INTERNATIONAL RESEARCH SYMPOSIUM

Amsterdam, The Netherlands · December 4 - 5, 2024

ASSESSMENT INNOVATION & COLLABORATION WITH A FOCUS ON AI



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About the Municipal Property Assessment Corporation (MPAC)

Ontario, Canada







Ontario Government

Establishes the province's assessment and taxation laws, sets the valuation date and determines education tax rates.

MPAC

Calculates, captures and distributes assessments for all properties and buildings across Ontario.

Municipalities

Determine revenue requirements, set municipal tax rates and collect property taxes to pay for municipal services.

Property Owners

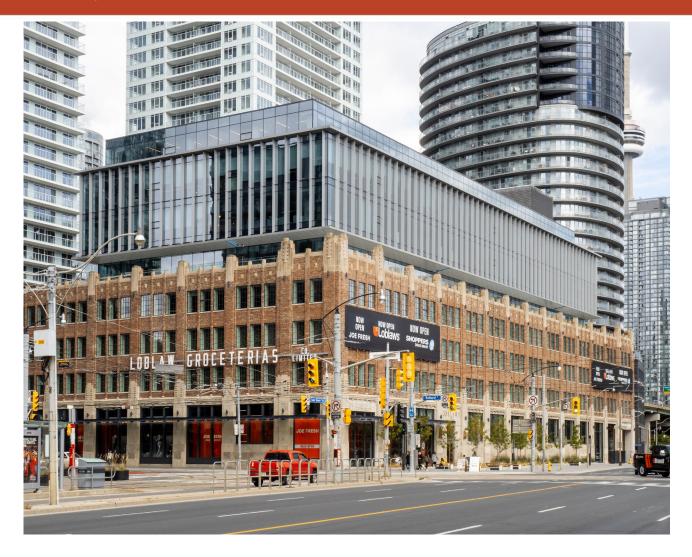
Pay property taxes for community services and education taxes to help fund elementary and secondary schools in Ontario.





About the Municipal Property Assessment Corporation (MPAC)

Ontario, Canada









Value - \$143.18B Count – 469.61K



Value - \$2.25TCount – 5.05M



Value - \$2.88TCount – 5.75M

Value Base Date = January 1, 2016









Expansion of Mixed Use in Ontario

- 1,300 1,500 large mixed-use properties with 2 or more distinct income streams
 - Multi-storey buildings with floor plates greater than 10,000 square feet
- Approximately 60 regional mall sites; 1/4 currently have mixed-use development proposals
 - Mostly medium-to-high density residential infilling (rental and/or strata)
 - Development timelines projected to vary from a few years to a few decades
- Another 100+ enclosed community mall sites available
 - Current development plans in major urban centres (i.e. Toronto)







Defining Mixed Use Properties

- Three or more significant revenue-producing uses (such as retail, office, residential, institutional, hotel, and/or entertainment/cultural/recreation) which in well-planned projects are mutually supporting
- Significant physical and functional integration of project components (and thus a relatively close-knit and intensive use of land), including uninterrupted pedestrian connections
- Development in conformance with a coherent plan, which frequently stipulates the type and scale of uses, permitted densities and related items

Business Geography and New Real Estate Market Analysis, Grant Ian Thrall, p.216-217





Key Differences



Single Property Appraisal

"The systemic appraisal of properties one at a time. Commonly referred to as a fee appraisal or bank appraisal, which normally determines a value of a particular property as of a given date."

Glossary for Property Appraisal and Assessment Third Edition, IAAO, p124



Mass Appraisal

"The process of valuing a group of properties as of a given date and using standard statistical methods, employing common data, and allowing for statistical testing."

Standard on Mass Appraisal, IAAO, p5







Balancing Market Value and Equity









Planning and Approval Processes

- Official Plan Amendments
 - Official and secondary plans
- Rezoning (often site-specific)
 - How the land is to be used?
 - Where buildings can be located?
 - How high can the buildings be?
 - Allowable uses
- Site Plan Approvals
 - For each building, public space
- Informed by public engagement

Municipalities in Ontario









Legal Title vs Development

- One or many parcels
- Value independently or as one asset?
- Some properties would not exist otherwise
 - Air rights
 - Pedestrian access only
- Various stages of lineage
 - Parent parcels
 - Sibling parcels
 - Child parcels

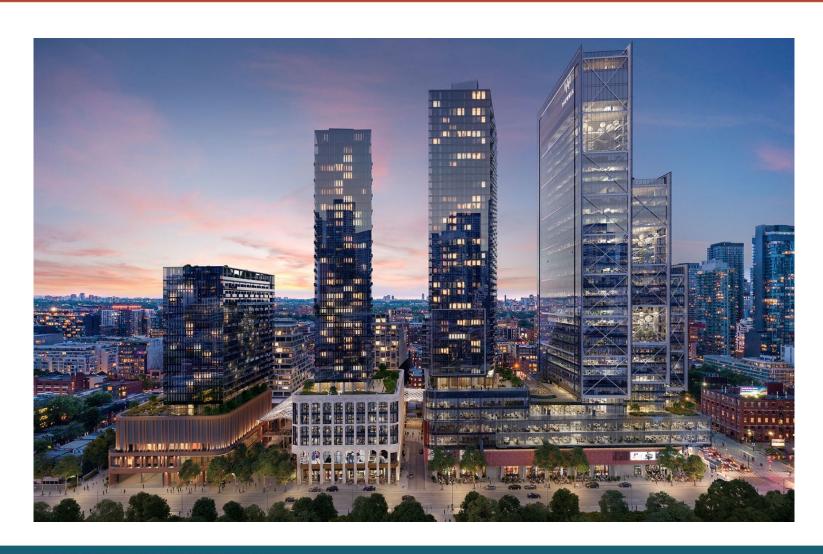








Why is this a challenge? - Case Study: The Well (Toronto, ON)



The Well is an ambitious mixeduse project located in downtown Toronto, Ontario with over:

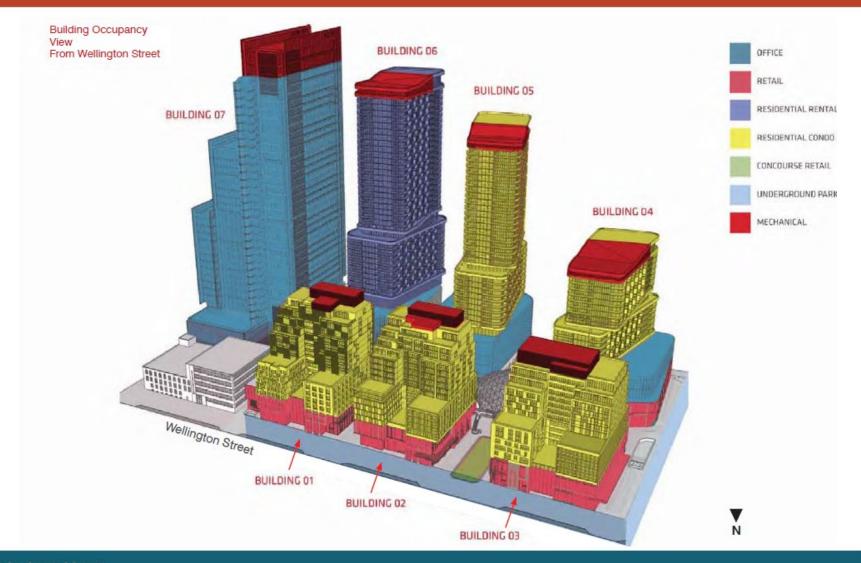
- 1.1 million square feet of office
- 0.5 million square feet of retail and food services over a 3-level podium and concourse
- 1,700 residential units (townhouse & condominiums)
- 1,900 vehicle + 2,200 bicycle parking spaces over 4 underground levels.







Why is this a challenge? - Case Study: The Well (Toronto, ON)









Why is this a challenge? - Case Study: The Well (Toronto, ON)

- Multiple Uses (income streams)
 - Office, retail, residential, parking, public parkland, and publicly accessible privatelyowned open space
- Physical and functional integration of development/buildings
 - Significant publicly accessible areas including urban parkland
 - Pedestrian-friendly design interconnecting all 7 buildings
- Local zoning/planning
 - 2014 Provincial Policy Statement and 2017 Growth Plan designates the site within an Urban Growth Centre
 - 2015 Official Plan Amendment redesignated the lands from Regeneration Areas to Mixed Use Areas
 - 2017 Zoning By-Law Amendment established the permitted uses and development standards for the site







Data











Benchmarking











How do assessors keep on top of this ever-changing property type?









How do assessors keep on top of this ever-changing property type?









How do we ensure accuracy? – Case Study: The Well (Toronto, ON)

Ensuring Accuracy (example)

Single cap rate

Component	NOI	Cap Rate	Est. Value
Property	\$90.24 M	4.50%	\$2.005 B

Many cap rates

Component	NOI	Cap Rate	Est. Value
Office	\$27.17 M	5.25%	\$517.44 M
Retail	\$22.56 M	4.50%	\$501.39 M
Residential	\$35.99 M	3.25%	\$1,107.25 M
Parking	\$ 4.52 M	4.75%	\$95.26 M
TOTAL	\$90.24 M		\$2.221 B







How do we ensure accuracy? – Case Study: The Well (Toronto, ON)

Ensuring Accuracy (example)

• Blended cap rates

Component	NOI / Weight	Cap Rate	Wtd. Cap	Est. Value
Office	\$27.17 M/ 30%	5.25%	1.58%	
Retail	\$22.56 M/ 25%	4.50%	1.13%	
Residential	\$35.99 M/ 40%	3.25%	1.30%	
Parking	\$ 4.52 M/ 5%	4.75%	0.24%	
TOTAL	\$90.24 M/100%		4.24%	\$2.128 B

Comparison

Cap Rate(s)	NOI	Cap Rate	Est. Value
Single	\$90.24 M	4.50%	\$2.005 B
Many - separate	\$90.24 M	3.25%-5.25%	\$2.221 B
Many - blended	\$90.24 M	4.25%	\$2.128 B







What about equity?

Leverage Tools and Technology

- Flexible Computer Assisted Mass Appraisal (CAMA) system
 - Data structured appropriately, business-controlled valuation equations
 - Valuation equation able to call data appropriately and apply calculation (it is just math ©)
- Data governance, quality management
 - In-system safeguards, checks and security
 - Consistent and quality data is the foundation (keep it safe)
- Multiple approaches
 - Monitor and compare various approaches
 - Compare results across population and sub-groups







What about equity?

Guidance for Assessors

- Directives
 - Formalize decisions and post
- Provide formal training
 - General valuation approaches
 - Complex property training
 - Support for formal directions
- Forum for questions
 - Access to subject market experts
 - Regular touch-points (i.e. scrums)
 - Integrated into how we work (not just during an assessment update)







What about equity? - Case Study: The Well (Toronto, ON)

Demonstrating equity – by component

Comparable Component Cap Rates		
Office (Class A+)	5.25%	
Retail (TIER 1 Regional Mall)	4.50%-5.00%	
Residential (High Rise A) 3.25%		

3 rd Party Reported Cap Rates		
Office (Class A+)	4.25% - 5.25%	
Regional Mall	4.50% - 5.50%	
Apartment (High Rise A)	3.25% - 4.75%	

Subject Component Cap Rates		
Office (Class A+)	5.25%	
Retail (TIER 1 Regional Mall) 4.50%		
Residential (High Rise A) 3.25%		

Subject Cap Rate Estimates		
Single	4.50%	
Separate components	3.25%-5.25%	
Blended components	4.25%	







What about equity? - Case Study: The Well (Toronto, ON)

Demonstrating equity – by component

Subject	Units	Cap Rate	Value/Unit
Office	1.1M SF	5.25%	\$470/SF
Retail	0.5M SF	4.50%	\$1,003/SF
Residential	1,700	3.25%	\$651,323/Unit
Parking	1,900	4.75%	\$50,135/Space

Comps	Cap Rates	Value/Unit
Office	5.25%	\$463-\$530/SF
Retail	4.50%-5.00%	\$990-\$1,251/SF
Residential	3.25%	\$525,723-\$671,098/Unit
Parking	3.25%-5.25%	\$40,292-\$53,457/Space

- All applied cap rates are within range of applied comparable property components
- Value per unit is within range of comparable property component values per unit



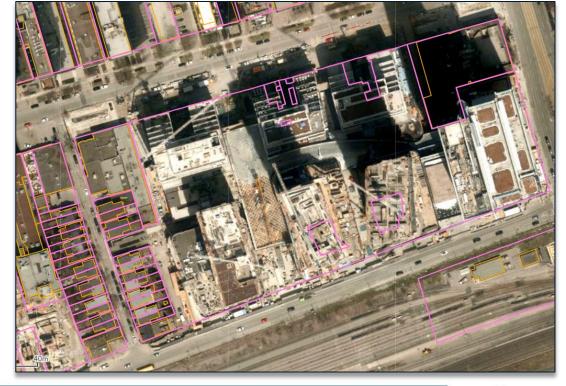


What about equity? - Case Study: The Well (Toronto, ON)

- Demonstrating equity by timeline
- Aerial photos during construction

2018 2022











Is it sustainable?

Can (should) we repeat this?

- How successful can we be defending our approach?
 - Think beyond your jurisdiction
 - Leverage friends and colleagues
 - Learn from the battle scars of other (collaborate!)
- Is it efficient?
 - Ensure your CAMA system is flexible and responsive
 - Leverage open data where possible
- How do we ensure assessors are up to date on market shifts and current developments?
 - Continuous training and engagement on emerging trends (before they show up at our door)

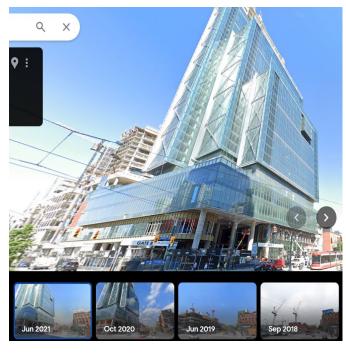


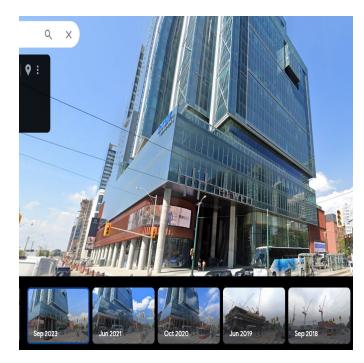




Is it sustainable? - Case Study: The Well (Toronto, ON)







2019 2021 2023





Where do we go from here?

Key Learnings

- And what did we learn?
 - Need to balance accuracy and consistency to be successful
 - Need to leverage our technology (system driven application)
 - Be open-minded and flexible (assumptions do not always equal market reality)
 - Get a little help from friends (we don't know everything)

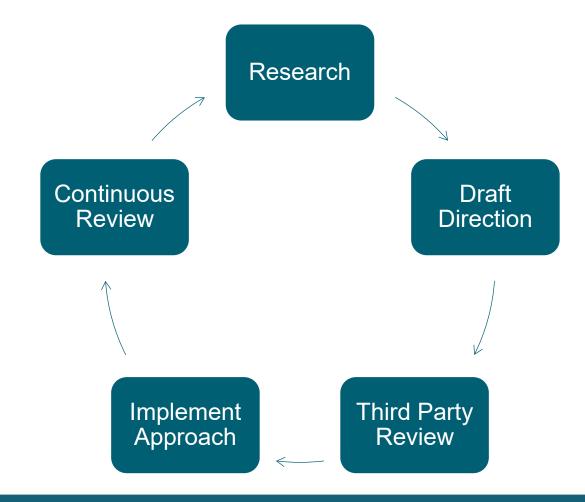






Where do we go from here?

Next Steps

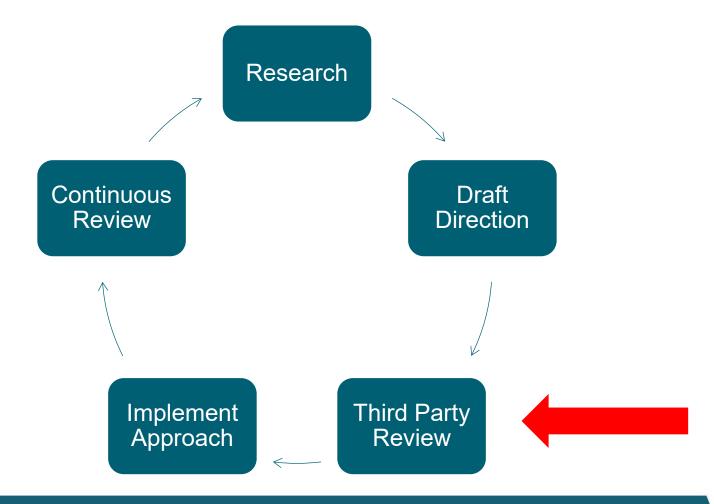






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Next Steps

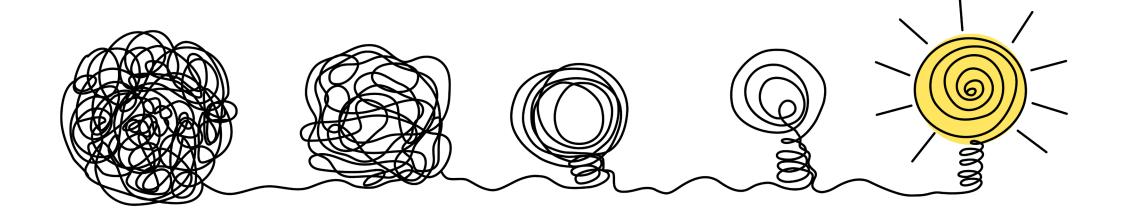








Final Thoughts







Thank You!!

Questions?

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