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# Ontario Ministry of Transportation – Highway Access Management Guideline

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Ken Teasdale, Senior Project Manager

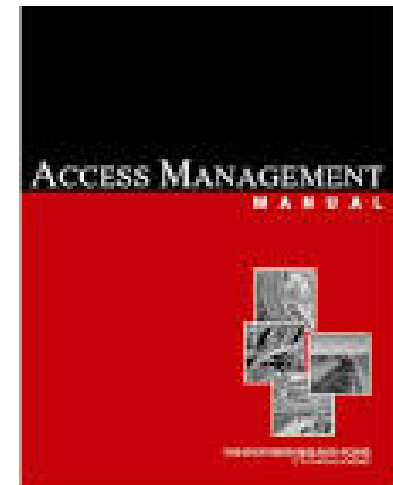
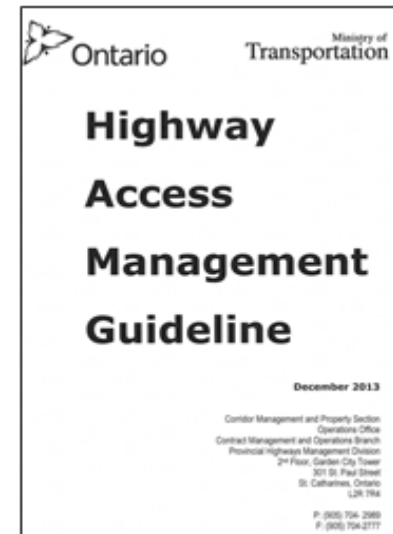
# MTO's Highway Access Management Guideline...

- MTO implemented its new '**Highway Access Management Guideline**' effective December 19, 2013.
- The Guideline sets out policies, standards and techniques for Ontario's highway network to help:
  - Preserve highway operation and efficiency = **safety**
  - Maintain the role and function of the highway network = **mobility**
  - Protect highway infrastructure investment = **sustainability**
  - Balance highway **safety, mobility and sustainability** with access for land development
  - **Integrate** highway transportation planning / design with land use planning / development



# MTO's Highway Access Management Guideline...

- MTO's Highway AM Guideline is a synthesis of material from existing manuals, reports, guidelines, etc. from within MTO as well as material from other provincial / state jurisdictions.
- MTO's Highway AM Guideline relied on the Transportation Research Board's (TRB) 'Access Management Manual', published in 2003 to help 'fill-in the gaps' where no standards existed.
- In 2006 and 2007, an extensive stakeholder consultation process took place involving nearly 20 organizations, associations and municipalities from across Ontario.



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# MTO's Highway Access Management Guideline...

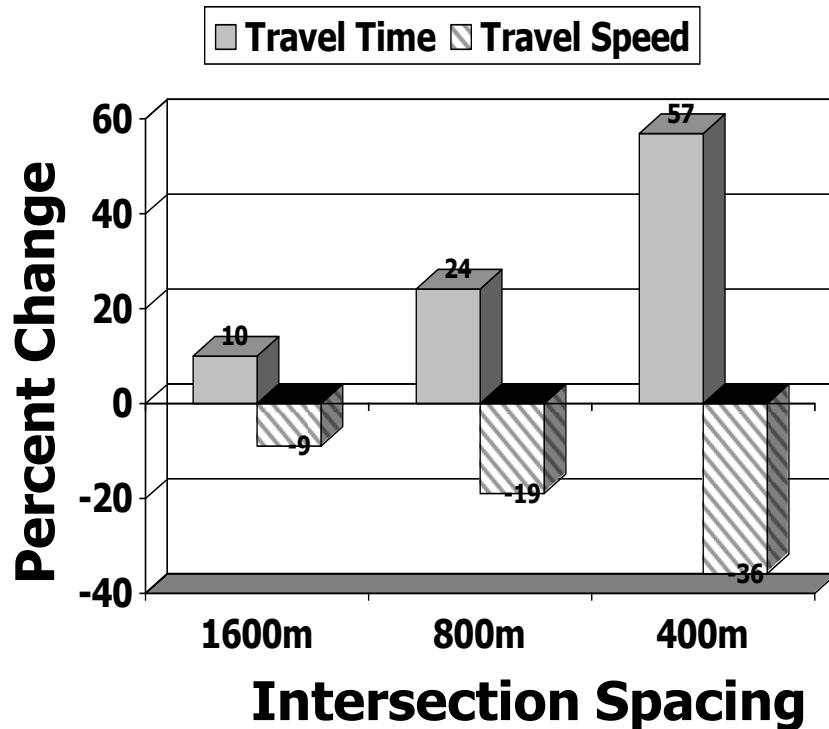
- Ontario provincial highways are experiencing...
    - increased congestion
    - increased travel times
    - reduced operating speeds
  - Ontario Ministry of Transportation (MTO) needs to...
    - protect and maintain the role and function of 'rural' provincial highways - to serve long distance / inter-regional travel
    - consider specific local constraints / issues and provides flexibility where provincial highways transverse through urban areas
  - MTO needed to update its access management practices and fill in the gaps ...
    - previous guideline was dated 1994
    - integrated approach to transportation planning and land use planning
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# MTO's Highway Access Management Guideline...

## Spacing of Intersections along Provincial Highways

A study completed by MTO in 2006 indicated the following:

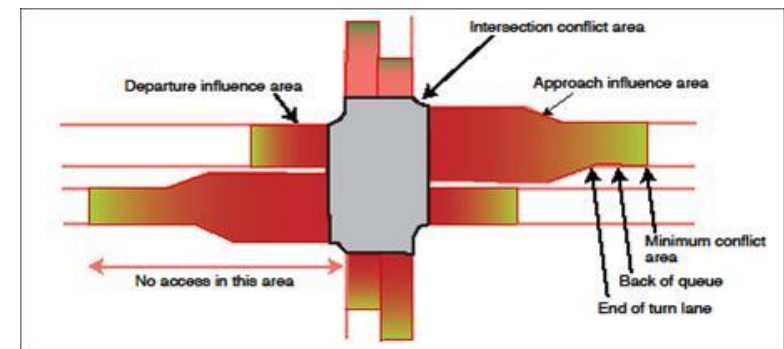
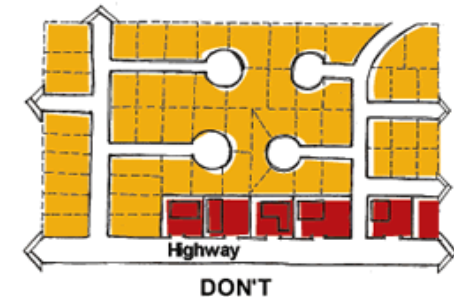
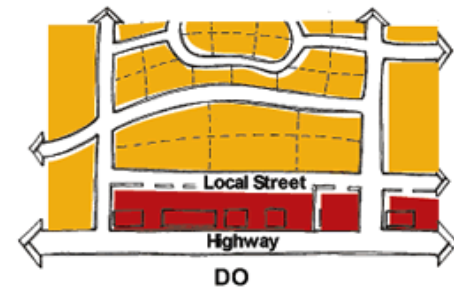
- Existing public road intersections typically spaced 2-3 km or greater in rural areas, whether signalized or not, have no significant impacts on the highway network
- Placement of signalized intersections at 1600 m intervals increases travel time by 10% and reduces speeds by 9%
- Placement of signalized intersections at 800 m intervals increases travel time by 24% and reduces speeds by 19%
- Placement of signalized intersections at 400 m intervals increases travel time by 57% and reduces speeds by 36%
- MTO's previous intersection spacing standard was only 365 m



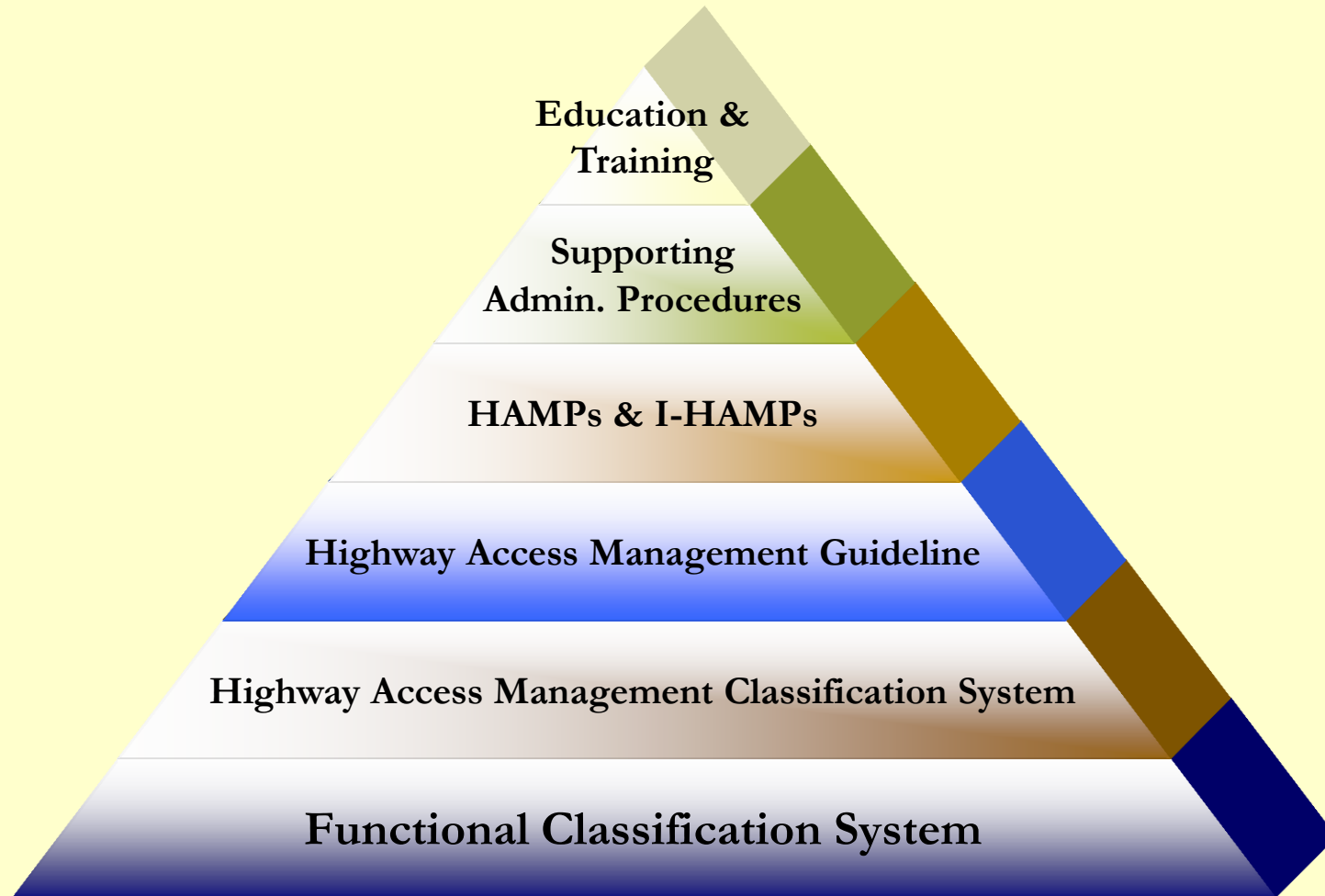
# MTO's Highway Access Management Guideline...

Access management protects the mobility (people/goods movement) and functionality (safety/operation) of Ontario's provincial highway network through such technical principles as:

- ❑ Limit and/or consolidate access connections while promoting a supporting municipal roadway network
- ❑ Limit the number of public road and commercial access connections to provincial highways
- ❑ Preserve the functional area of interchanges and intersections
- ❑ Limit and separate the number of direct private access connections
- ❑ Remove turning vehicles from through-traffic lanes

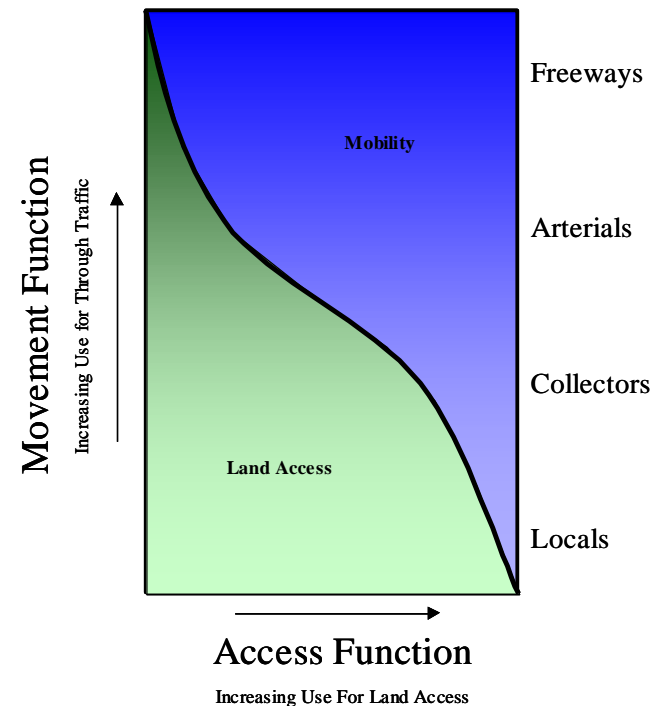


# MTO's Highway Access Management Guideline...



# MTO's Highway Access Management Guideline...

- MTO has established standards for the spacing and density of various access connection types, depending on whether...
  - the access connection is onto the provincial highway, or
  - a municipal public road within MTO's permit control area.
- Highways of a higher Access Management Classification require longer access spacing standards...
- Highways of a lower Access Management Classification can have more frequent and closely spaced access connections.





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# MTO's Highway Access Management Guideline...

MTO's Highway Access Management Guideline includes technical standards for:

- Spacing between interchanges;
  - Spacing of public road intersections / commercial entrances from interchange ramps;
  - Spacing of public road intersections along provincial highways;
  - Spacing of commercial entrances along provincial highways, and
  - Other standards/policies related to:
    - private access density along provincial highways
    - private access offset spacing criteria from provincial highway intersections
    - minimum sight distance requirements (visibility)
    - flexibility in application of access policies / standards in built-up / urban areas
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# MTO's Highway Access Management Guideline...

## Interchange Spacing...

- Interchange spacing is still consistent with the MTO's Geometric Design Standards for Ontario Highways (GDSOH) manual.
- Spacing standard is:
  - 3.0 - 8.0 km – Desirable (Rural)
  - 2.0 km - Minimum (Urban)



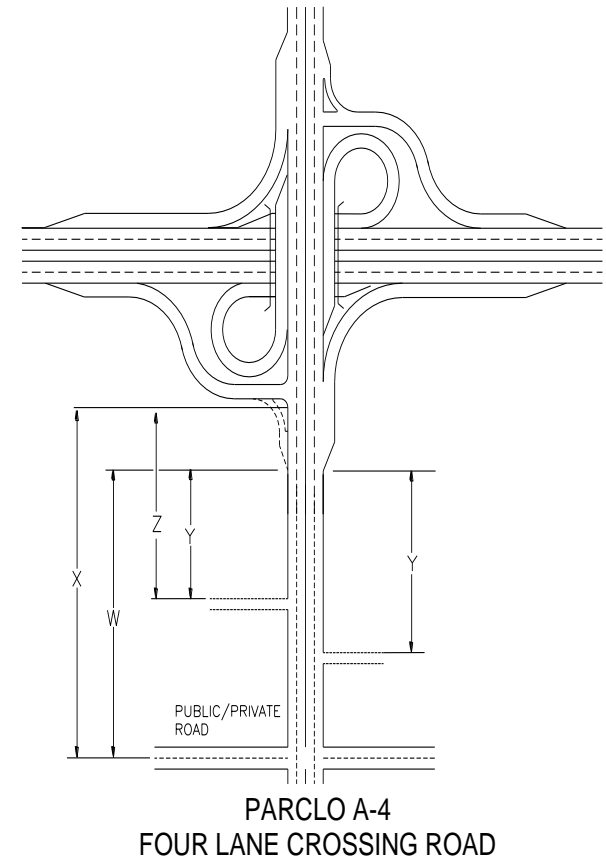
# MTO's Highway Access Management Guideline...

## Public Road and Signalized Commercial / Private Road Offsets from Interchange Ramp Terminal Intersections

Previous Access Management Spacing Standard	New Access Management Spacing Standard
No MTO standard	800 m - Desirable 400 m - Minimum

Note:

More specific details are contained in the Highway Access Management Guideline



# MTO's Highway Access Management Guideline...

## Public Road Spacing along Provincial Highways

Access Management Classification Category	Previous Access Management Spacing Standards	New Access Management Spacing Standards
2A - Principal Arterial	N/A	3.0 – 8.0 km – Desirable 2.0 km - Minimum
2B - Arterial	365 m*	1600 m – Desirable 800 m - Minimum
3 - Collector	365 m*	800 m - Minimum
4 - Local	365 m	400 m - Minimum

\*or in accordance with Controlled Access Highway Criteria

Note: All Controlled Access Highway Criteria have been revoked with issuance of the Highway Access Management Guideline

# MTO's Highway Access Management Guideline...

## Commercial / Private Road Spacing along Provincial Highways

Access Management Classification Category	Previous Access Management Spacing Standards	New Access Management Spacing Standards
2A - Principal Arterial	Not permitted	Not permitted
2B - Arterial	<ul style="list-style-type: none"><li>Typically 1 commercial entrance per km total*</li></ul>	1600 m – Desirable 800 m - Minimum
3 - Collector	<ul style="list-style-type: none"><li>Minimum frontage requirement of 45 m</li><li>Meet min. visibility requirements*</li></ul>	800 m - Minimum
4 - Local	<ul style="list-style-type: none"><li>Minimum frontage requirement of 45 m</li><li>Meet min. visibility requirements</li></ul>	400 m - Minimum

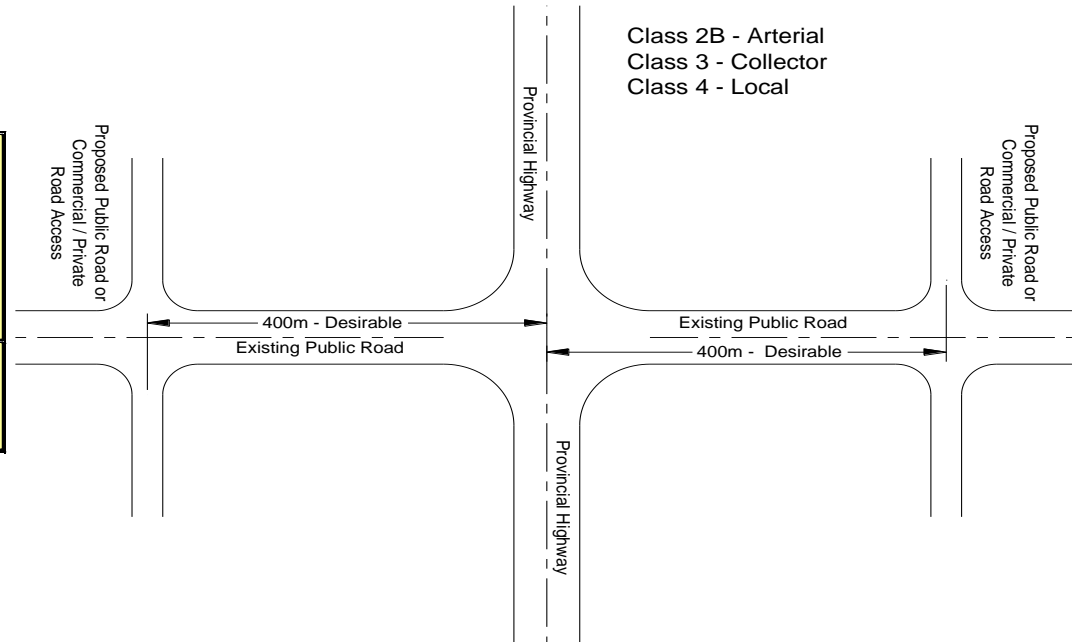
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# MTO's Highway Access Management Guideline...

## Public Road and Commercial / Private Road (Medium/High Volume) Offsets from at-grade Highway Intersections

Previous Access Management Standard	New Access Management Standard
No MTO standard	400 m - Desirable



Access Management Classification	Desirable Offset Criteria
Class 2B - Arterial	400 m
Class 3 - Collector	400 m
Class 4 - Local	400 m

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# MTO's Highway Access Management Guideline...

## **Highway Access Management Plans (HAMP) and Interchange-Highway Access Management Plans (I-HAMP)**

Purpose of a HAMP or I-HAMP is...

- to act as an “access management master plan” that co-ordinates highway access management and adjacent road/land development on a strategic rather than reactive basis.
  - to provide the opportunity to reduce future potential conflicts between provincial highway access management objectives (policies/standards) and municipal land use objectives (road/land development plans), so that both objectives are efficiently achieved;
  - to provide MTO, municipalities and stakeholders with an orderly technical process to evaluate, and hopefully resolve situations where development plans appear to be unable to comply with MTO's Highway Access Management Guideline.
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# MTO's Highway Access Management Guideline...

## **Highway Access Management Plans (HAMP)**

- A HAMP provides MTO, local road and planning authorities and developers with a comprehensive highway access management plan for a highway segment or corridor.
- A HAMP considers a range of access management techniques together with the overall highway corridor's role, function and mobility aspects, including municipal land use planning objectives (e.g. Official Plans, Secondary Plans, etc.)
- The HAMP should identify all existing Public Road locations, potential future Public Road locations and proposed Public Road closure locations.

## **Interchange – Highway Access Management Plans (I-HAMP)**

- An I-HAMP is similar to a HAMP, however it deals with a comprehensive highway access management plan for an interchange and would identify all existing Public Road locations, potential future Public Road locations and proposed Public Road closure locations.
  - The existing and anticipated future land use development potential within the interchange area will be considered in the preparation of an I-HAMP.
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# MTO's Highway Access Management Guideline...

## **Access Roads at Freeway Ramp Terminals**

- MTO may consider an access road opposite a freeway ramp terminal in high volume urbanized areas, in order to deal with traffic operational problems at an interchange.
  - This solution would only be considered as a last resort after all other alternatives have been exhausted.
    - MTO shall not consider an access road opposite a freeway ramp terminal in order to allow Proponents to develop greenspace land in rural areas.
    - It is not to be used as a tool to gain approval for an Access Road opposite a ramp terminal that provides the only means of access connection for the development.
  - The key component of the approval process is the submission of a Feasibility Study Report (FSR) by a professional engineer for MTO approval.
    - The FSR shall establish a business case for the Access Road; otherwise the Access Road shall not be considered.
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# MTO's Highway Access Management Guideline...

## **Future Updates to the Highway Access Management Guideline**

- MTO is committed to addressing revisions to the Highway Access Management Guideline one-year from the original publication (December 19, 2013) date to address any required revisions.
  - It is anticipated that the updated Guideline will be released in early 2015 to address matters such as:
    - Policy clarification to assist in the application of standards, including updates to Figures and Tables as needed.
    - Updated Access Management Classification mapping
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# MTO's Highway AM Guideline

Questions?