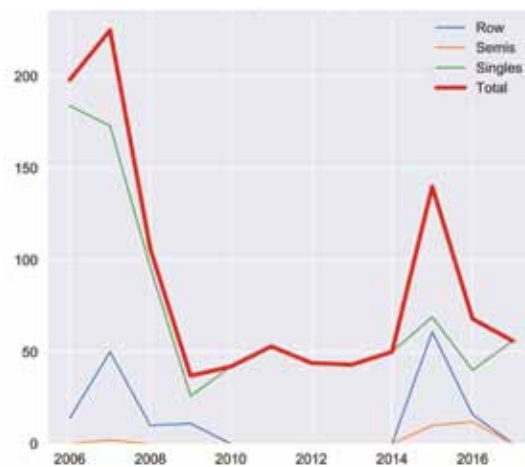


# DURHAM

**Figure 7A: Uxbridge – Higher Density**

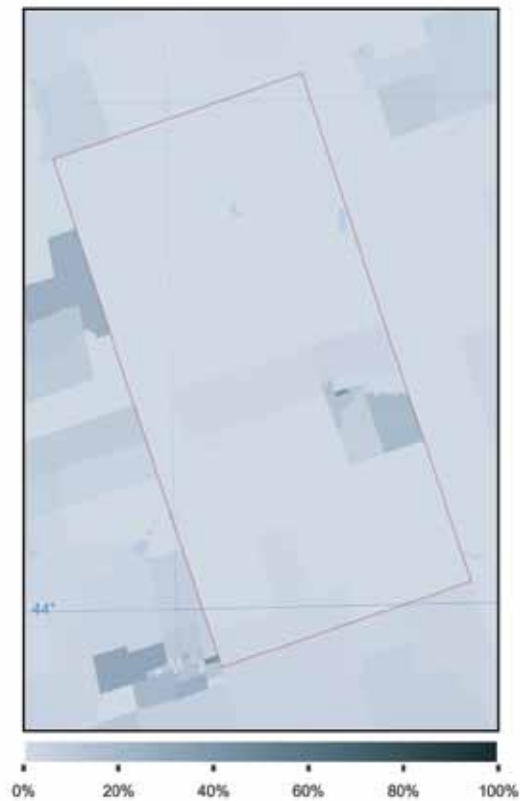


**Figure 7B: Uxbridge – Housing Starts By Type**

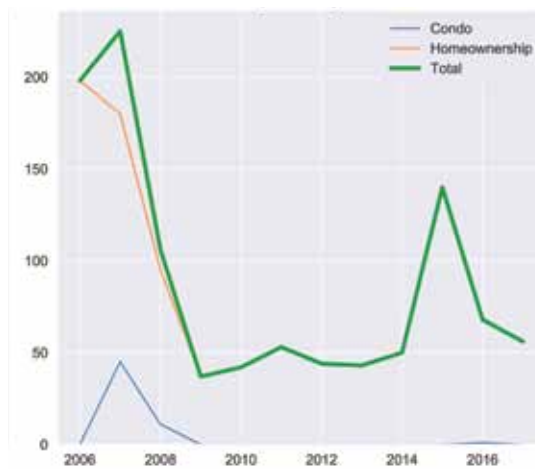


# DURHAM

**Figure 7C: Uxbridge – Medium Density**



**Figure 7D: Uxbridge – Housing Starts By Market**

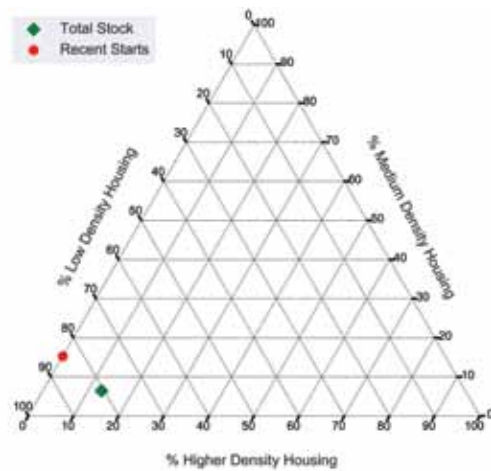


# DURHAM

**Figure 7E:** Uxbridge – Low Density

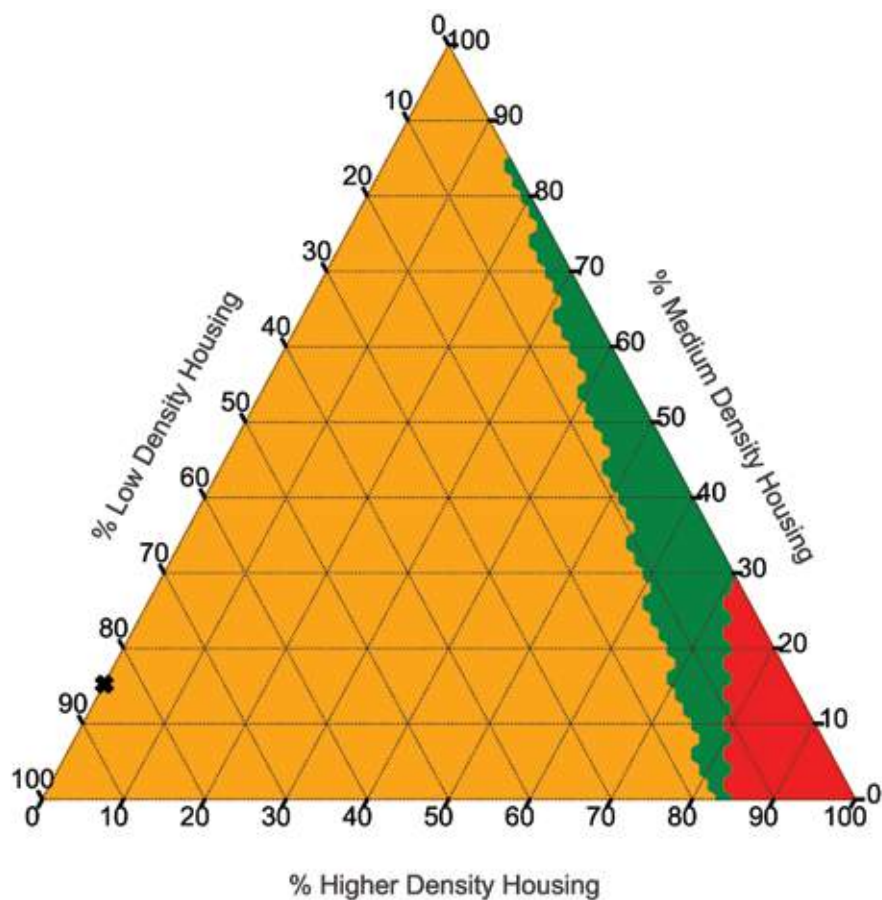


**Figure 7F:** Uxbridge – Dwelling Mix



# DURHAM

**Figure 7G:** Uxbridge – Development Mix



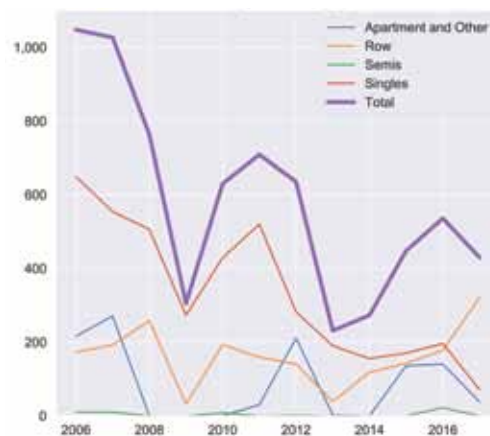


# DURHAM

**Figure 8A:** Whitby – Higher Density



**Figure 8B:** Whitby – Housing Starts By Type

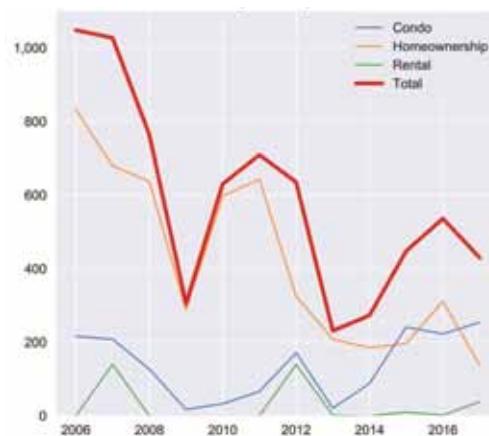


# DURHAM

**Figure 8C: Whitby – Medium Density**



**Figure 8D: Whitby – Housing Starts By Market**

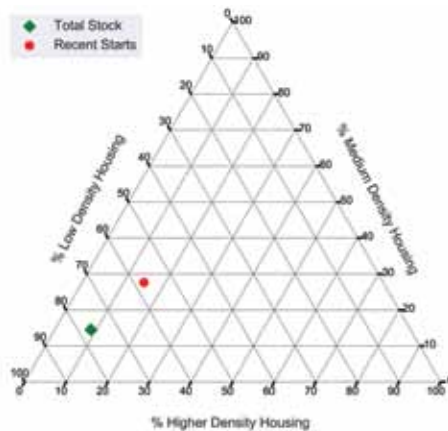


# DURHAM

**Figure 8E: Whitby – Low Density**

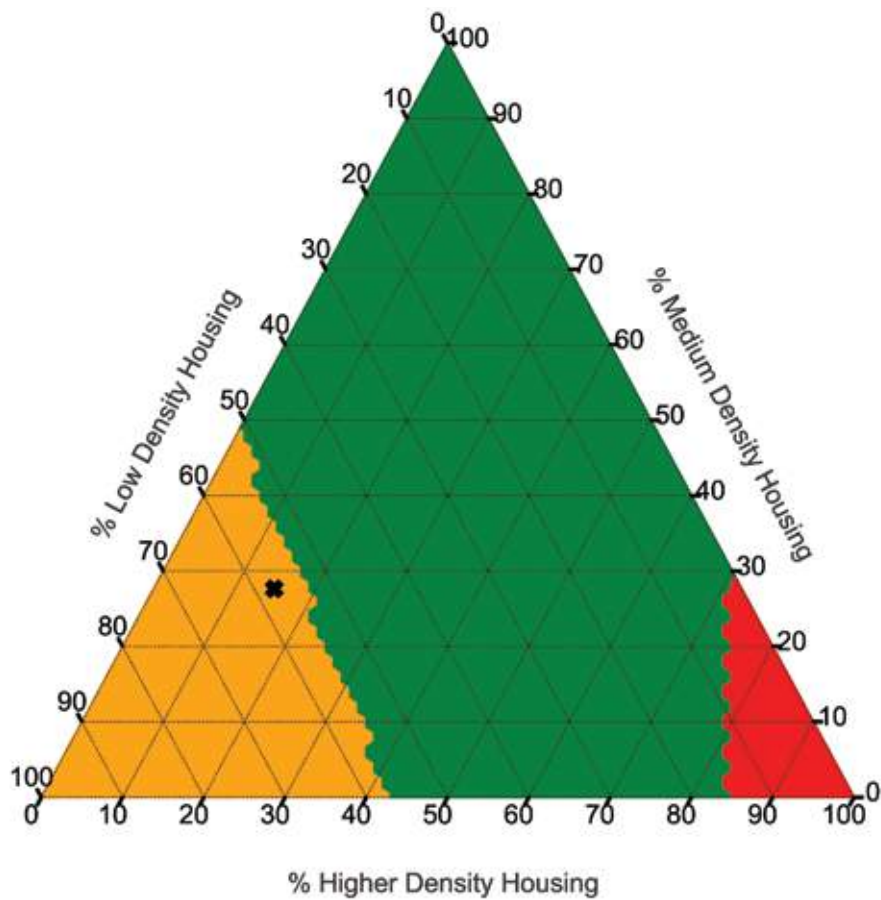


**Figure 8F: Whitby – Dwelling Mix**



# DURHAM

**Figure 8G:** Whitby – Development Mix

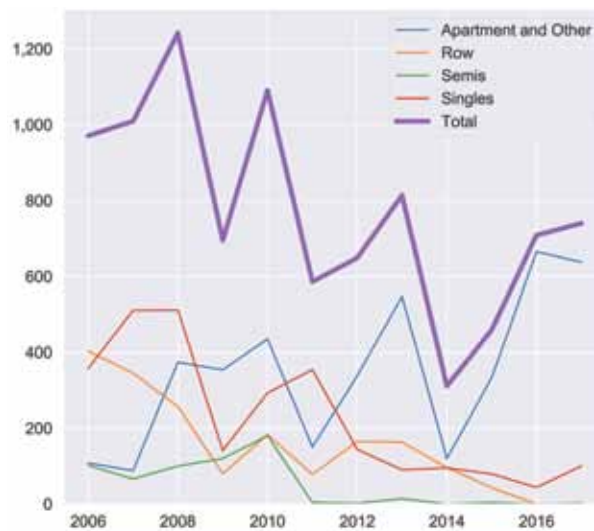


# HALTON

**Figure 9A: Burlington – Higher Density**



**Figure 9B: Burlington – Housing Starts By Type**

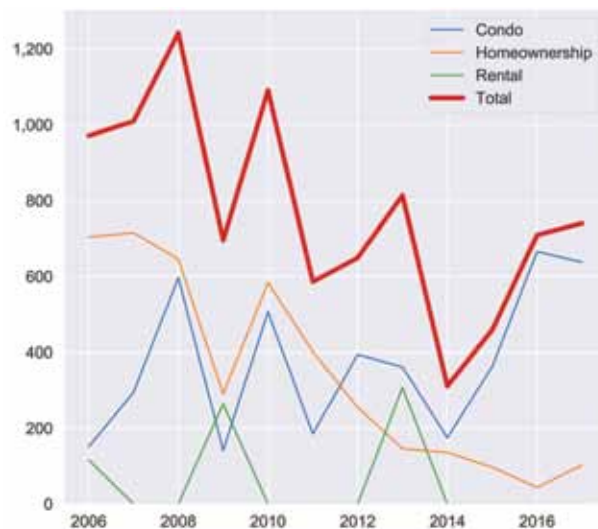


# HALTON

**Figure 9C:** Burlington – Medium Density



**Figure 9D:** Burlington – Housing Starts By Market

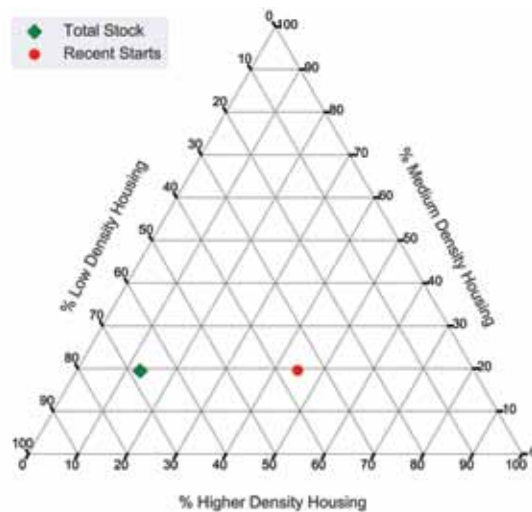


# HALTON

**Figure 9E:** Burlington – Low Density

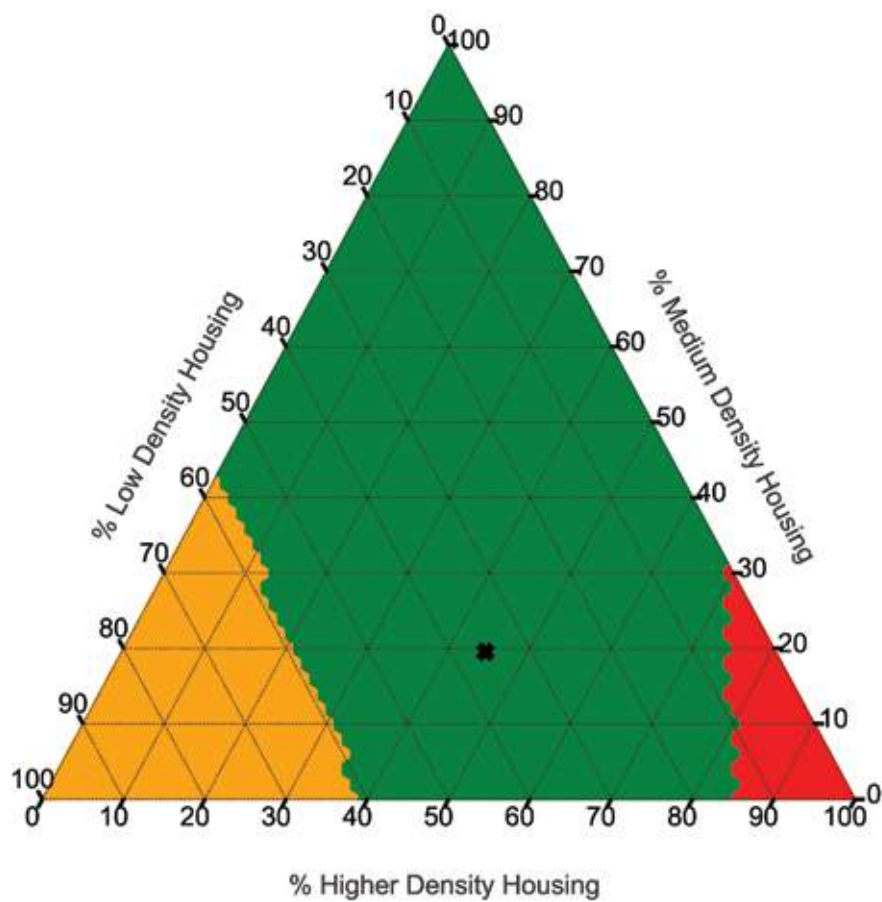


**Figure 9F:** Burlington – Dwelling Mix



# HALTON

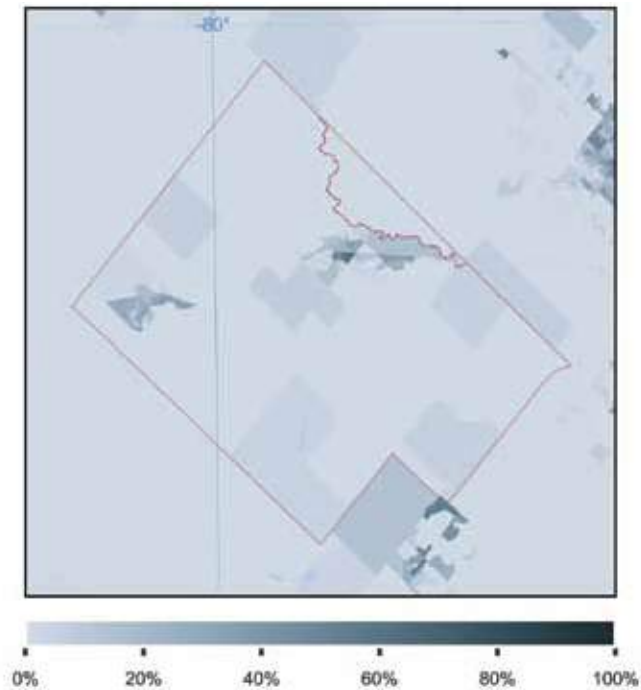
**Figure 9G:** Burlington – Development Mix





# HALTON

**Figure 10A: Halton Hills – Higher Density**

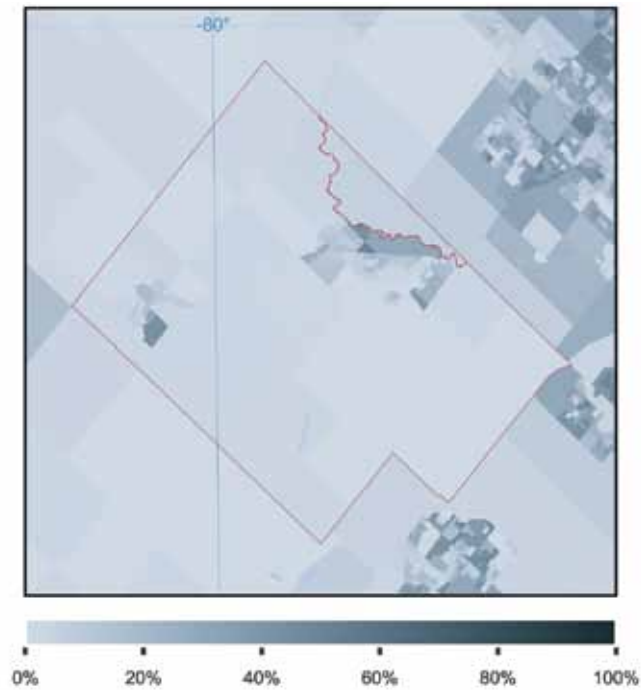


**Figure 10B: Halton Hills – Housing Starts By Type**

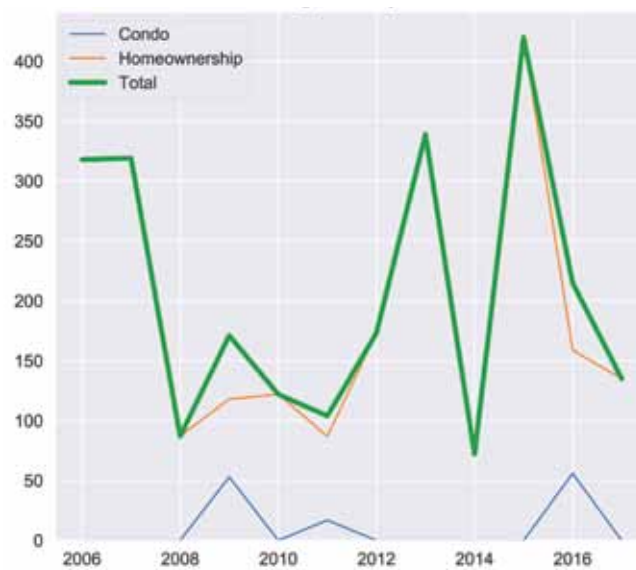


# HALTON

**Figure 10C:** Halton Hills – Medium Density

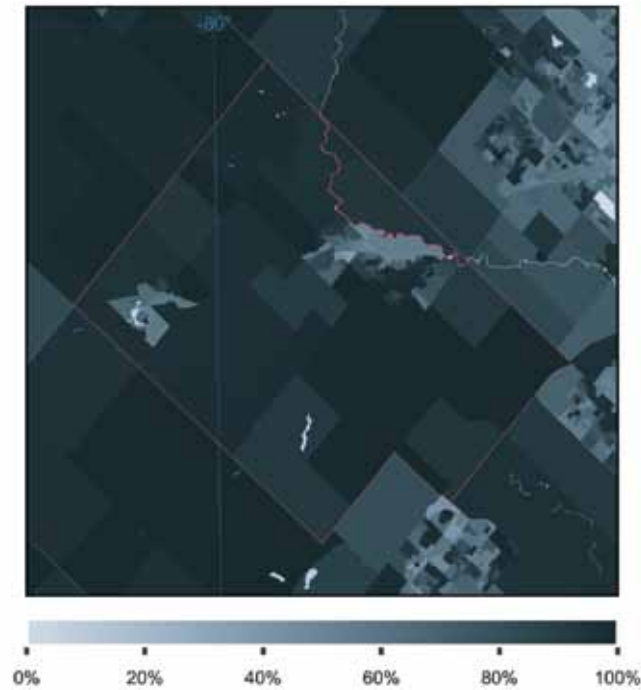


**Figure 10D:** Halton Hills – Housing Starts By Market

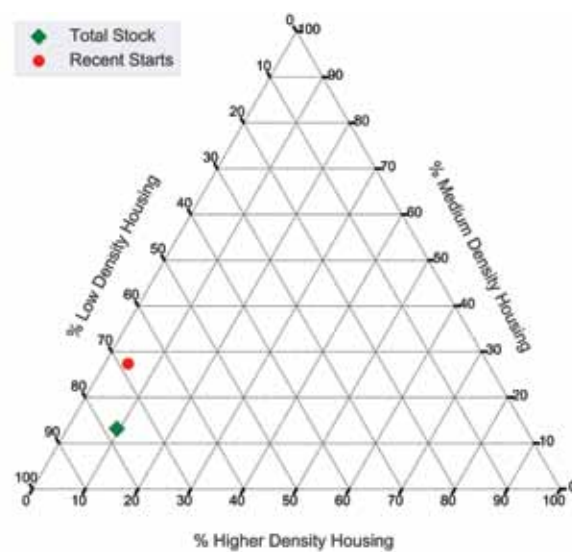


# HALTON

### Figure 10E: Halton Hills – Low Density

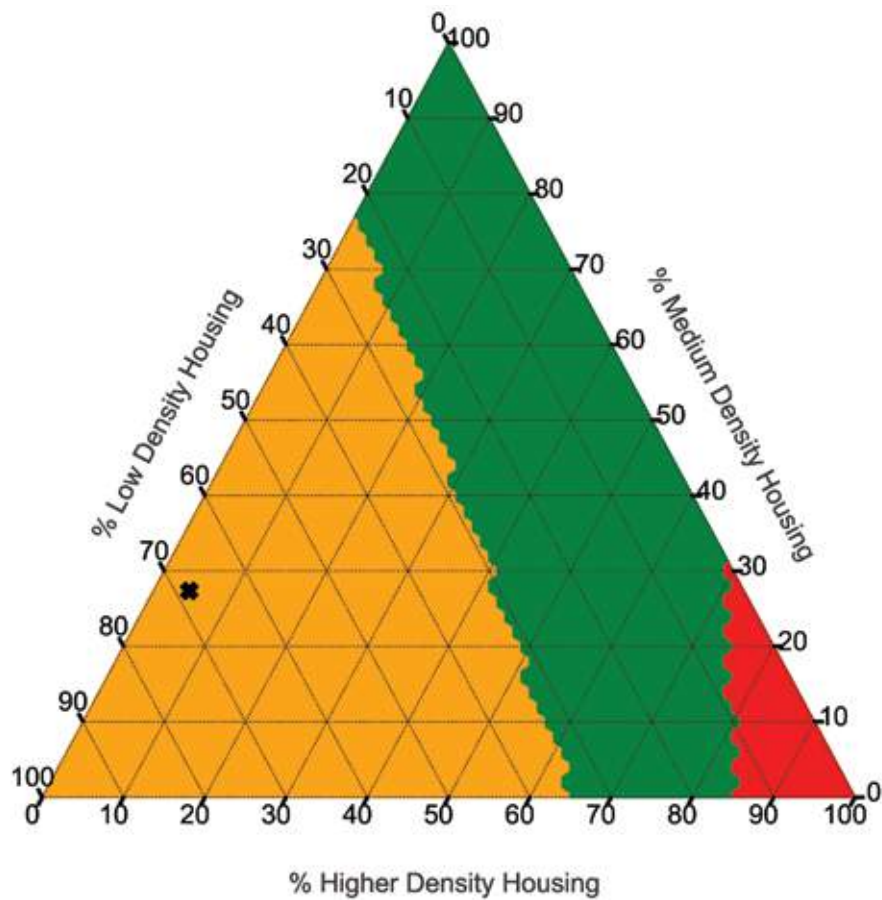


### Figure 10F: Halton Hills – Dwelling Mix



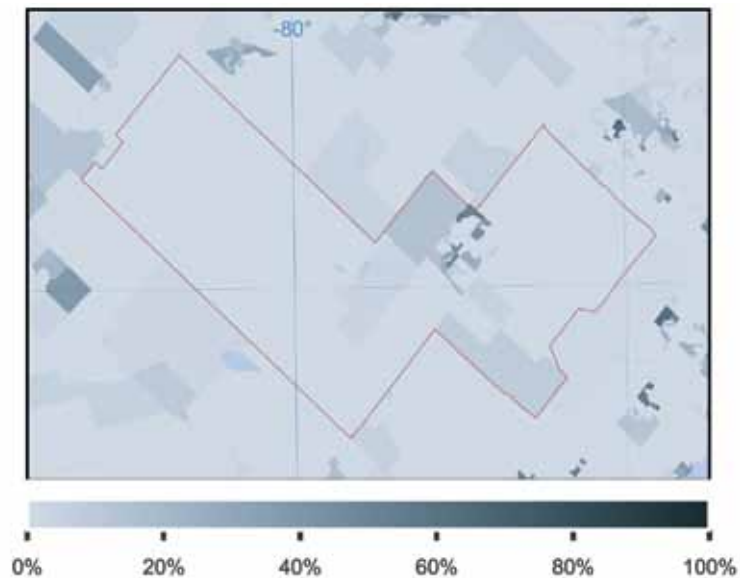
# HALTON

**Figure 10G:** Halton Hills – Development Mix



# HALTON

**Figure 11A: Milton – Higher Density**

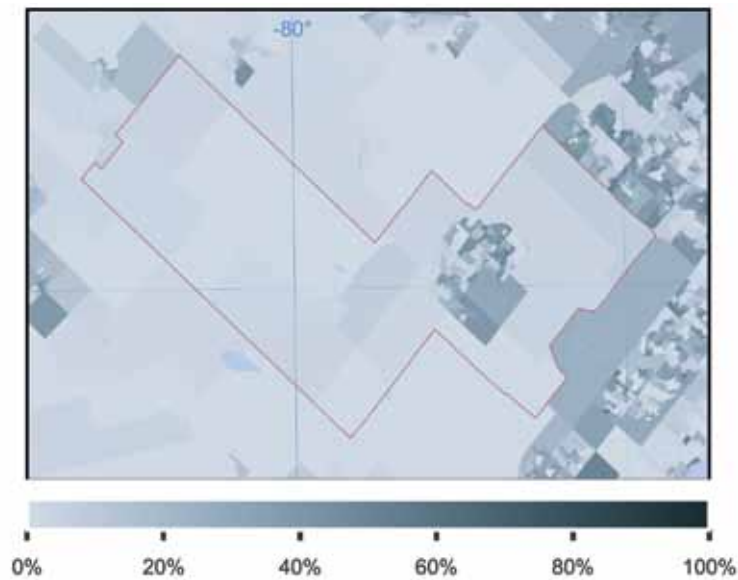


**Figure 11B: Milton – Housing Starts By Type**

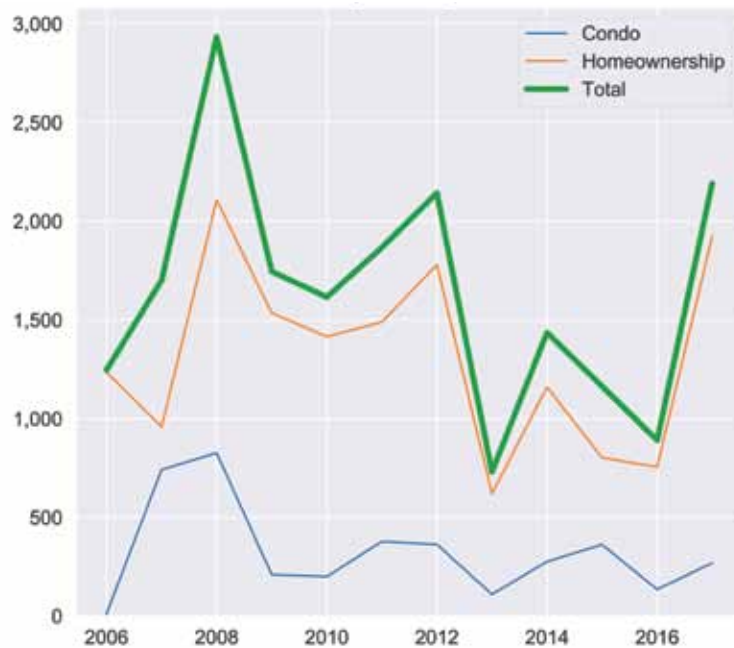


# HALTON

**Figure 11C:** Milton – Medium Density

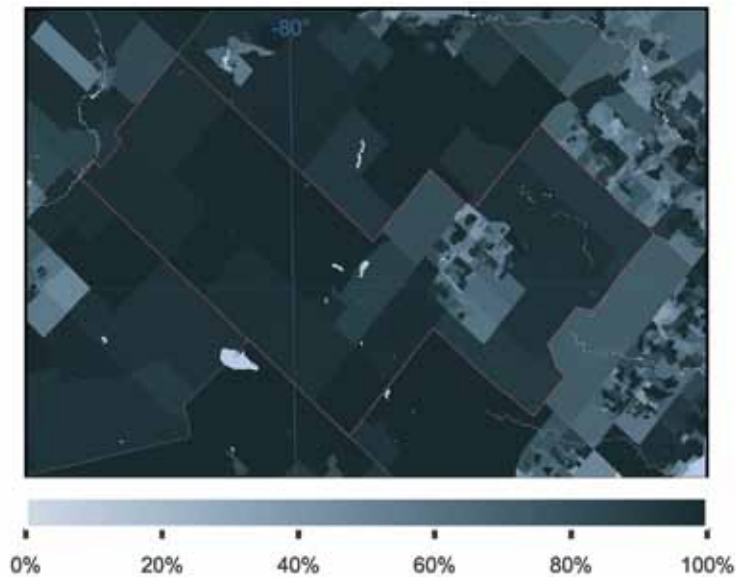


**Figure 11D:** Milton – Housing Starts By Market

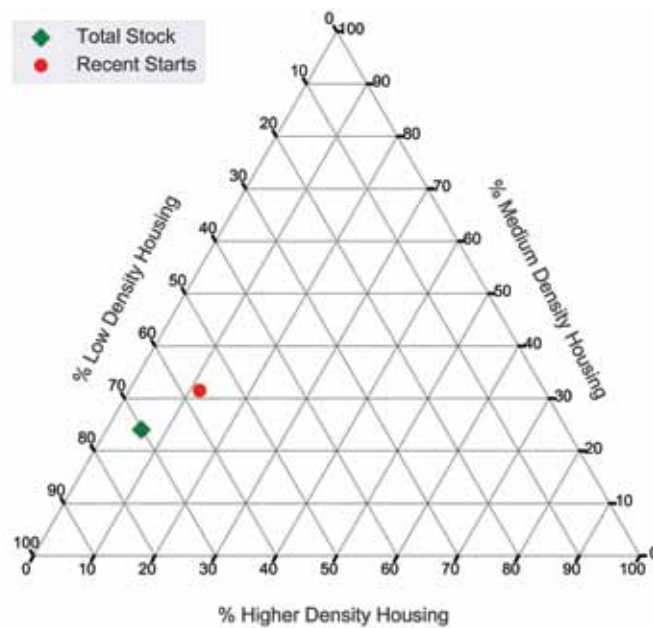


# HALTON

**Figure 11E: Milton – Low Density**

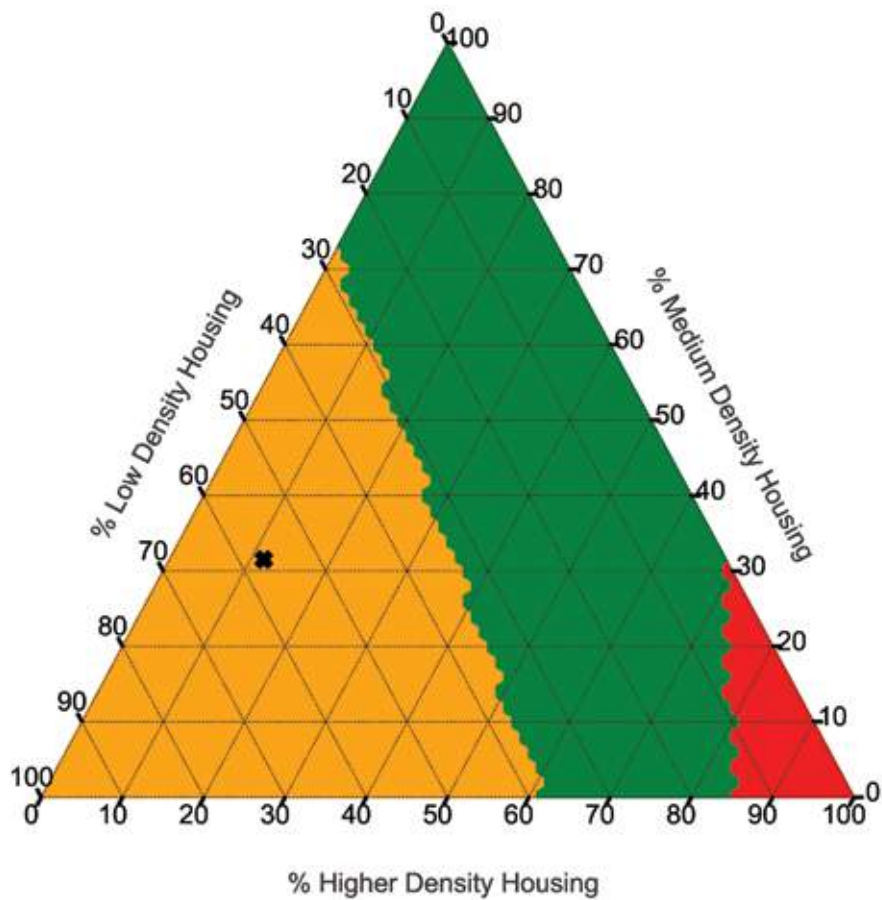


**Figure 11F: Milton – Dwelling Mix**



# HALTON

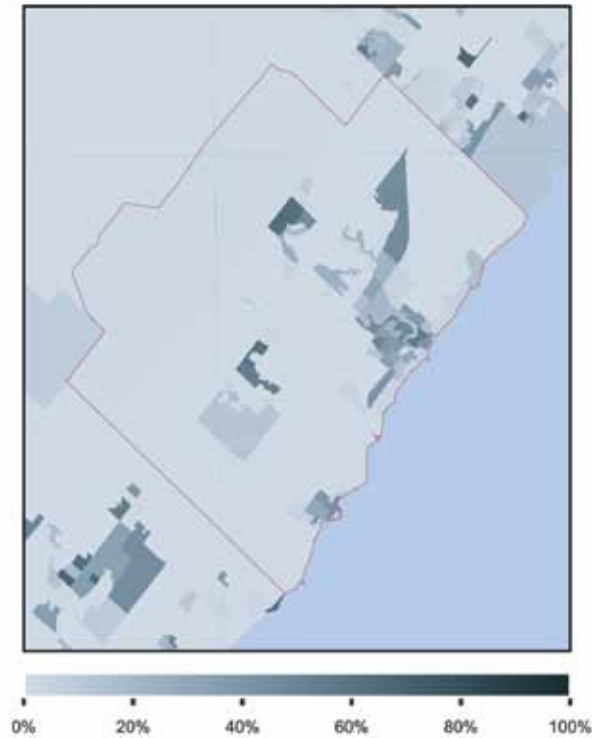
**Figure 11G: Milton – Development Mix**





# HALTON

**Figure 12A: Oakville – Higher Density**



**Figure 12B: Oakville – Housing Starts By Type**

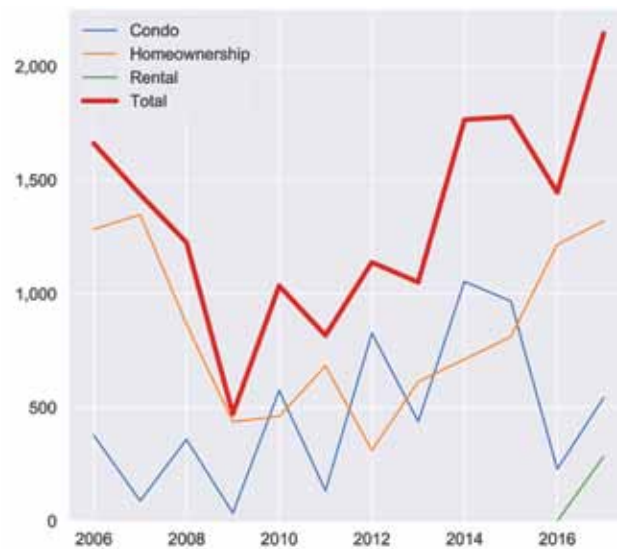


# HALTON

**Figure 12C: Oakville – Medium Density**



**Figure 12D: Oakville – Housing Starts By Market**

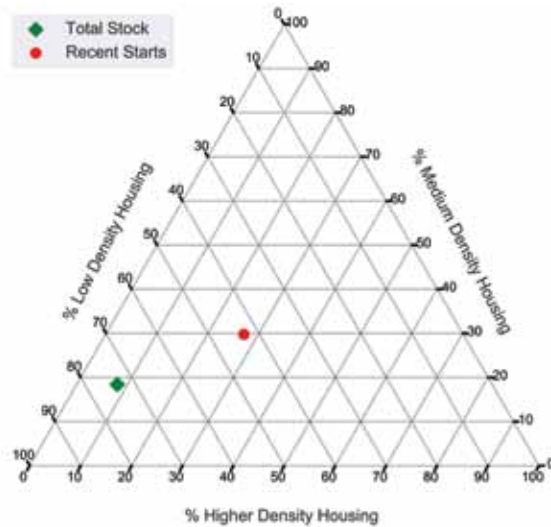


# HALTON

**Figure 12E: Oakville – Low Density**

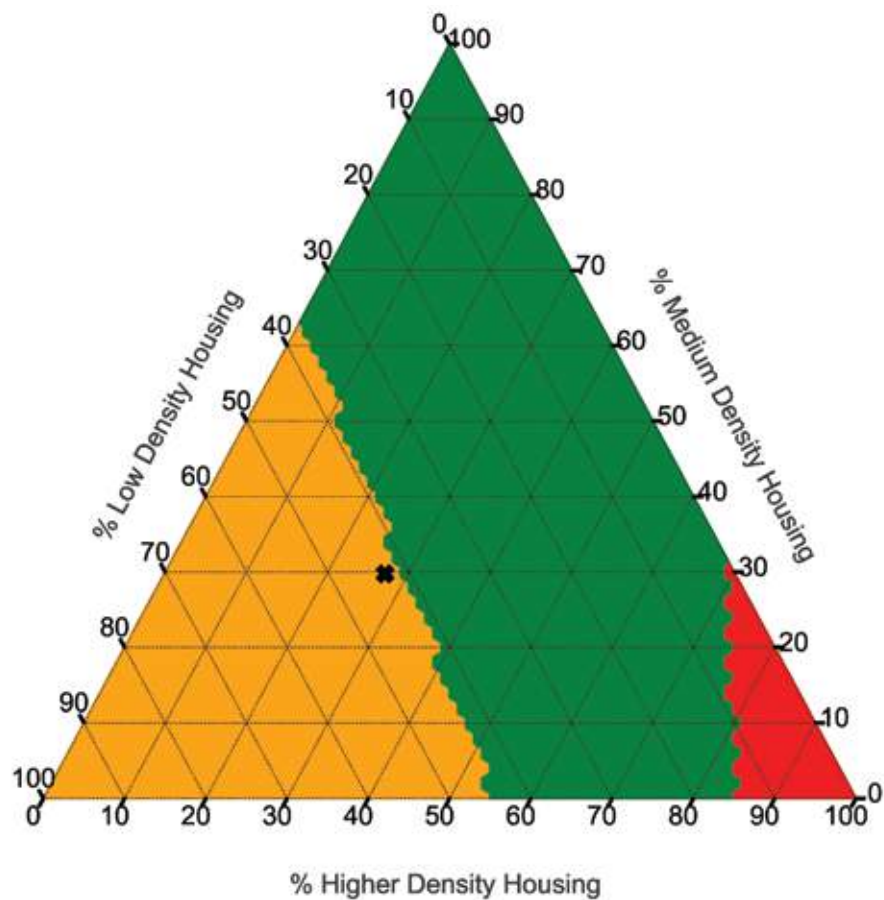


**Figure 12F: Oakville – Dwelling Mix**



# HALTON

**Figure 12G: Oakville – Development Mix**



**Figure 13A: Brampton – Higher Density**



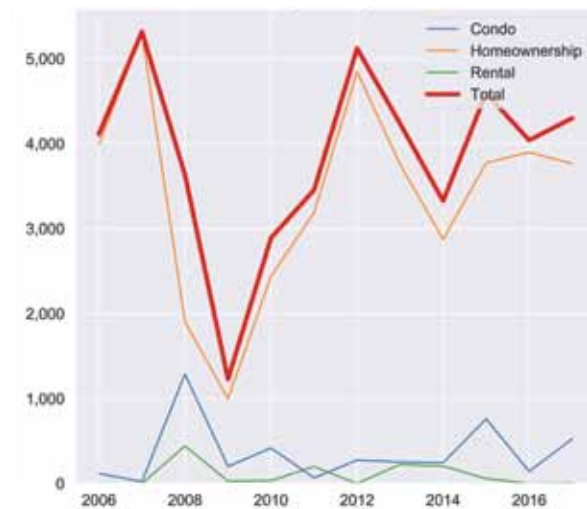
**Figure 13B: Brampton – Housing Starts By Type**



**Figure 13C: Brampton – Medium Density**



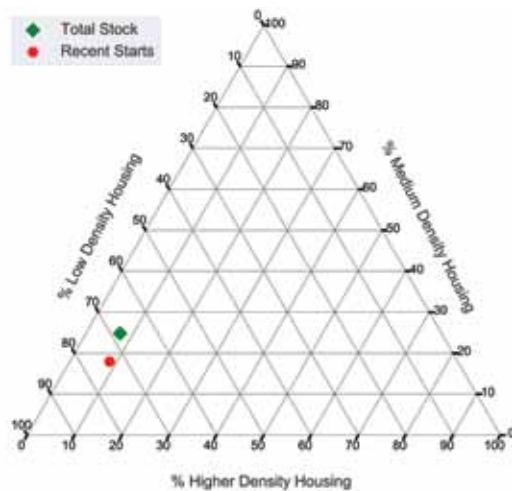
**Figure 13D: Brampton – Housing Starts By Market**



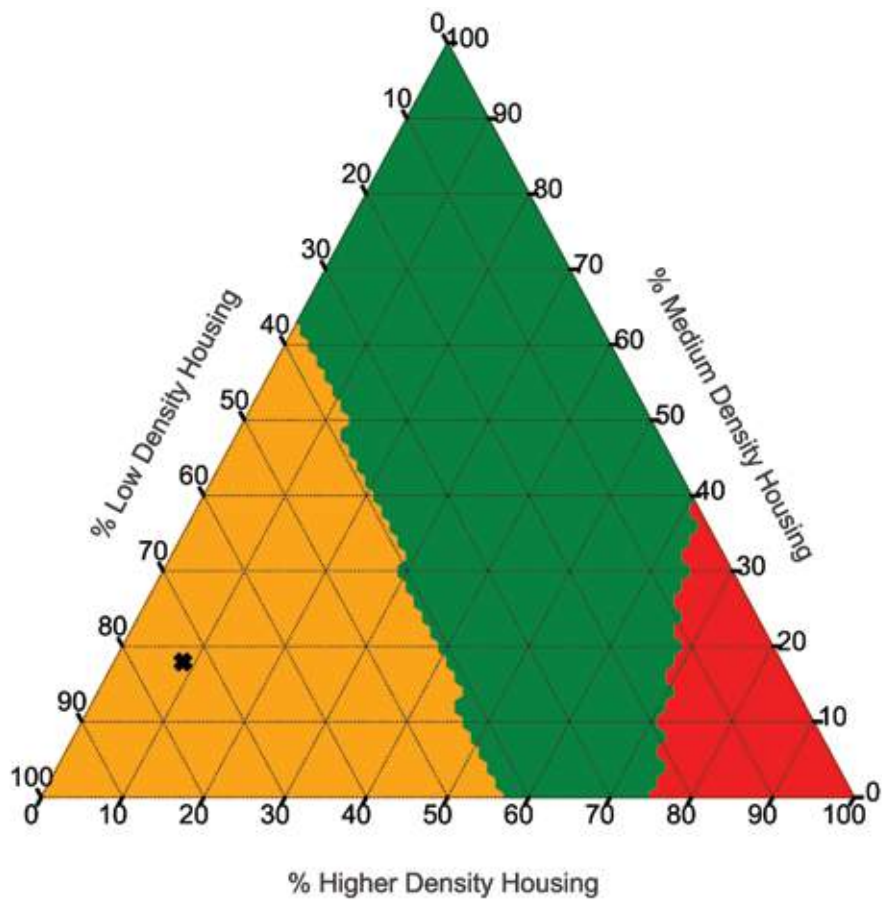
**Figure 13E: Brampton – Low Density**



**Figure 13F: Brampton – Dwelling Mix**



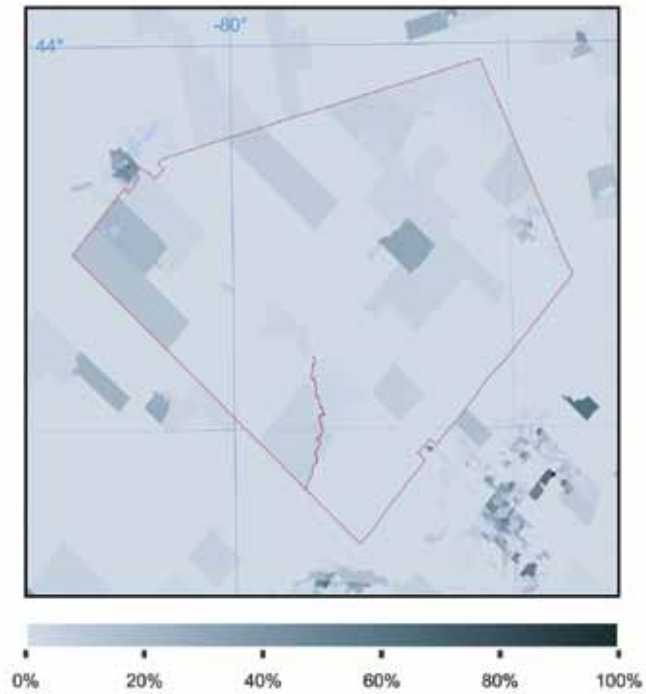
**Figure 13G:** Brampton – Development Mix



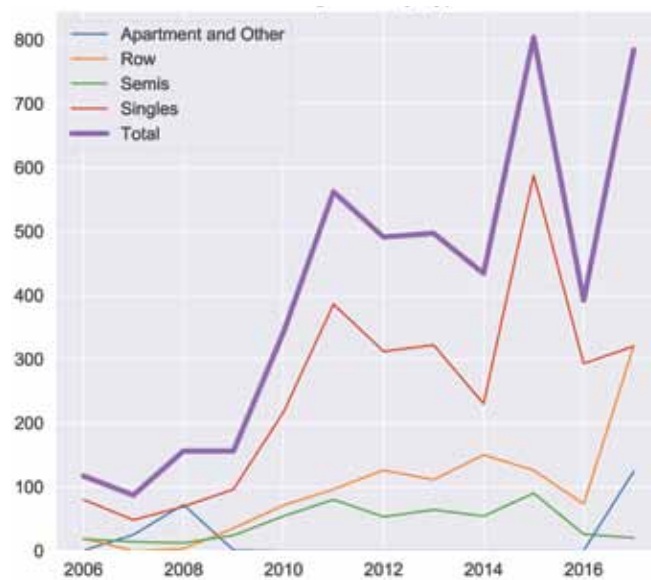


# PEEL

**Figure 14A: Caledon – Higher Density**

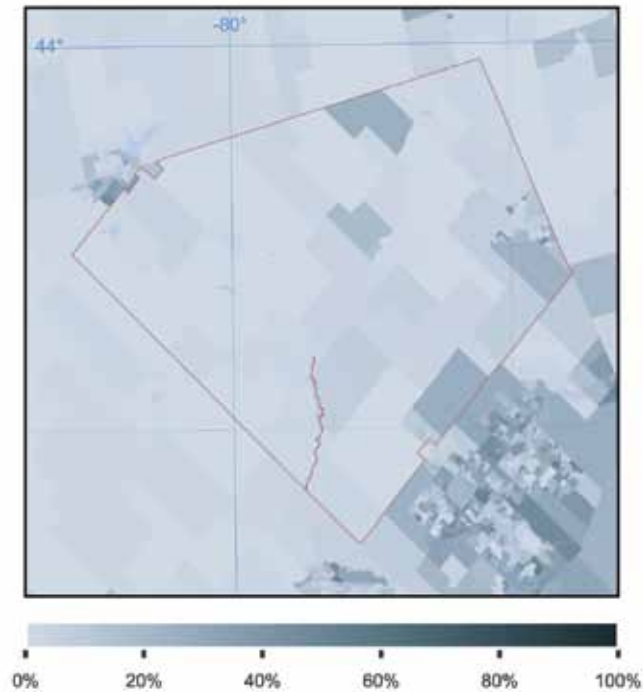


**Figure 14B: Caledon – Housing Starts By Type**

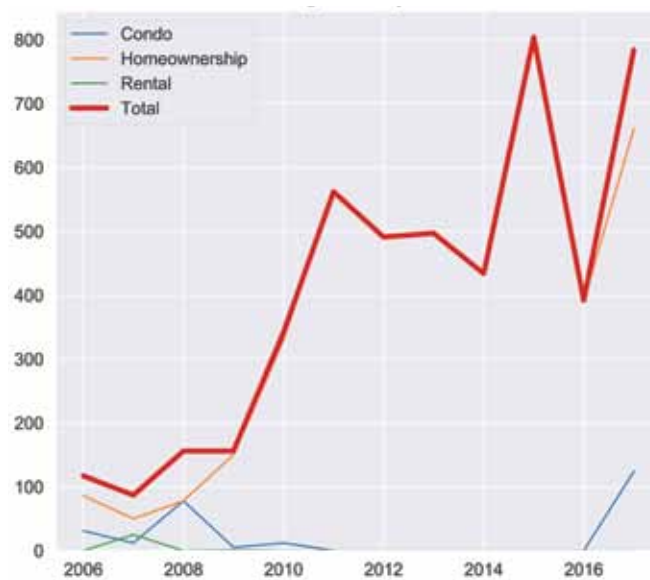


# PEEL

**Figure 14C:** Caledon – Medium Density

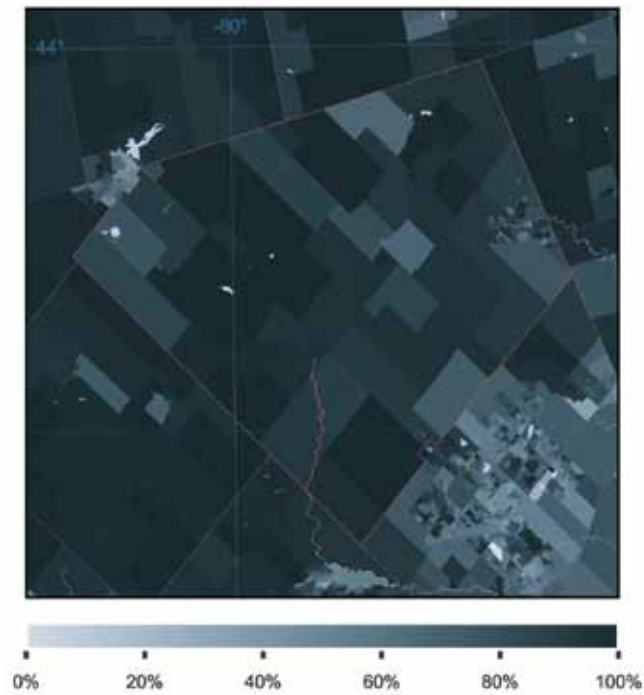


**Figure 14D:** Caledon – Housing Starts By Market

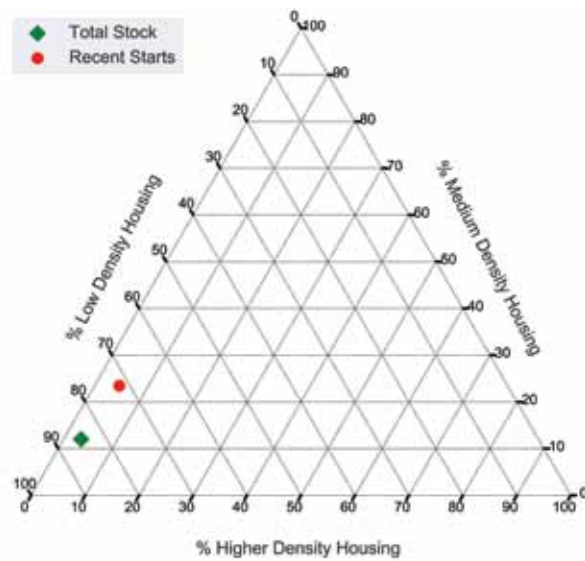


# PEEL

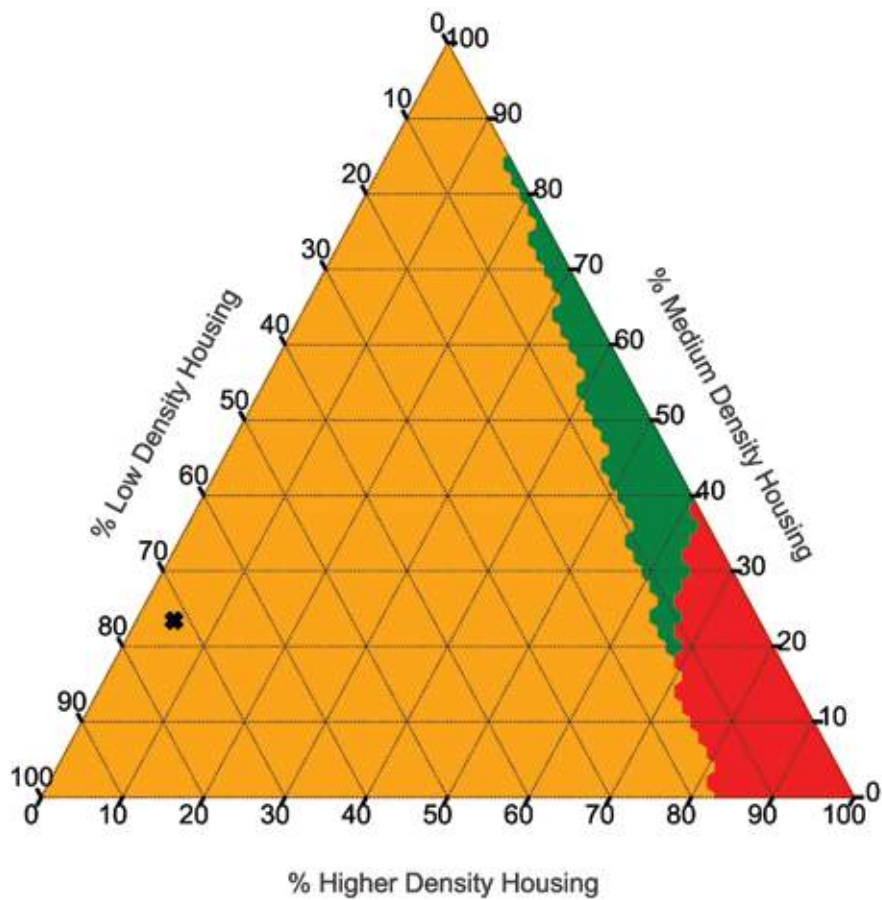
**Figure 14E: Caledon – Low Density**



**Figure 14F: Caledon – Dwelling Mix**



**Figure 14G: Caledon – Development Mix**

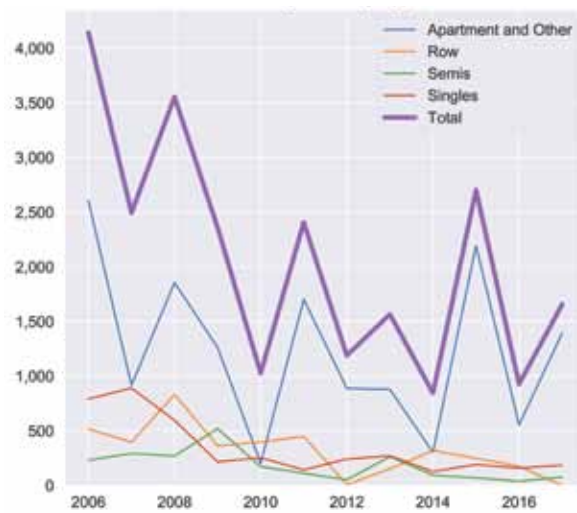


# PEEL

**Figure 15A: Mississauga – Higher Density**



**Figure 15B: Mississauga – Housing Starts By Type**

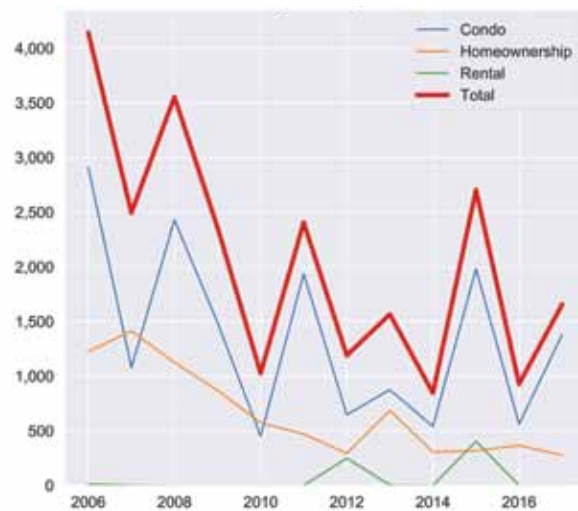


# PEEL

**Figure 15C: Mississauga – Medium Density**



**Figure 15D: Mississauga – Housing Starts By Market**

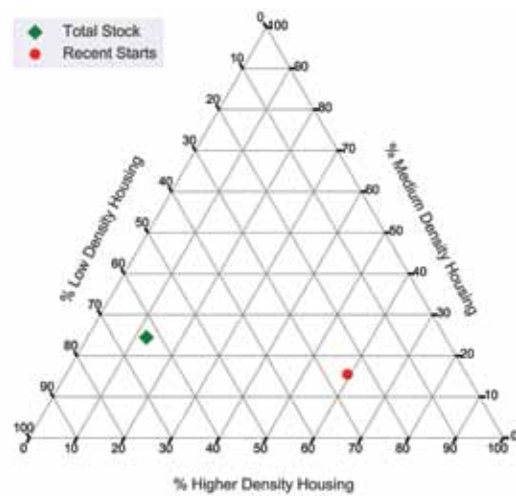


# PEEL

**Figure 15E: Mississauga – Low Density**



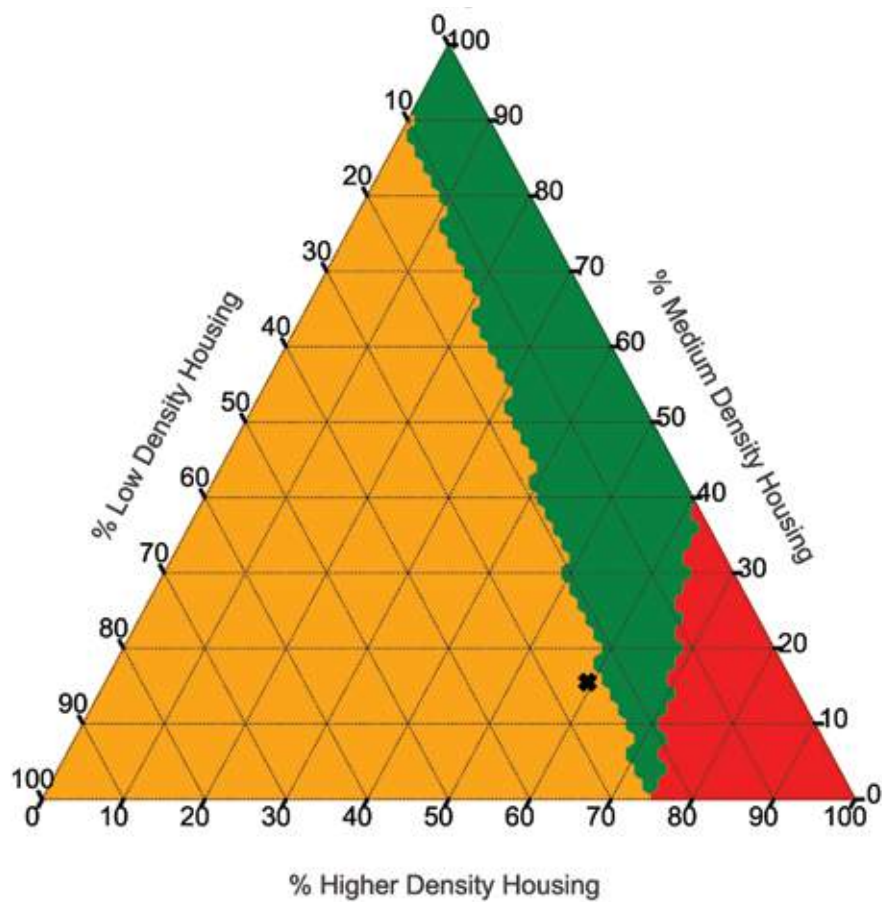
**Figure 15F: Mississauga – Dwelling Mix**





# PEEL

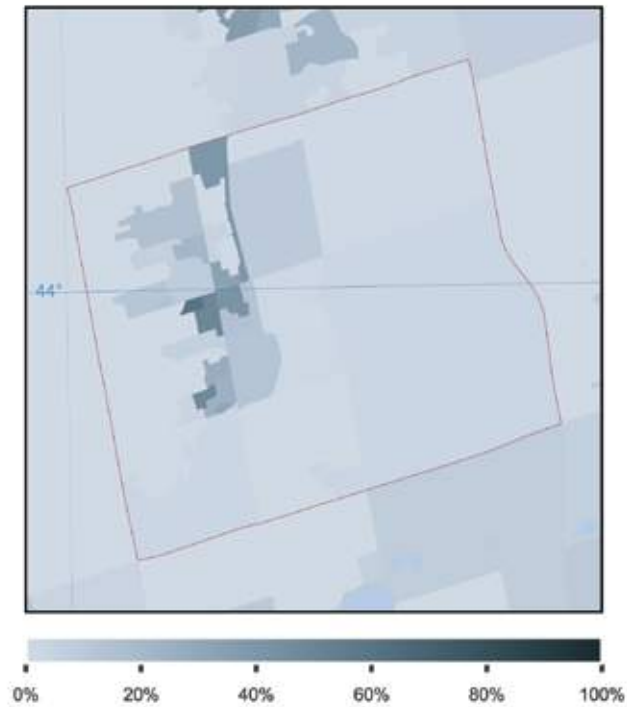
**Figure 15G:** Mississauga – Development Mix





# YORK

**Figure 16A: Aurora – Higher Density**

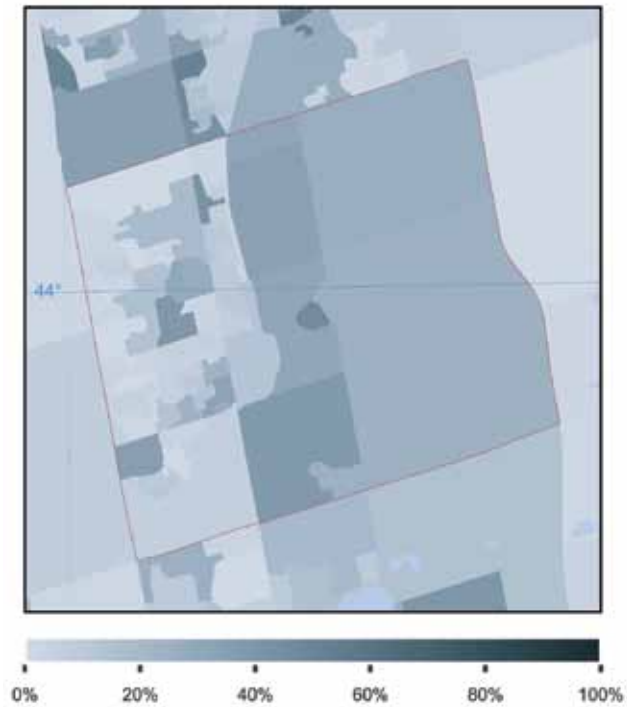


**Figure 16B: Aurora – Housing Starts By Type**

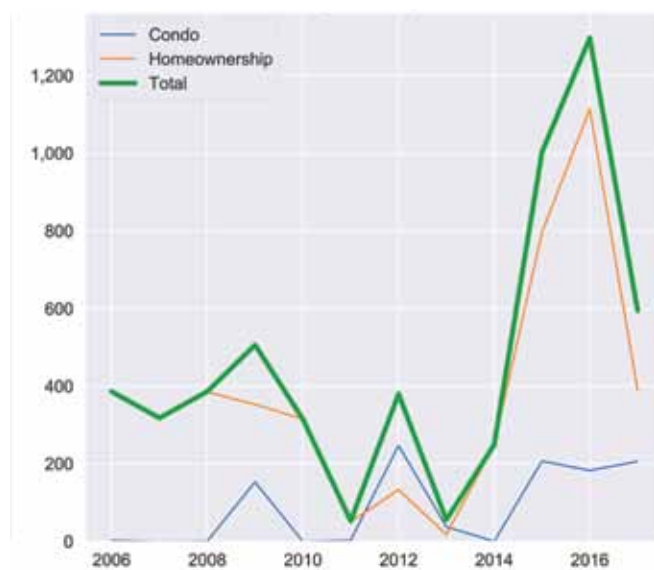


# YORK

**Figure 16C:** Aurora – Medium Density



**Figure 16D:** Aurora – Housing Starts By Market

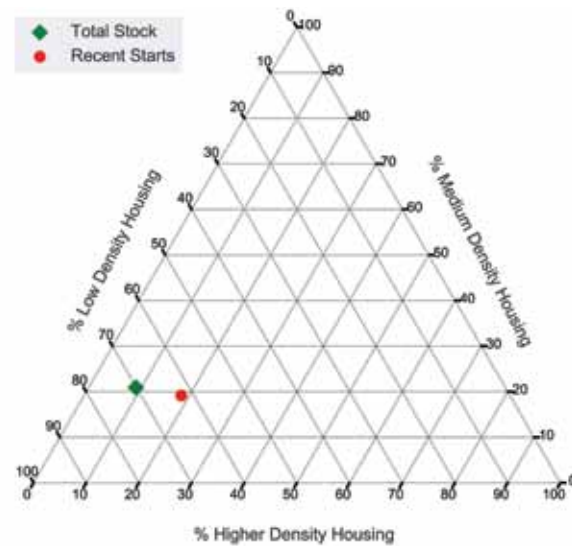


# YORK

**Figure 16E: Aurora – Low Density**

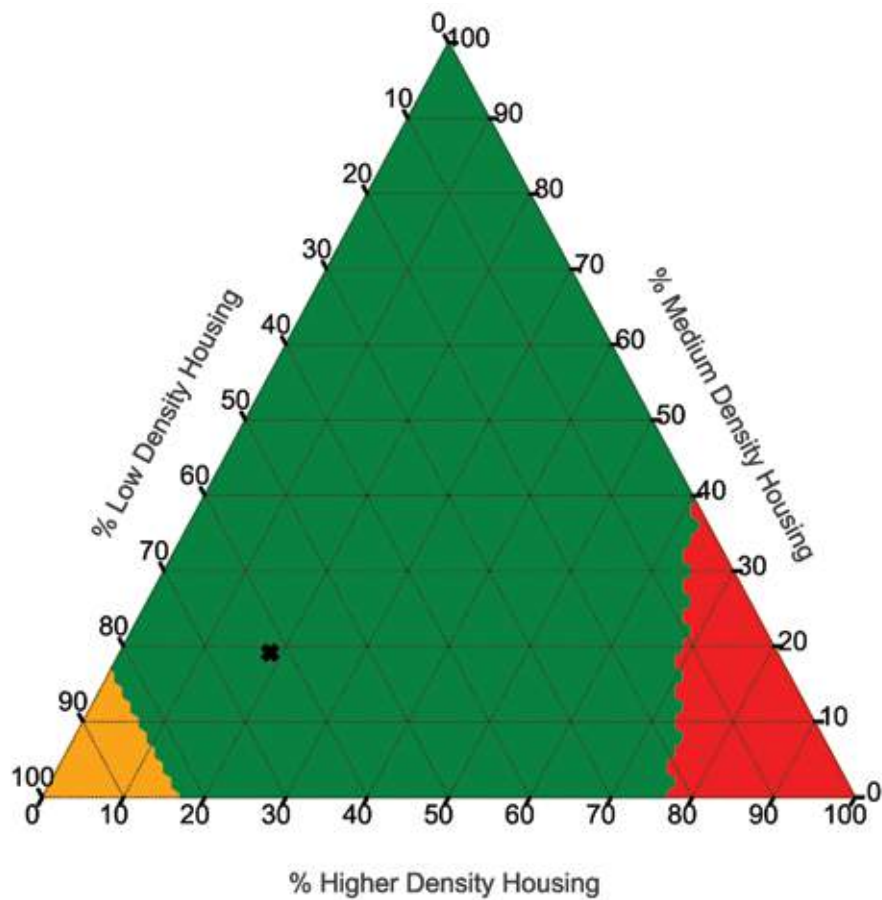


**Figure 16F: Aurora – Dwelling Mix**



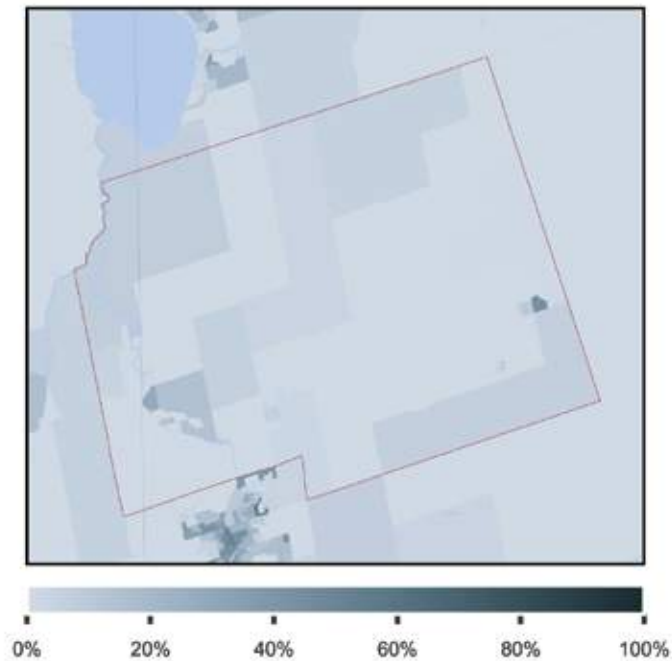
# YORK

**Figure 16G:** Aurora – Development Mix

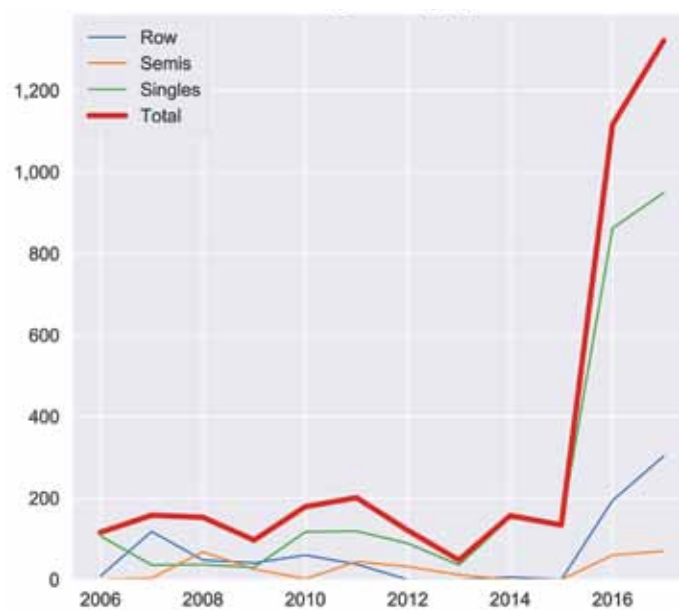


# YORK

**Figure 17A:** East Gwillimbury – Higher Density

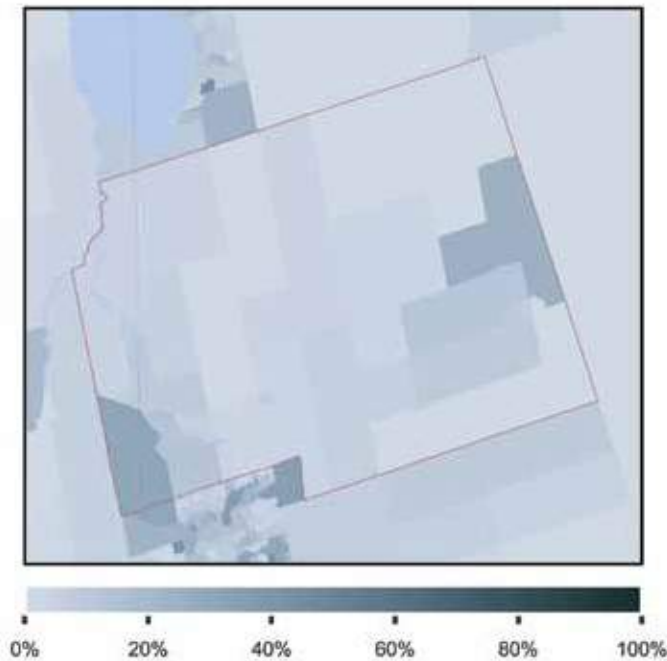


**Figure 17B:** East Gwillimbury – Housing Starts By Type

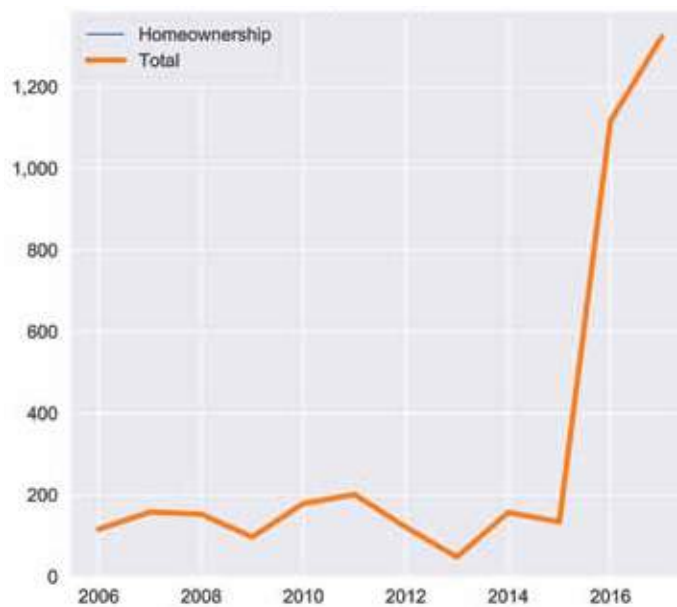


# YORK

**Figure 17C:** East Gwillimbury – Medium Density

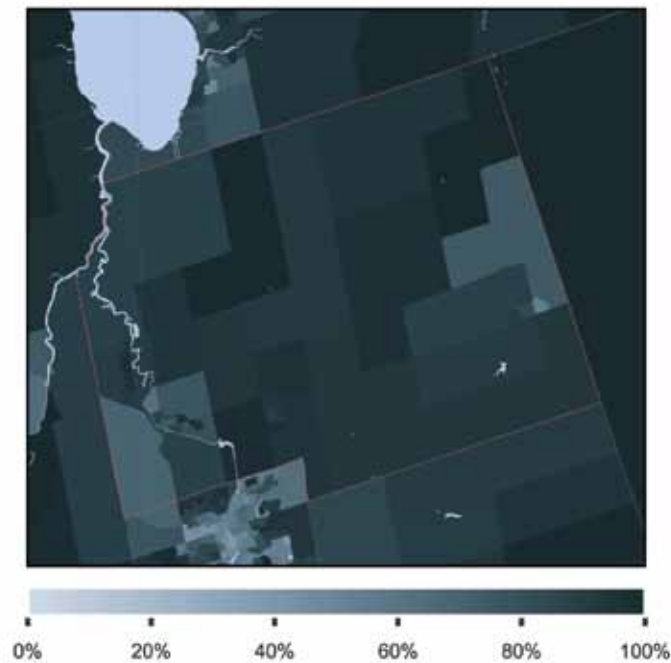


**Figure 17D:** East Gwillimbury – Housing Starts By Market

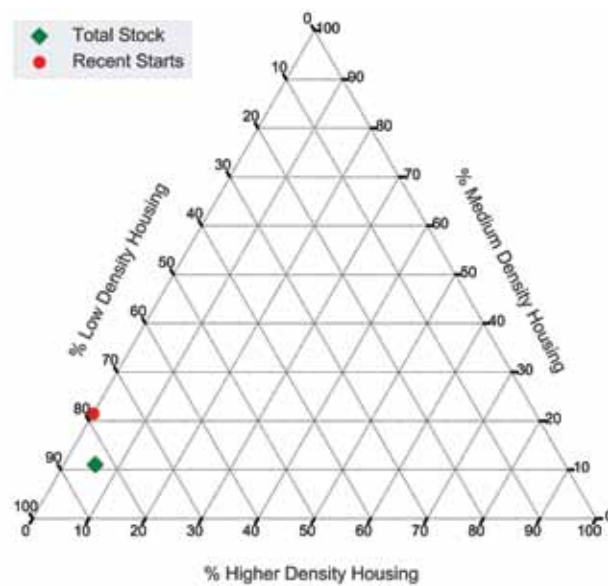


# YORK

**Figure 17E:** East Gwillimbury – Low Density

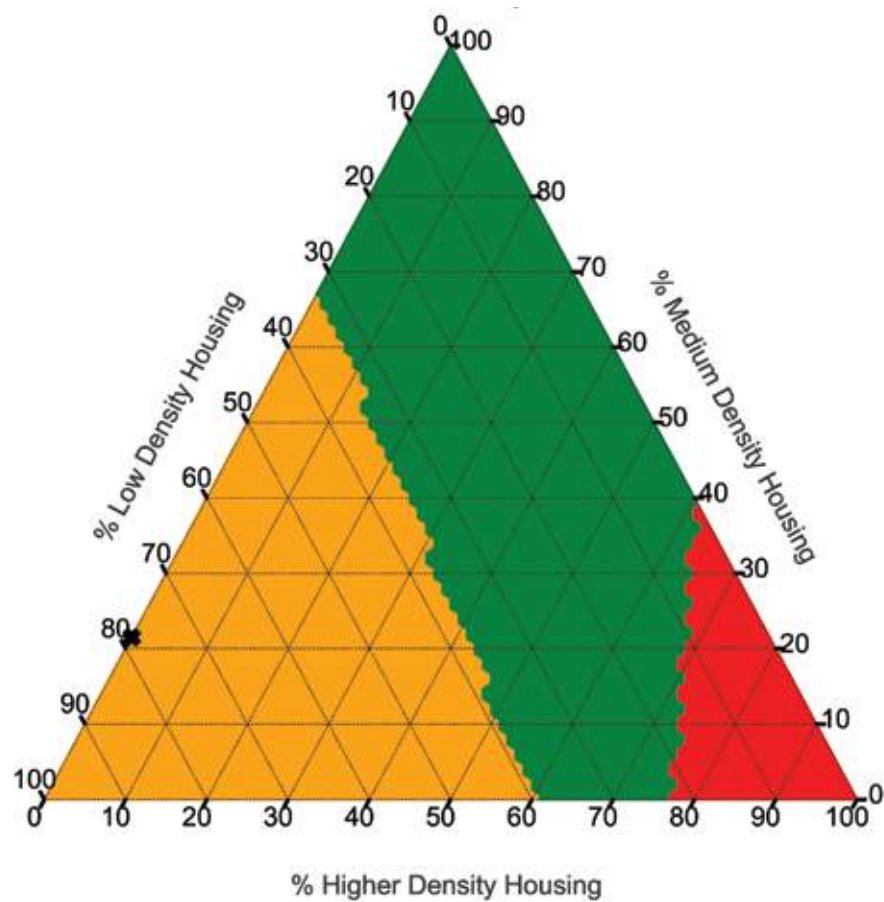


**Figure 17F:** East Gwillimbury – Dwelling Mix



# YORK

**Figure 17G:** East Gwillimbury – Development Mix





# YORK

**Figure 18A:** Georgina – Higher Density



**Figure 18B:** Georgina – Housing Starts By Type

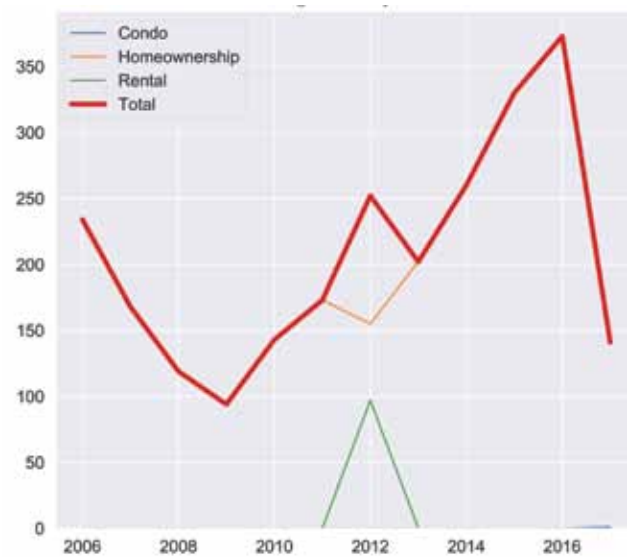


# YORK

**Figure 18C:** Georgina – Medium Density



**Figure 18D:** Georgina – Housing Starts By Market

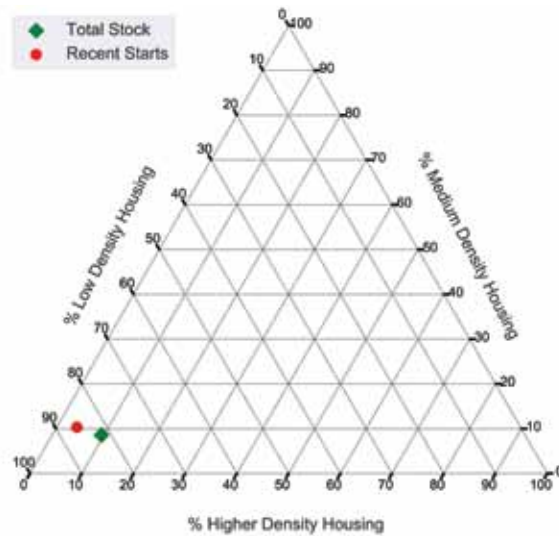


# YORK

**Figure 18E: Georgina – Low Density**

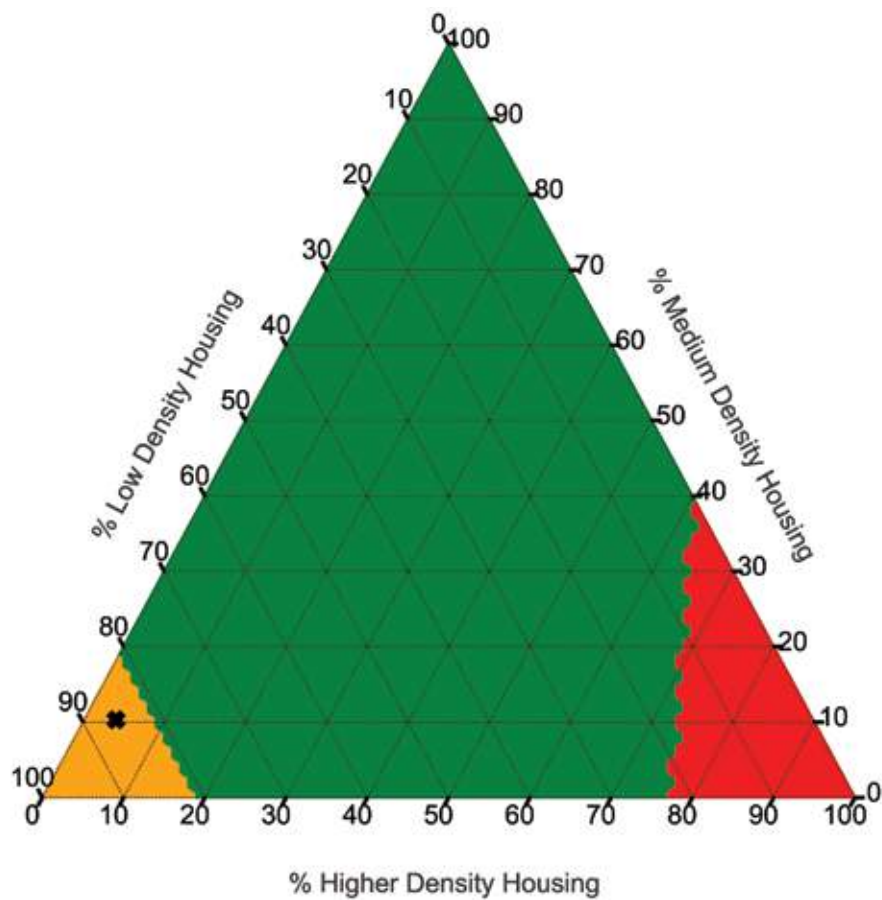


**Figure 18F: Georgina – Dwelling Mix**



# YORK

**Figure 18G: Georgina – Development Mix**

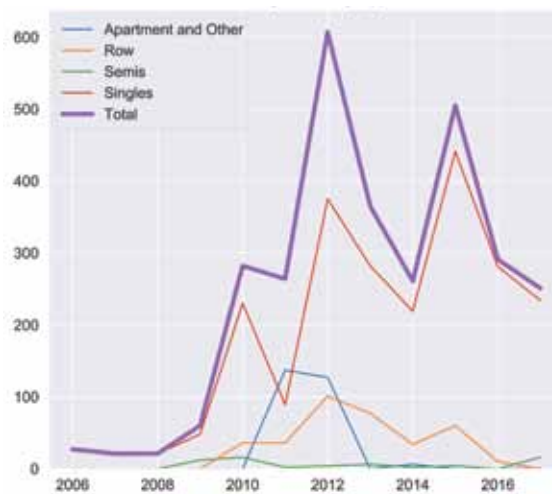


# YORK

**Figure 19A:** King City – Higher Density

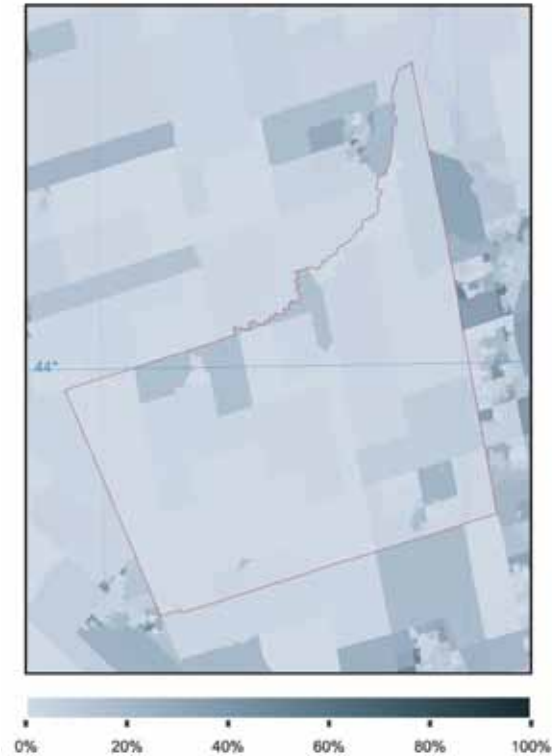


**Figure 19B:** King City – Housing Starts By Type

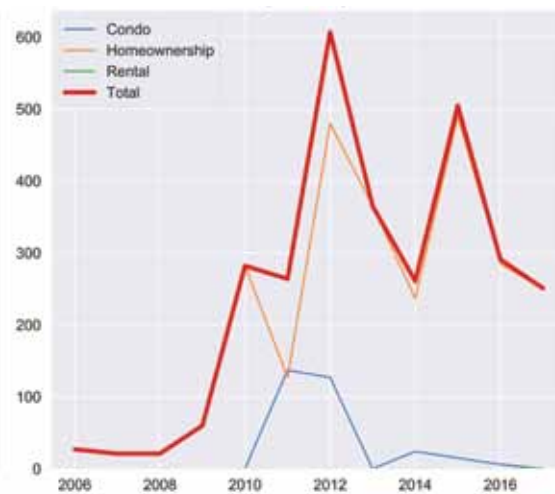


# YORK

**Figure 19C: King City – Medium Density**



**Figure 19D: King City – Housing Starts By Market**

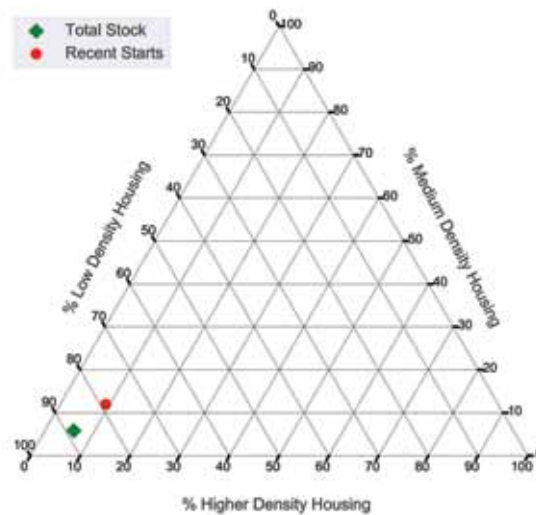


# YORK

**Figure 19E: King City – Low Density**

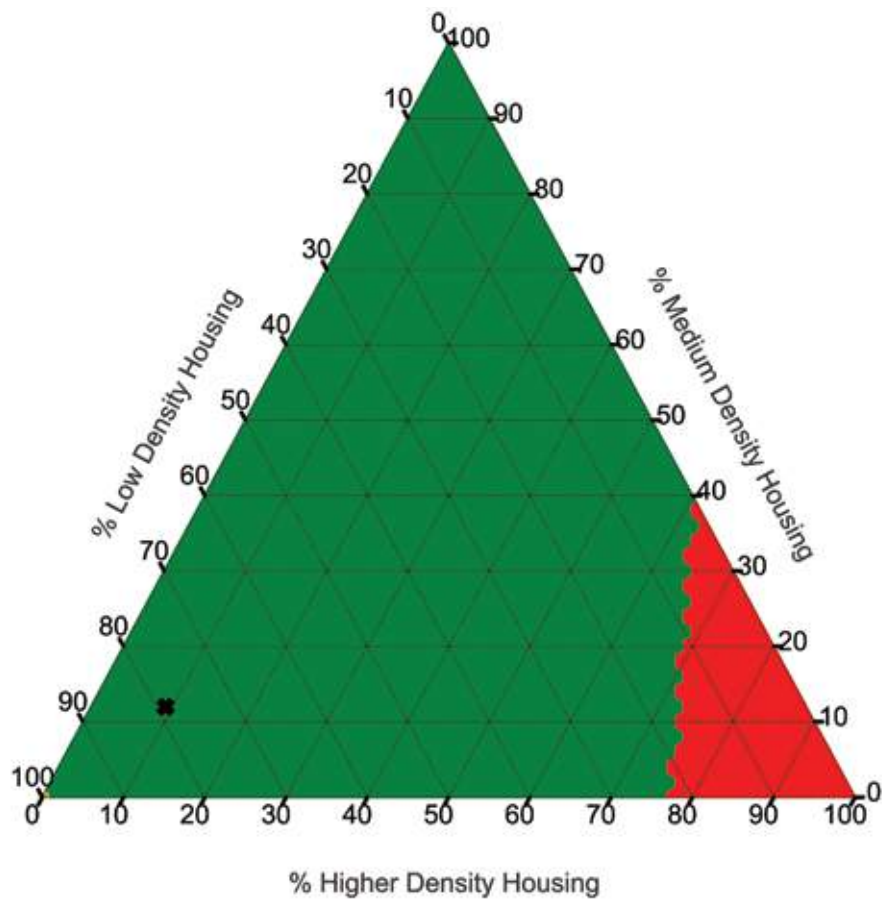


**Figure 19F: King City – Dwelling Mix**



# YORK

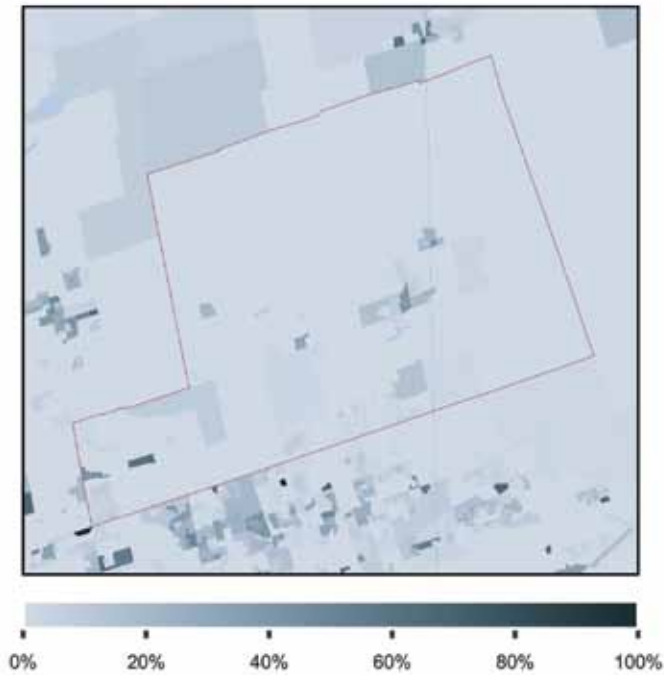
**Figure 19G:** King City – Development Mix



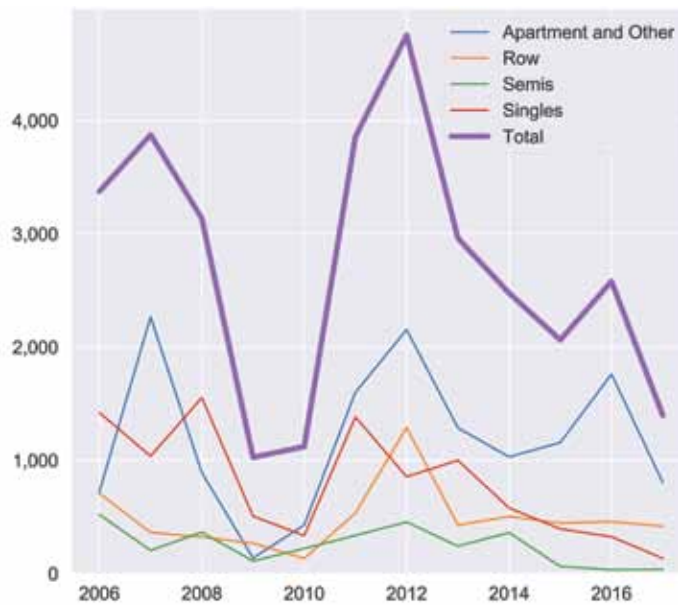


# YORK

**Figure 20A: Markham – Higher Density**

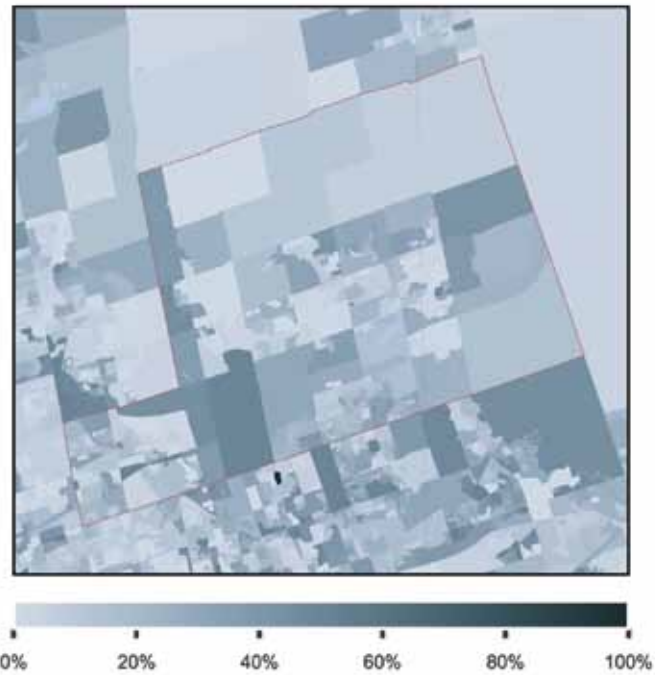


**Figure 20B: Markham – Housing Starts By Type**

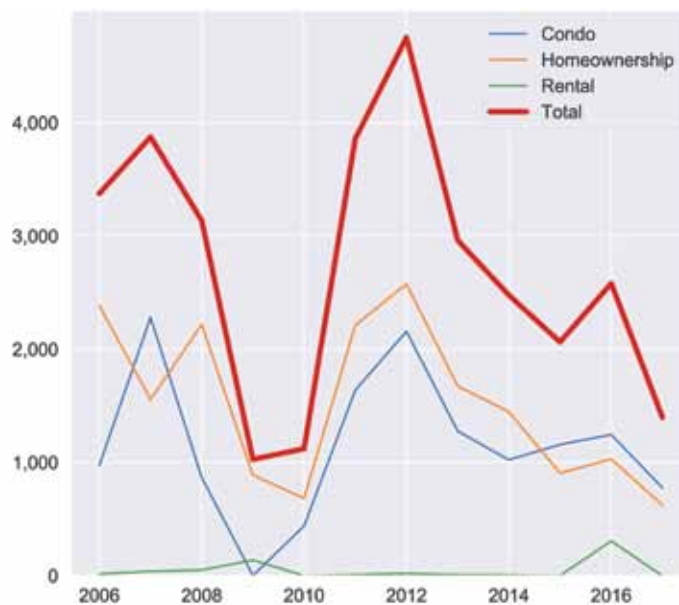


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**Figure 20C: Markham – Medium Density**

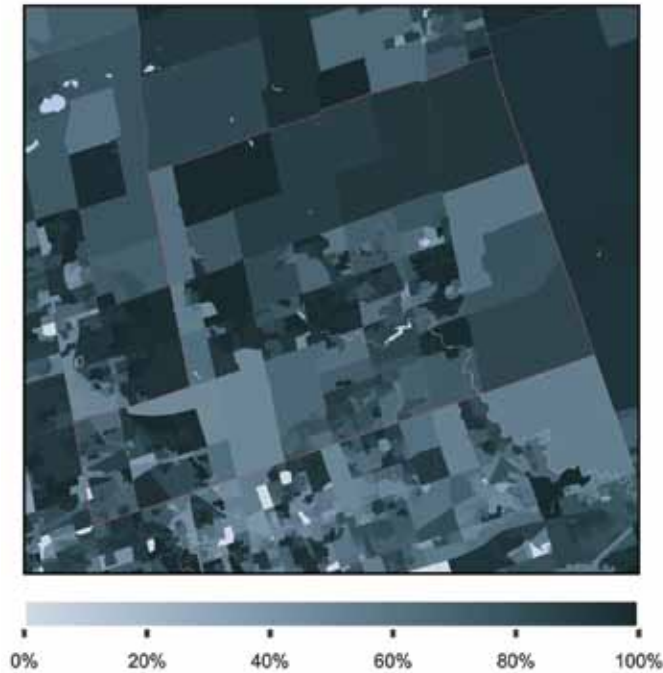


**Figure 20D: Markham – Housing Starts By Market**

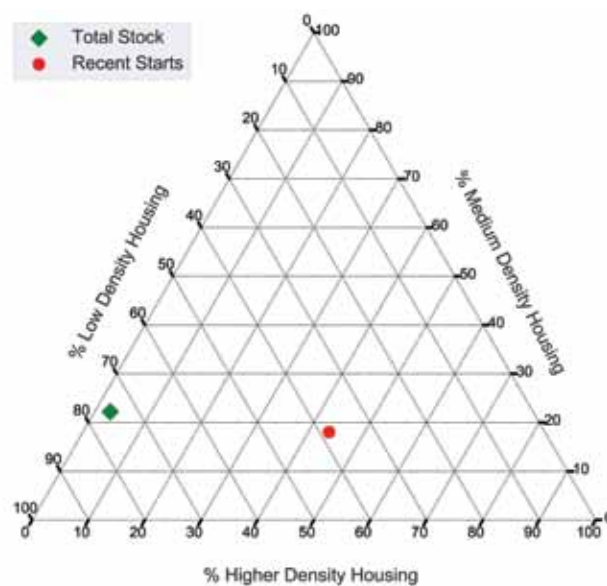


# YORK

**Figure 20E: Markham – Low Density**

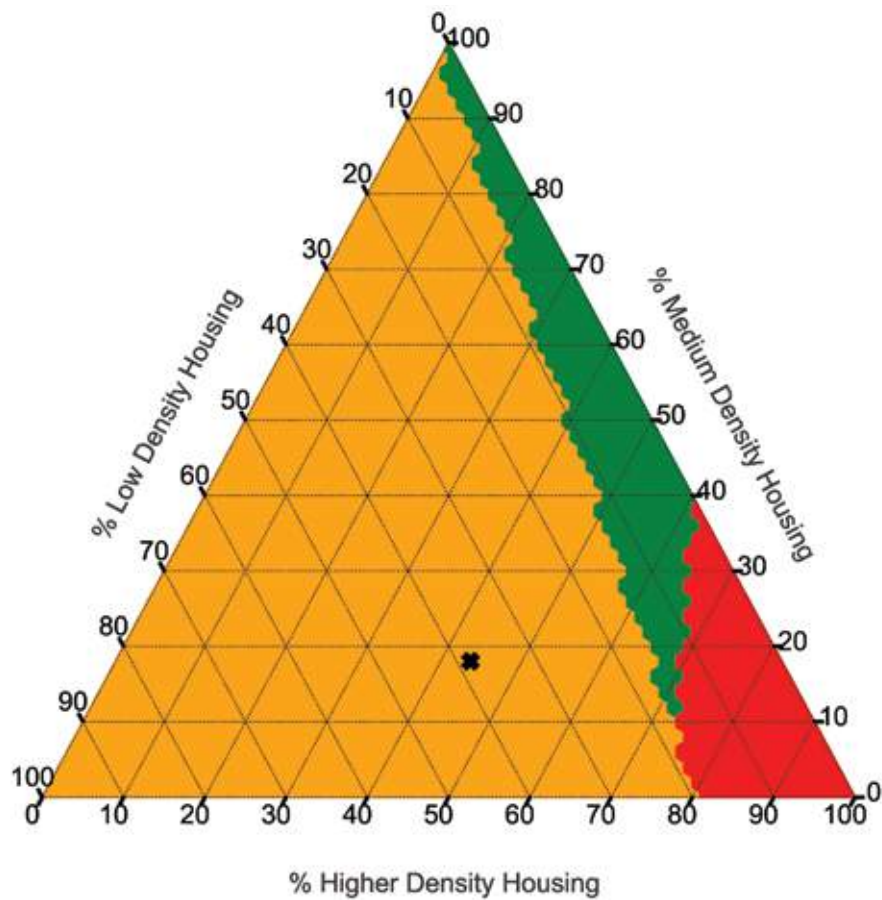


**Figure 20F: Markham – Dwelling Mix**



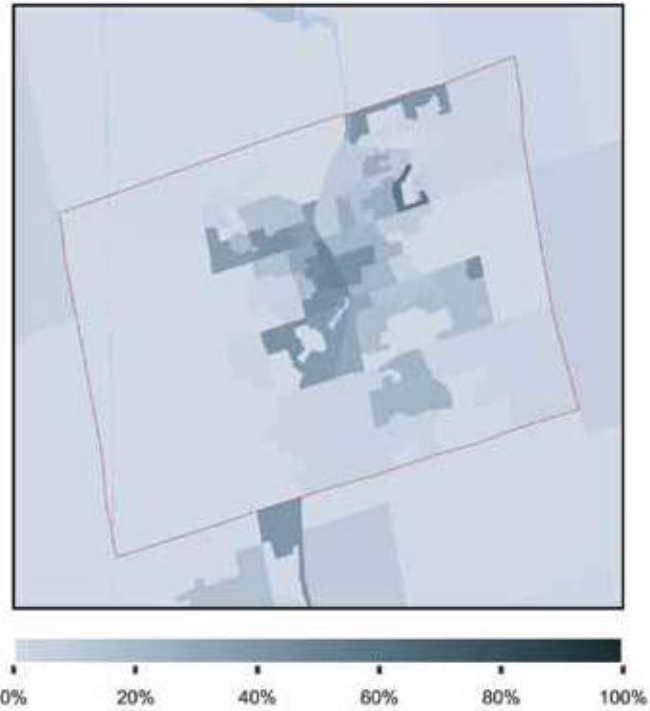
# YORK

**Figure 20G:** Markham – Development Mix

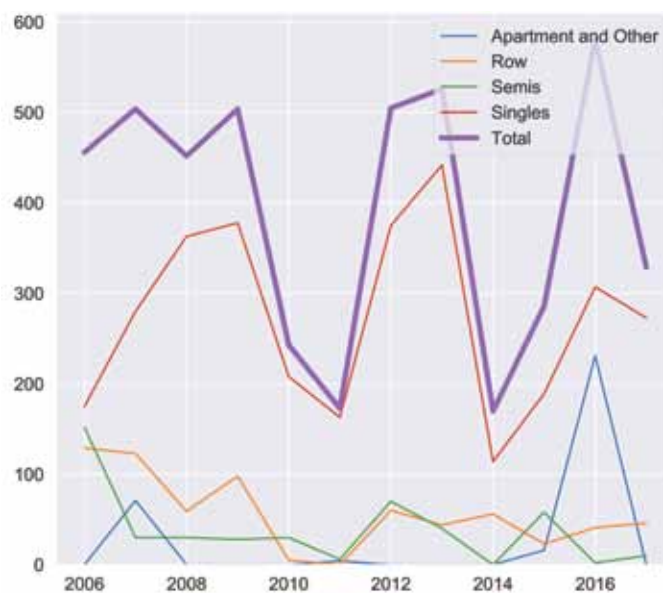


# YORK

**Figure 21A: Newmarket – Higher Density**

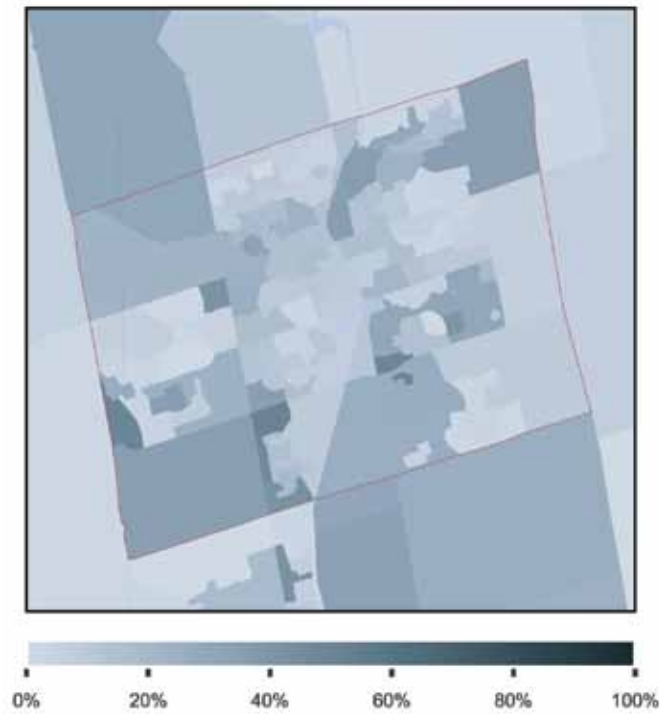


**Figure 21B: Newmarket – Housing Starts By Type**

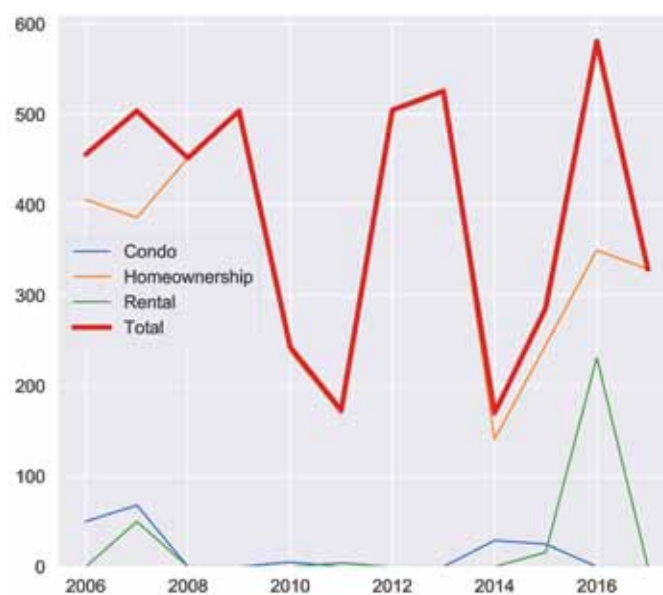


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**Figure 21C:** Newmarket – Medium Density

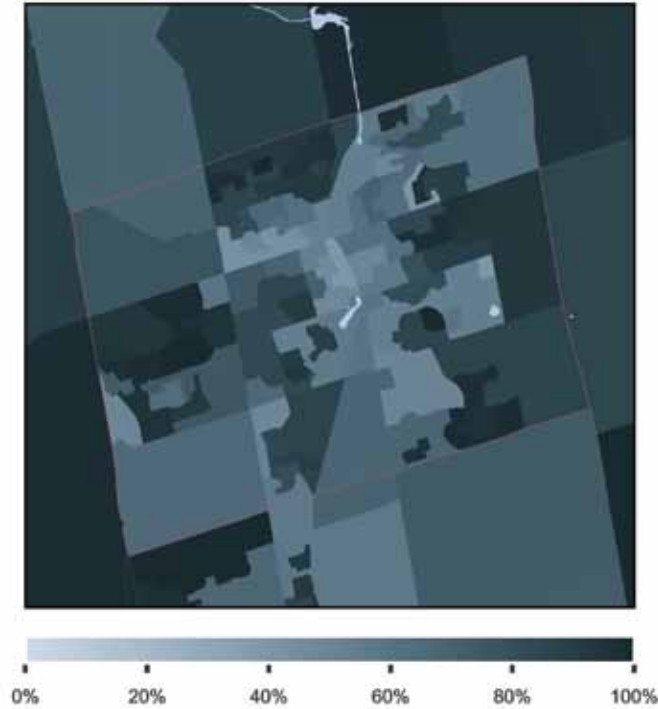


**Figure 21D:** Newmarket – Housing Starts By Market

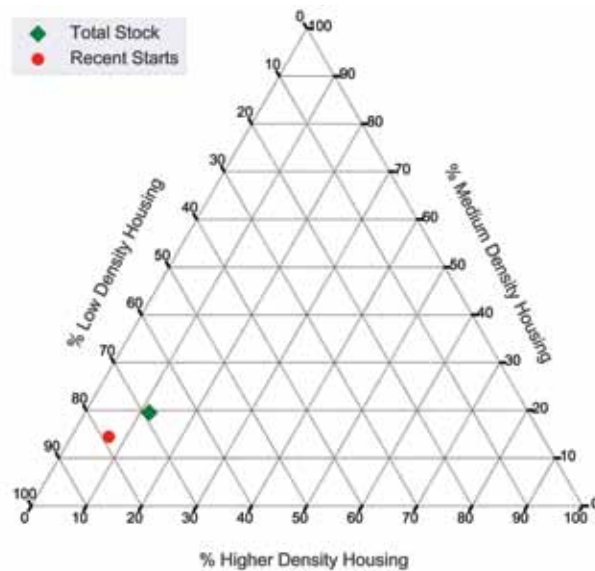


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**Figure 21E:** Newmarket – Low Density



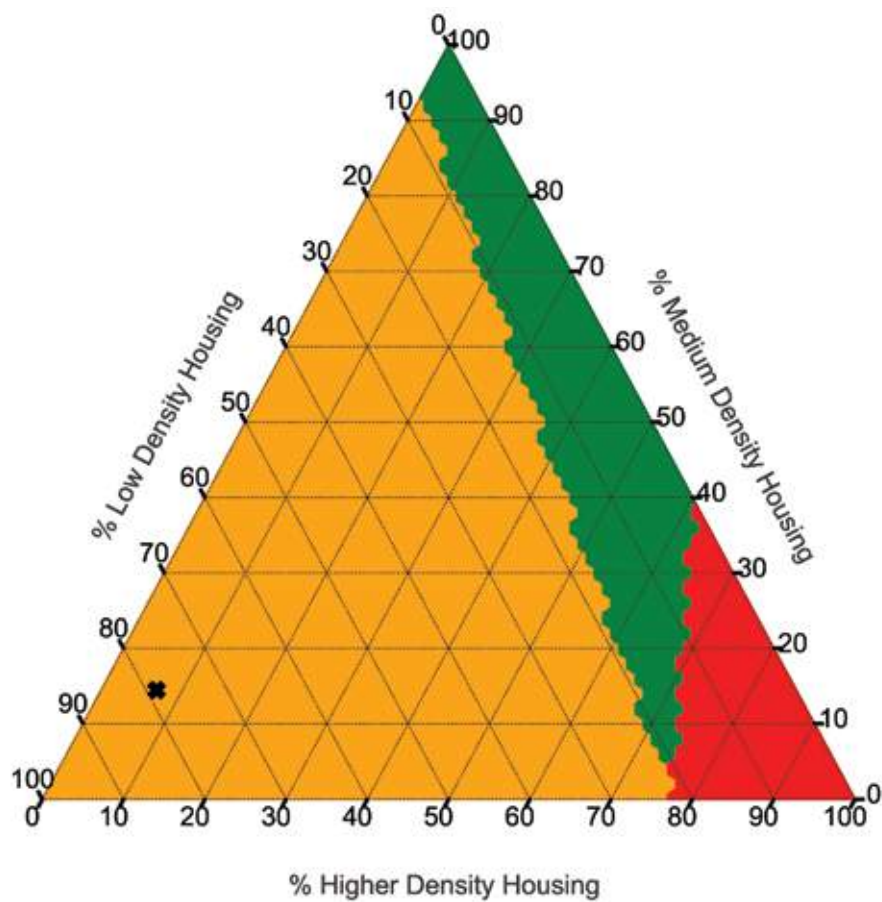
**Figure 21F:** Newmarket – Dwelling Mix





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**Figure 21G:** Newmarket – Development Mix





# YORK

**Figure 22A:** Richmond Hill – Higher Density



**Figure 22B:** Richmond Hill – Housing Starts By Type

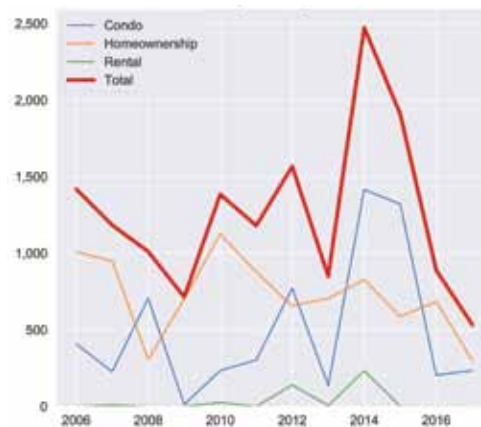


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**Figure 22C:** Richmond Hill – Medium Density



**Figure 22D:** Richmond Hill – Housing Starts By Market

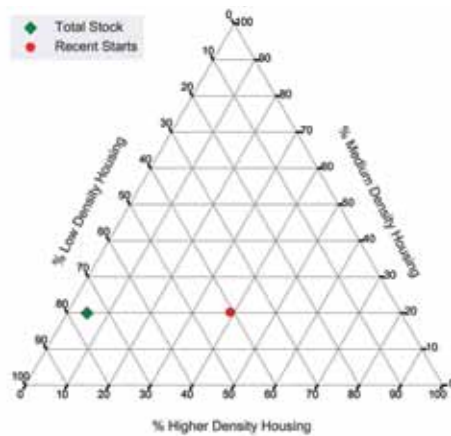


# YORK

**Figure 22E: Richmond Hill – Low Density**

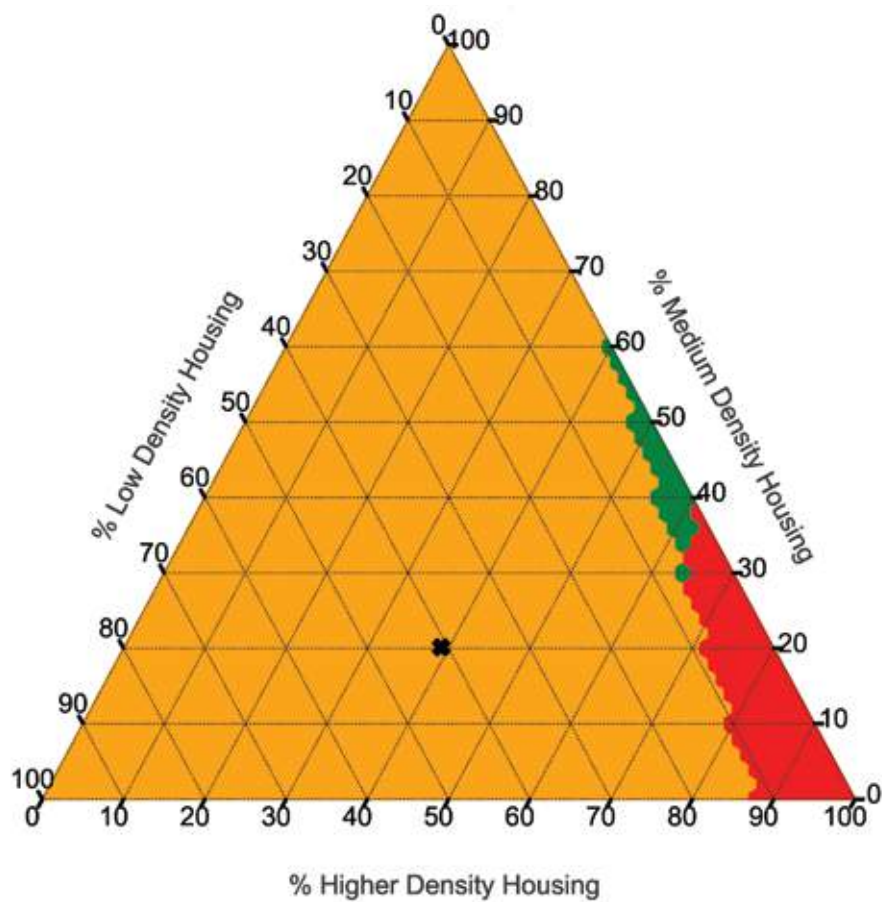


**Figure 22F: Richmond Hill – Dwelling Mix**



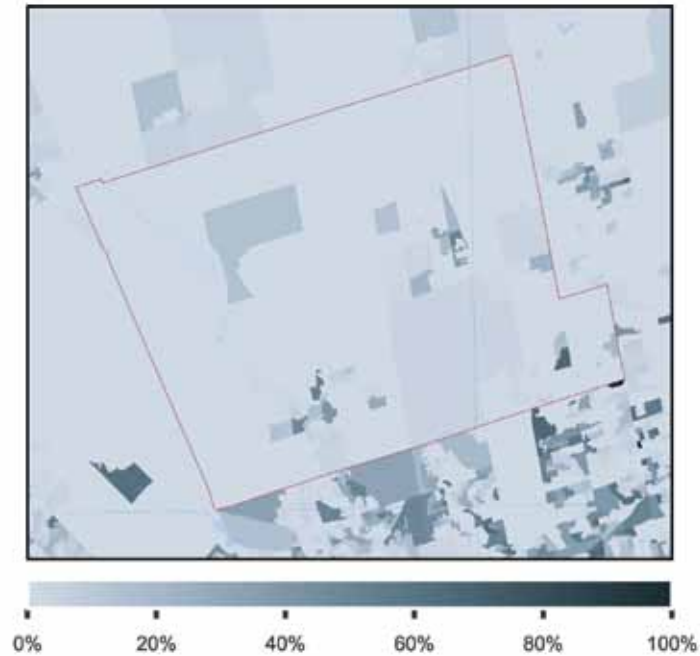
# YORK

**Figure 22G:** Richmond Hill – Development Mix

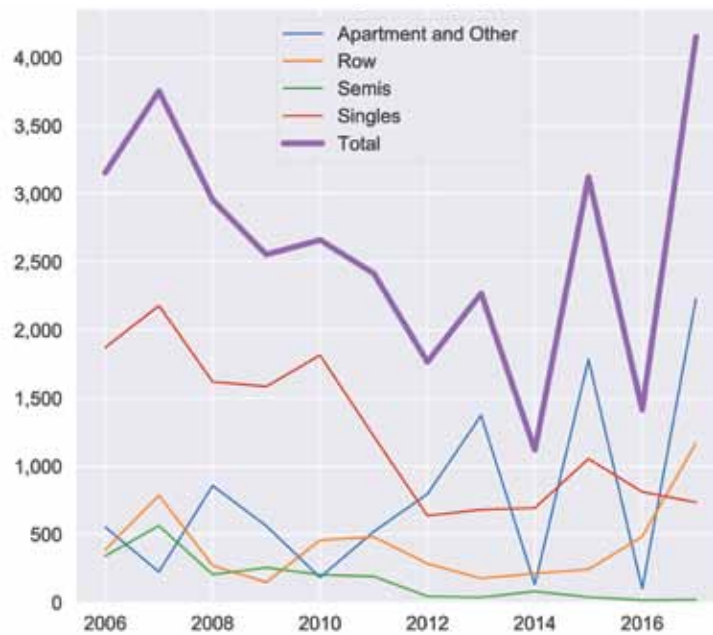


# YORK

**Figure 23A: Vaughan – Higher Density**

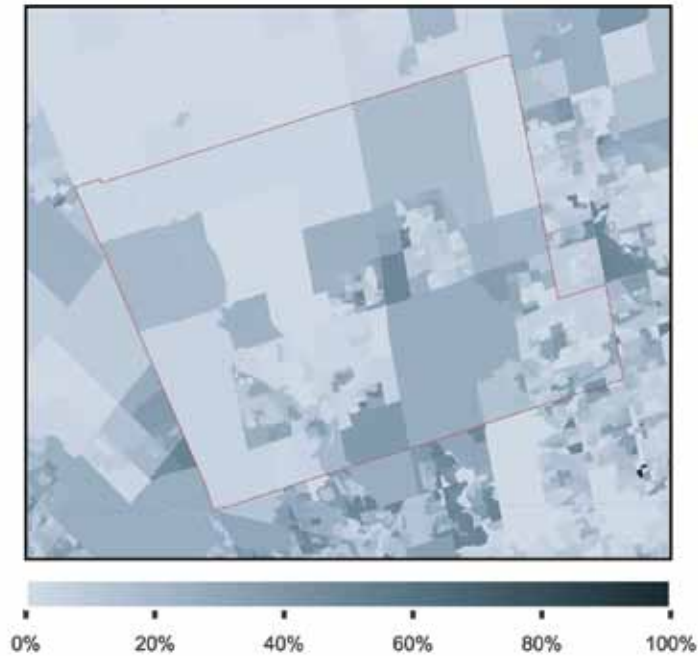


**Figure 23B: Vaughan – Housing Starts By Type**

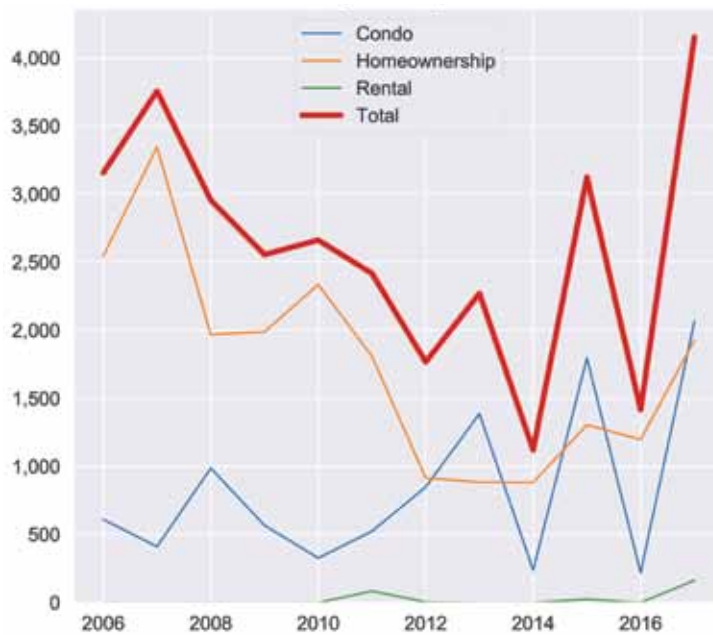


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**Figure 23C:** Vaughan – Medium Density

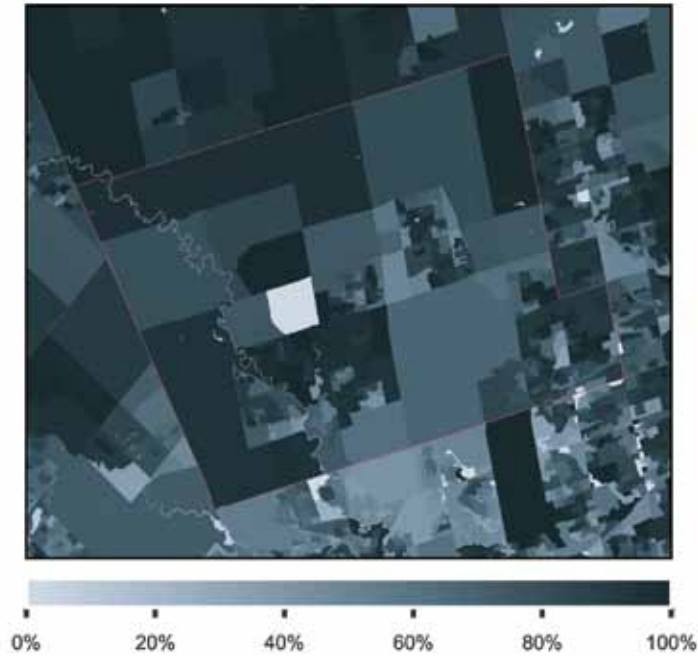


**Figure 23D:** Vaughan – Housing Starts By Market

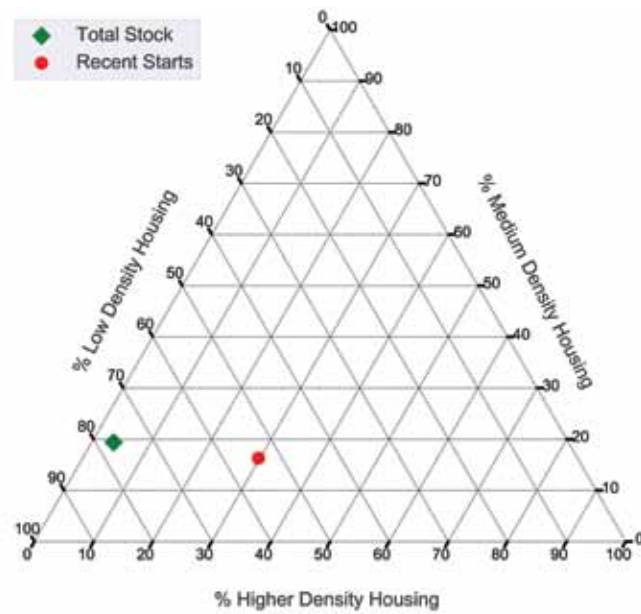


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**Figure 23E:** Vaughan – Low Density

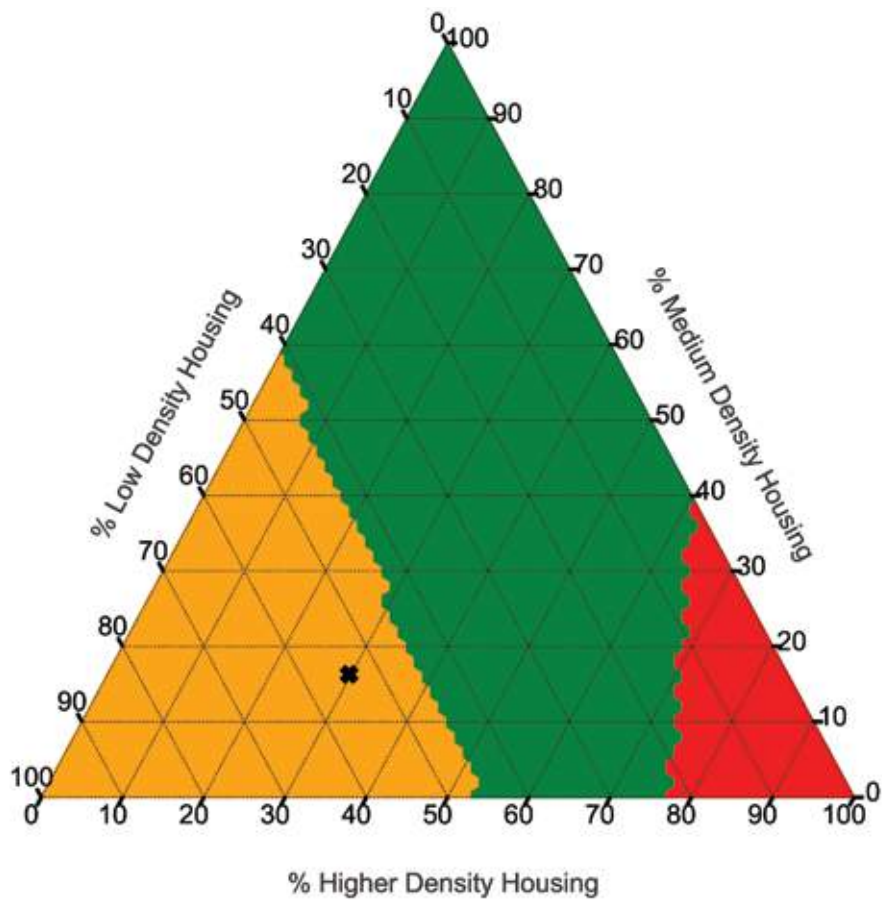


**Figure 23F:** Vaughan – Dwelling Mix



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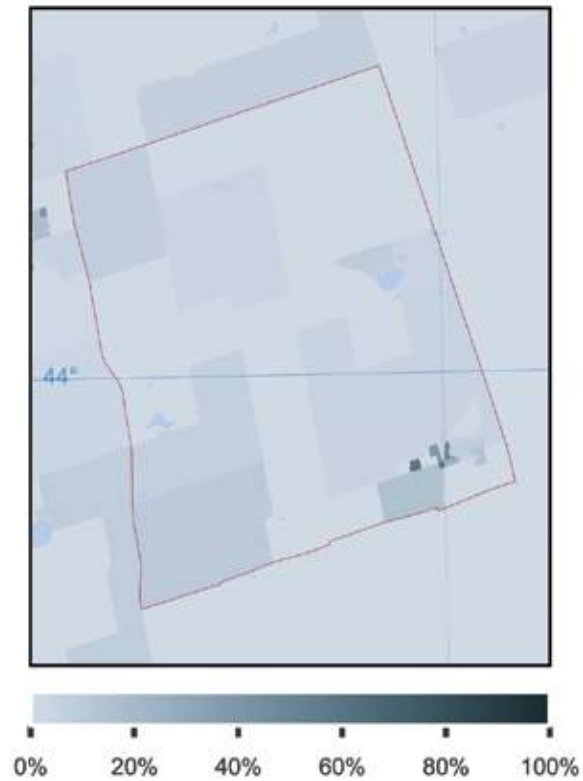
**Figure 23G:** Vaughan – Development Mix



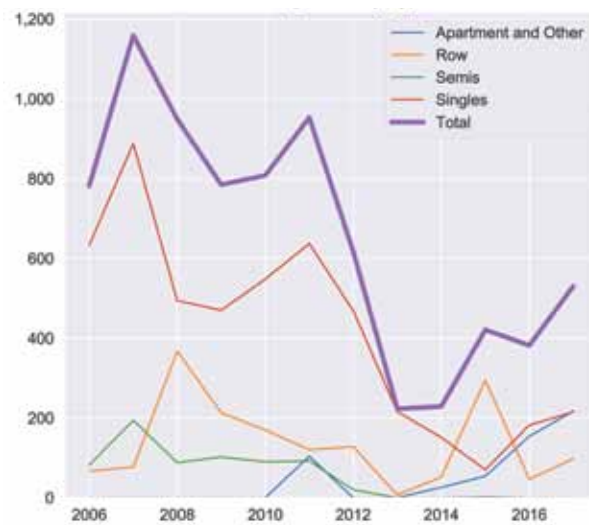


# YORK

**Figure 24A: Whitchurch-Stouffville – Higher Density**



**Figure 24B: Whitchurch-Stouffville – Housing Starts By Type**

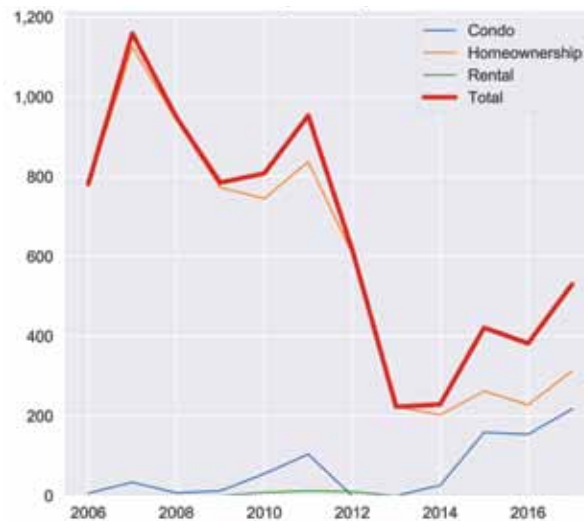


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**Figure 24C:** Whitchurch-Stouffville – Medium Density

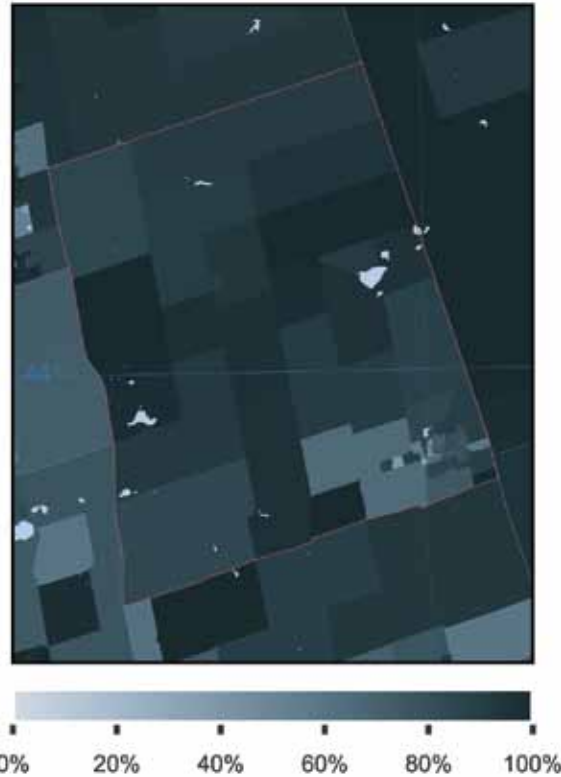


**Figure 24D:** Whitchurch-Stouffville – Housing Starts By Market

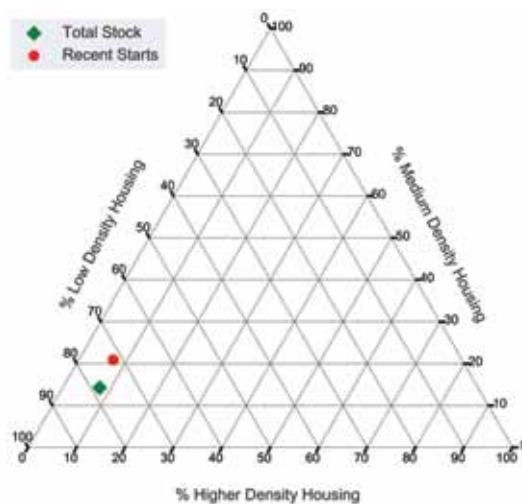


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**Figure 24E: Whitchurch-Stouffville – Low Density**



**Figure 24F: Whitchurch-Stouffville – Dwelling Mix**



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**Figure 24G:** Whitchurch-Stouffville – Development Mix

