

On-street parking study at nearby Roxboro-Pierrefonds train station

Public consultation

December, 13th 2016



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1 Introduction

Background

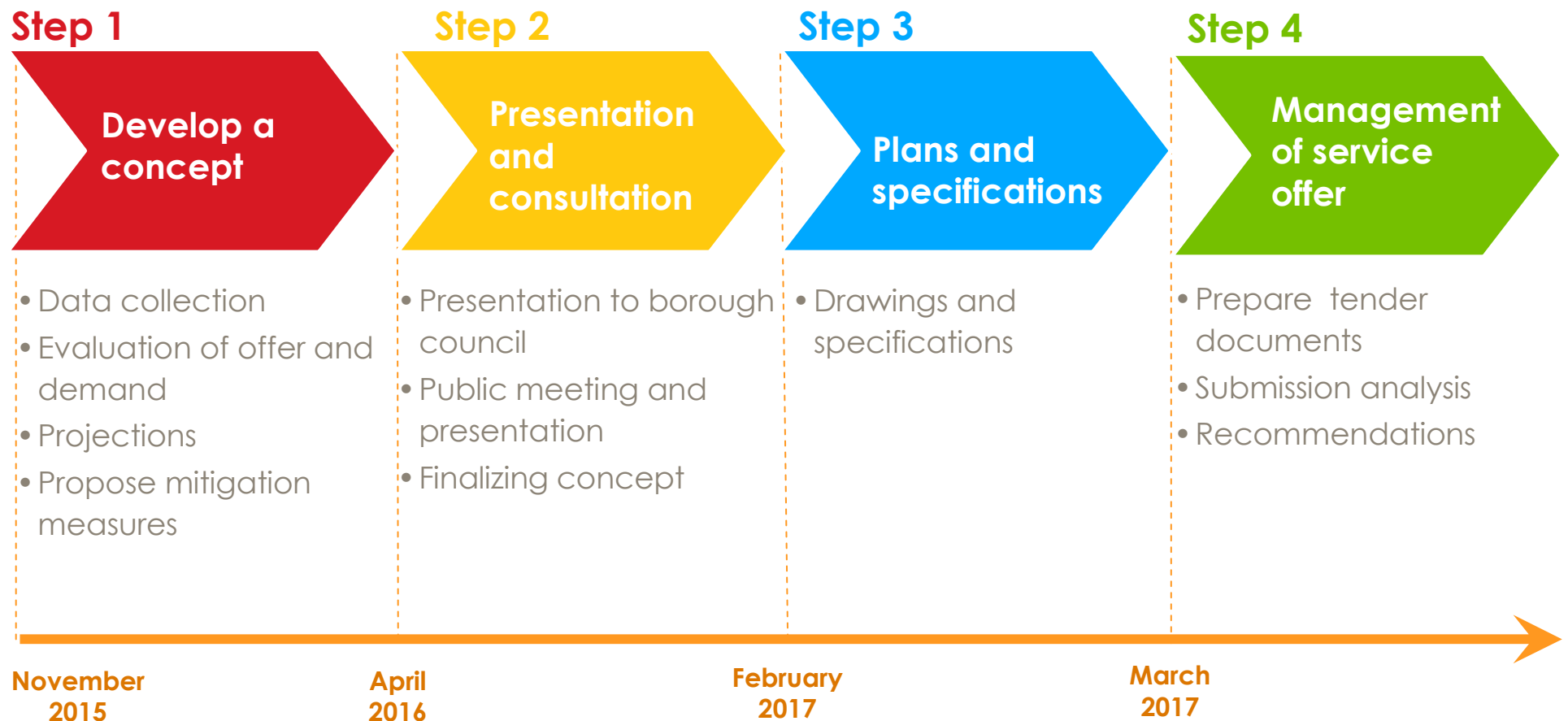
Current assessment

- The Park-and-Ride facility at the Pierrefonds-Roxboro train station is currently saturated;
- Parking overflow can be observed in neighbouring residential area and causes troubles for residents.

Objective of the study

- Develop a parking solution that answers the needs of residents and train users;
- Prepare the signalization specifications;
- Manage the tender.

date's progression



2 Characterizing the Existing Situation

Location of the studied area



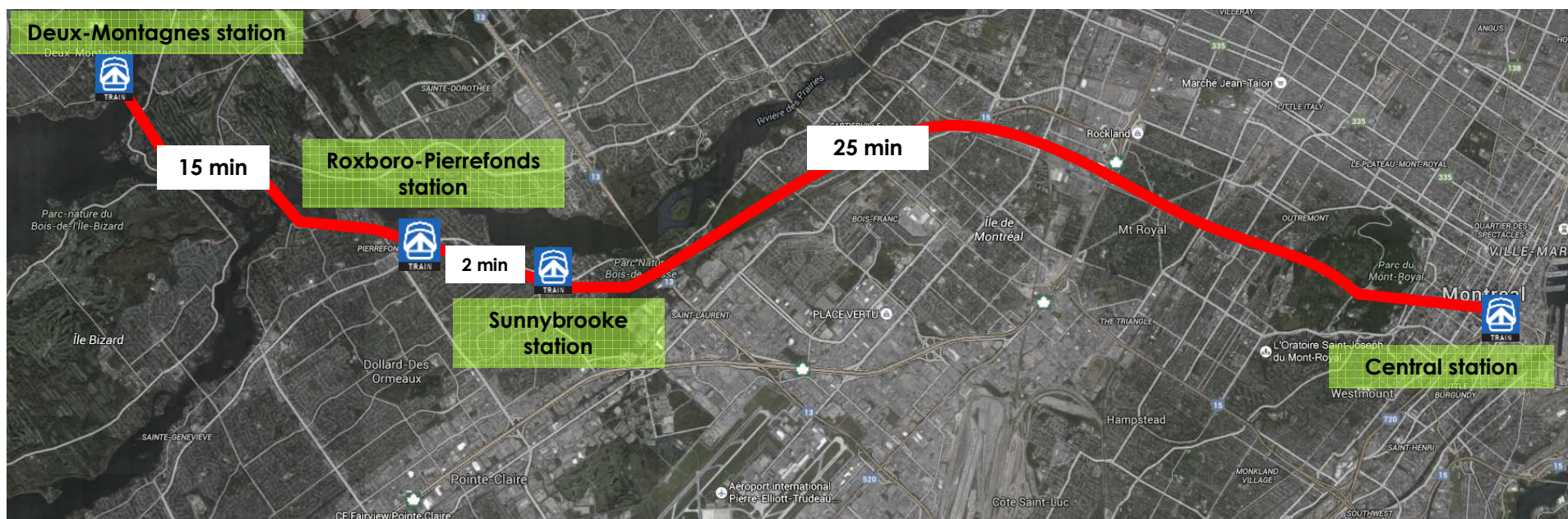
==== Deux-Montagnes line

○ Studied sector (500 m radius)

- The study area for the parking overflow analysis was delimited within a 500 m radius of the train station.

≈ 5 minute walk to the train station.

Montréal - Deux-Montagnes' commuter train line



Direction	Train frequency		
	AM (6-9:00)	PM (3-6:00)	24H
Montreal	8	4	24
Deux-Montagnes	2	7	24

- 1 train per 25 minutes during peak periods
- 27 minutes to reach Central station

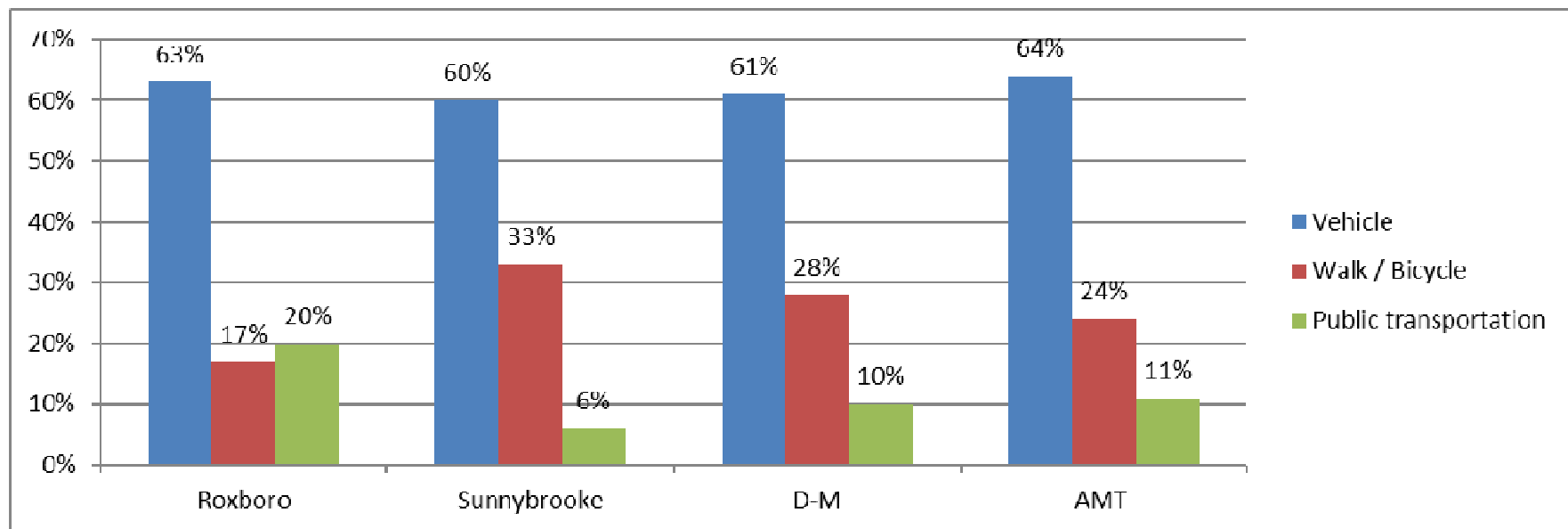
User's characteristics*

* : source AMT

Ridership (2014) :

- Roxboro-Pierrefonds : 1 367 200 (18% of the train line)
- Sunnybrooke : 787 900 (10% of the train line)

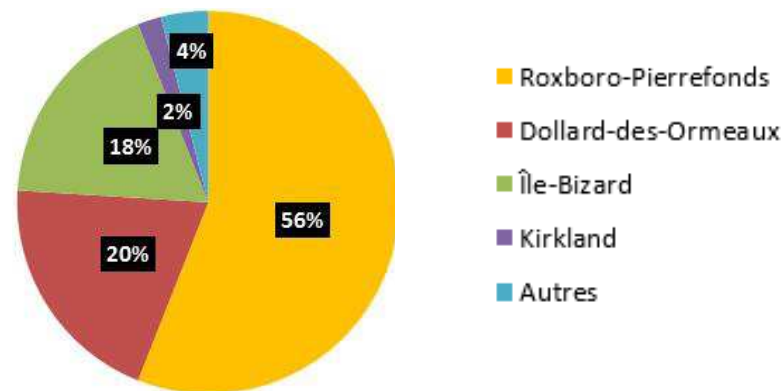
Access mode to the train station (2014) :



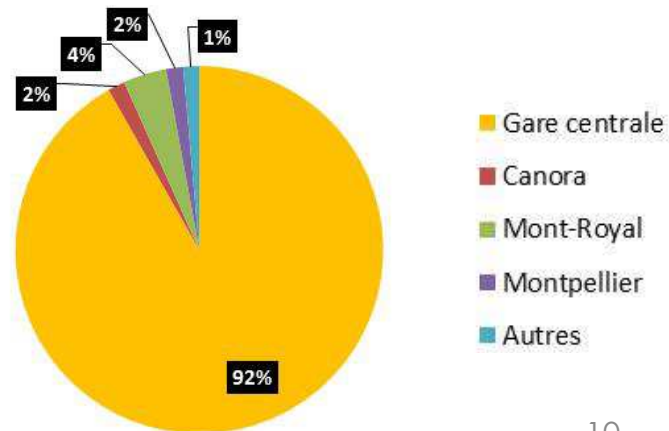
Service points of Train Users*

* : source AMT

Origin of users that arrive to the station by car (2014)



Destination of all the users (2014)



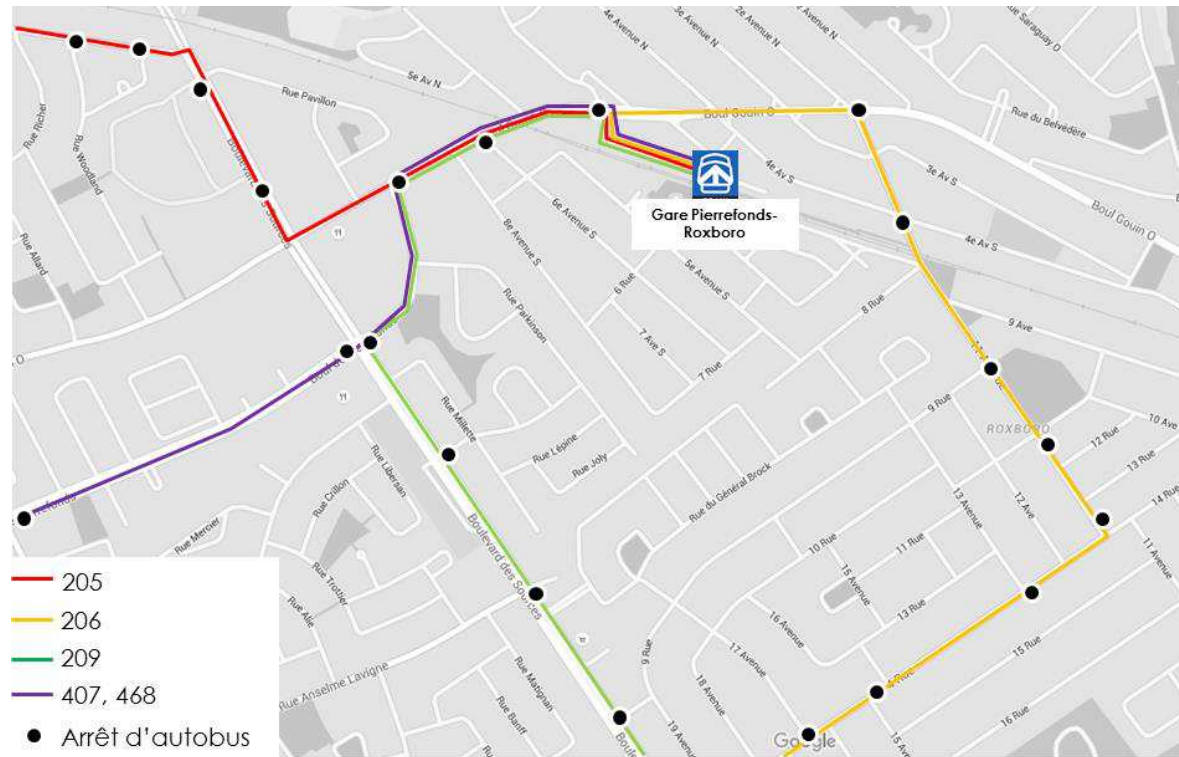
Roxboro-Pierrefonds Park-and-Ride facility



Station	CAPACITY		OCCUPATION RATE		RIDERSHIP
	Park-and-Ride	Pilot project – Guaranteed parking space	September 2015	2014	2014
Roxboro-Pierrefonds	918	171	92%	88%	211 100

- The Park-and-ride facility is saturated;
- Capacity is reached between 7:30-8:00 AM

Public Transit



DESTINATION	BUS LINE	FREQUENCY	
		PHAM	PHPM
Roxboro-Pierrefonds train station	205, 206, 209, 407, 468	2 MIN	2 MIN

- Roxboro-Pierrefonds train station is well serviced by the public transportation.

Active Transport

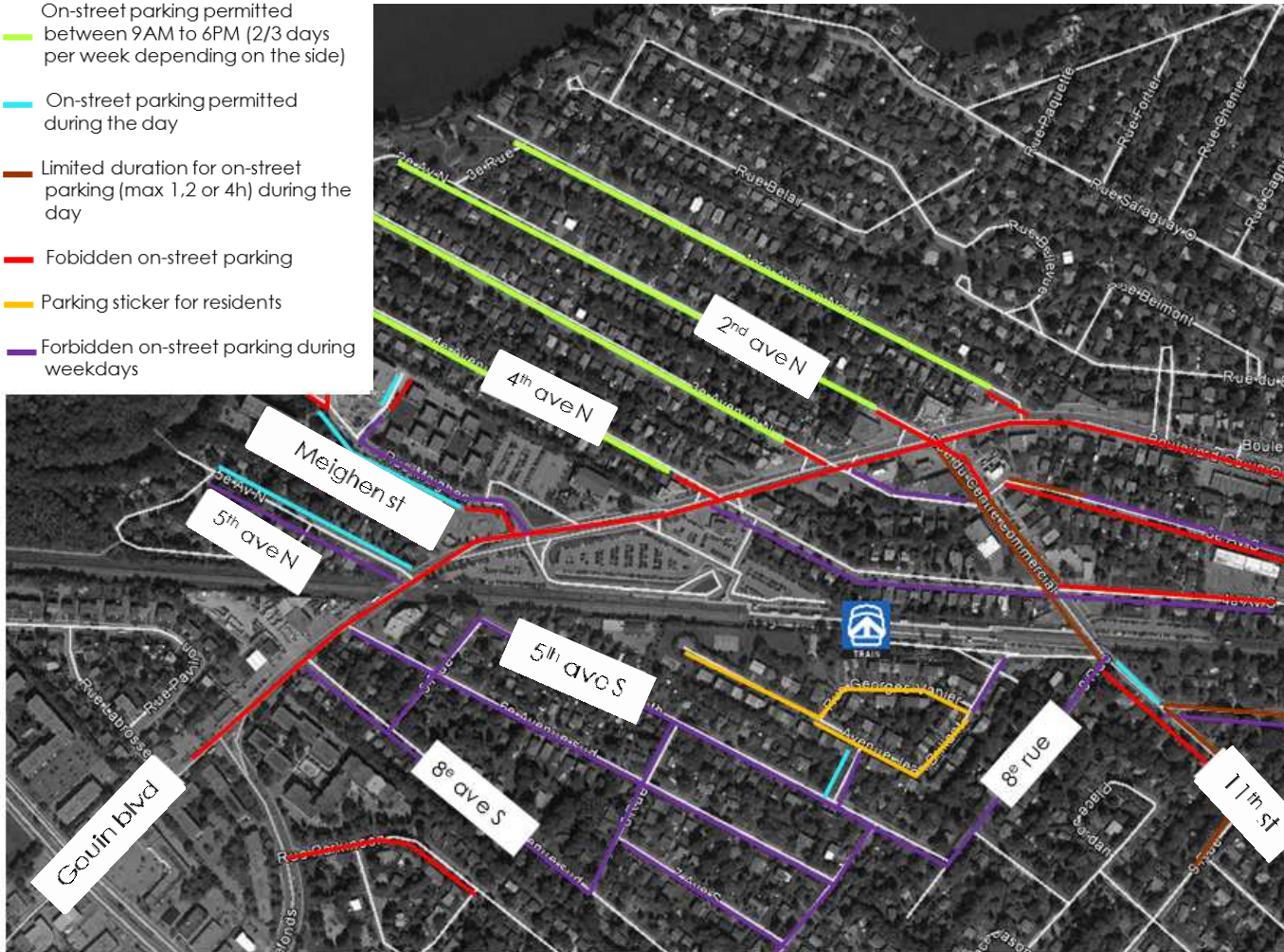


- The surrounding streets lack sidewalks for pedestrians
- No connections between bicycle paths and the train station

On-street parking

Regulations around Roxboro-Pierrefonds train station

- On-street parking permitted between 9AM to 6PM (2/3 days per week depending on the side)
- On-street parking permitted during the day
- Limited duration for on-street parking (max 1,2 or 4h) during the day
- Forbidden on-street parking
- Parking sticker for residents
- Forbidden on-street parking during weekdays

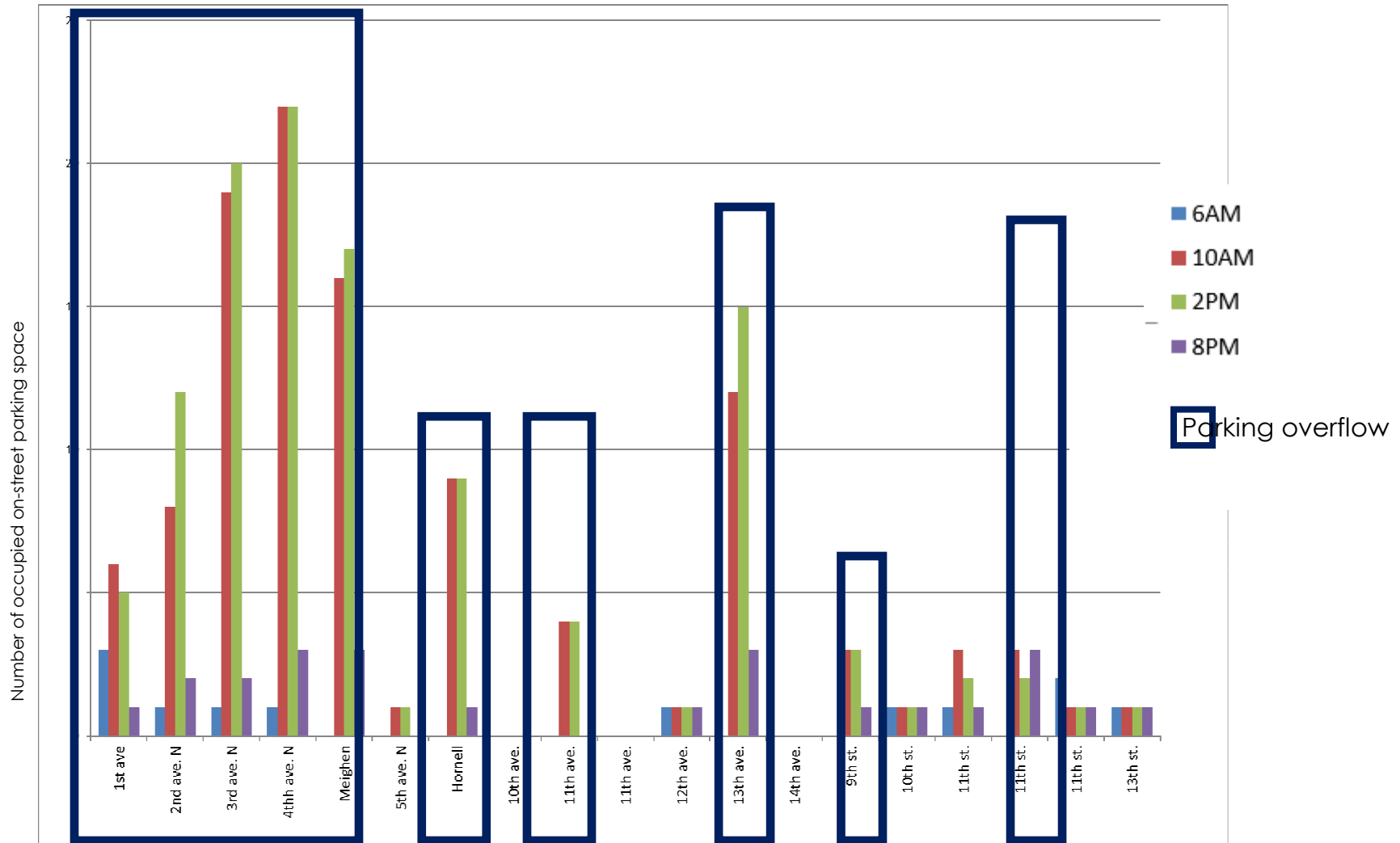


Allowed on-street parking:

- 1st, 2nd, 3rd, 4th, 5th ave North
- Meighen street
- 11th ave

On-street parking

On-street parking occupancy's evolution (November 3rd, 2015)



On-street parking

Results

NEARBY TRAIN STATION	RAW RESULTS FOR PARKING OVERFLOW	ACTUAL PARKING OVERFLOW ⁽¹⁾
Roxboro-Pierrefonds	100 ± 10	120 ± 10

⁽¹⁾: 10% margin of error and private parking rental (10%)

- Parking overflow is estimated to be 120 – 130 spaces around the Roxboro-Pierrefonds train station;
- Nearby streets are subject to parking overflow ;
- Parking overflow causes troubles for residents (noise, pollution, safety).

Issues to address

On-street parking for residents

- Allow on-street parking for residents

Parking space for the commuter train users

- Increase on-street parking capacity for the present and future needs of commuter train users;
- Target nearby streets according to walking distance to train station.

Other

- Implement an on-street regulation that is suitable with both residents and train users;
- Residents safety / standard of living ;
- Short term solution ;
- Street maintenance (waste, snow, etc).

3 Assessing the Future Situation

Projections

Methodology

Parking overflow
(15 yr horizon)

Existing parking overflow
Growth rate

+

Parking overflow linked to the
park-and-ride saturation

Hypothesis :

- **The Réseau Électrique Métropolitain project from La Caisse de Dépôt was not considered in this study** (project unknown at the time and confidential data);
- Parking demand is considered equal to the growth rate Population area serviced by the train (0.53% / year).

Projections

Projected parking overflow over a 15-year horizon

TRAIN STATION	CURRENT PARKING OVERFLOW	PROJECTED PARKING OVERFLOW
Roxboro-Pierrefonds	120 ± 10	200 ± 10

- The projected parking overflow is estimated at 200-210 units around the Roxboro-Pierrefonds train station
- Parking overflow if statu quo

4 Proposed Mitigation Measures

Recommended solutions

Solution to increase parking capacity and to resolve issues concerning parking overflow

Medium/long-term solution:

Multi-Level parking facility;

Short-term solution:

Modify parking regulation for the neighboring streets.

When the REM project is planned, it will be required to update the solutions depending on the projected ridership.

Multi-Level parking facility (medium/long-term)



Multi Level parking facility (**medium/long term**)

Pros

- + Parking overflow issue resolved
- + Satisfied residents and train users
- + Potential increase of train ridership
- + Potential commercial development on ground floor (financing)

Cons

- Can be only realized in a medium/long term
- Cost
- Pilot project “Guaranteed parking” space becomes irrelevant
- Train capacity
- Managing the existing park and-ride facility during construction

Modifications to the street parking regulations (**short term**)

Principle

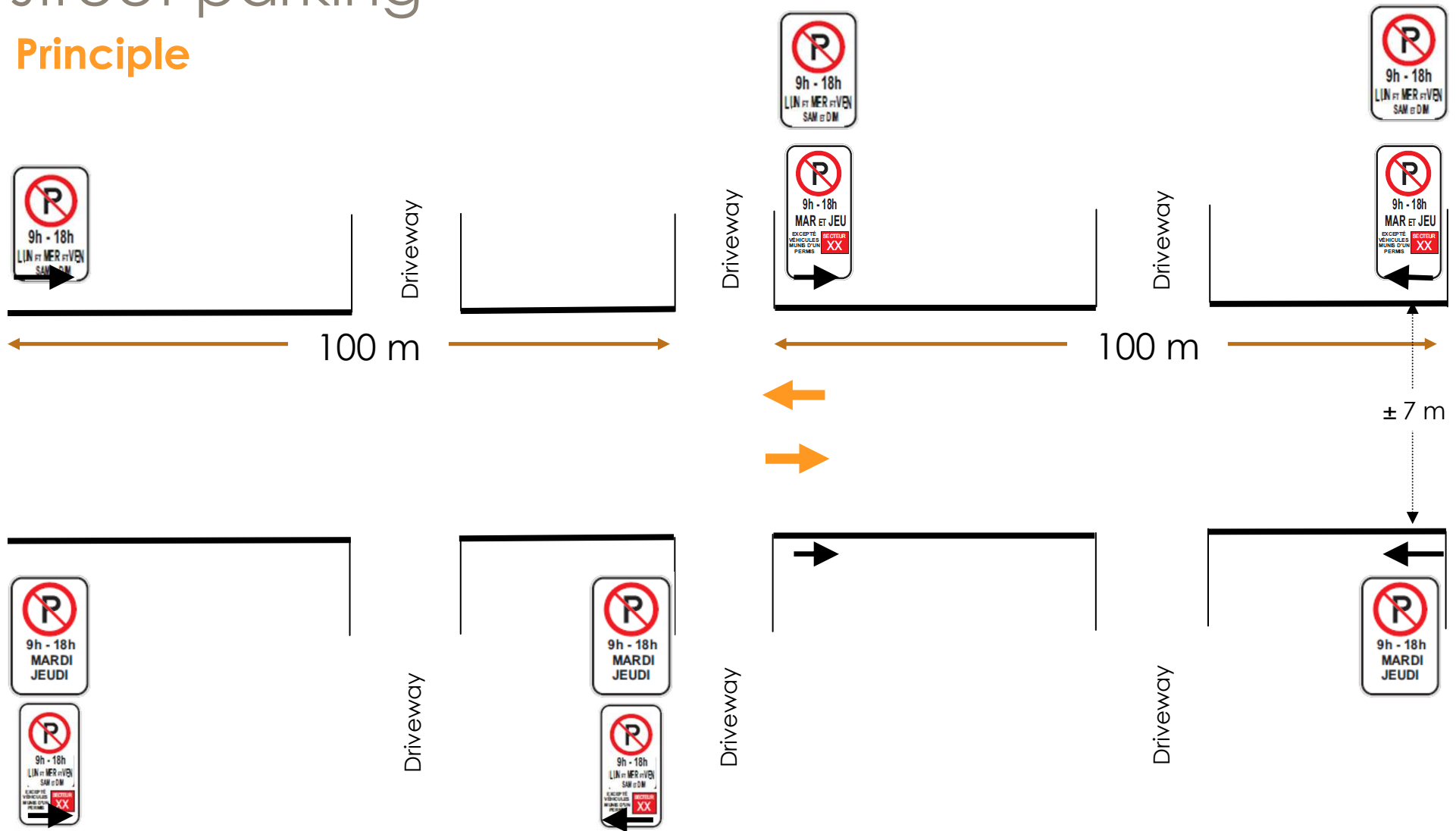
- Put in place a parking regulation that is more permissive and better adapted to the residents and train users.

Parking concepts

- Concept 1 : Reserved parking for residents holding a permit and alternated on-street parking
- Concept 2 : alternated on-street parking

Concept 1 : Parking permit and alternated on-street parking

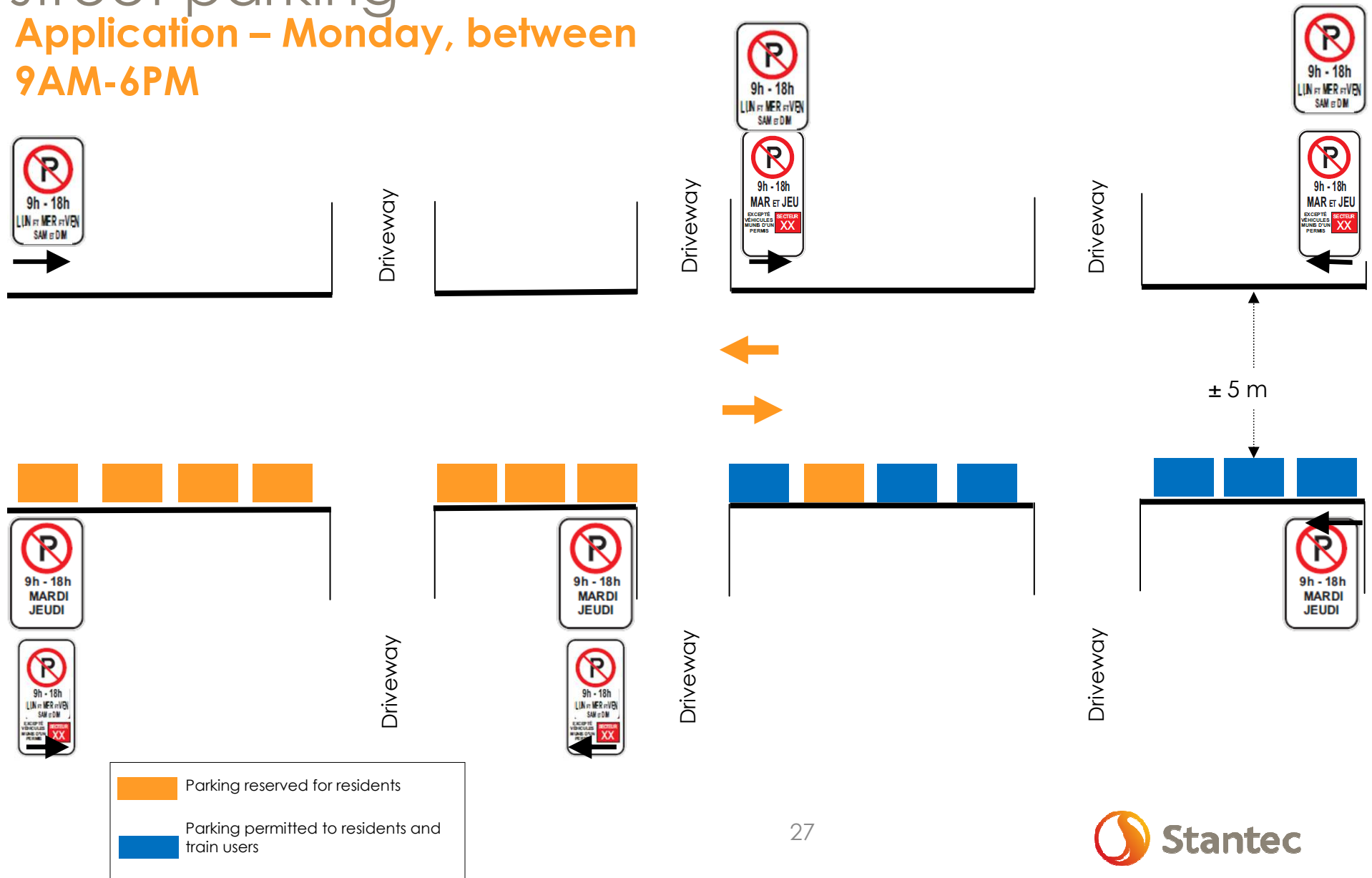
Principle



* Maintenance is possible between 9AM and 6PM on Mondays, Wednesdays and Fridays (north side); Tuesdays and Thursdays (south-side)

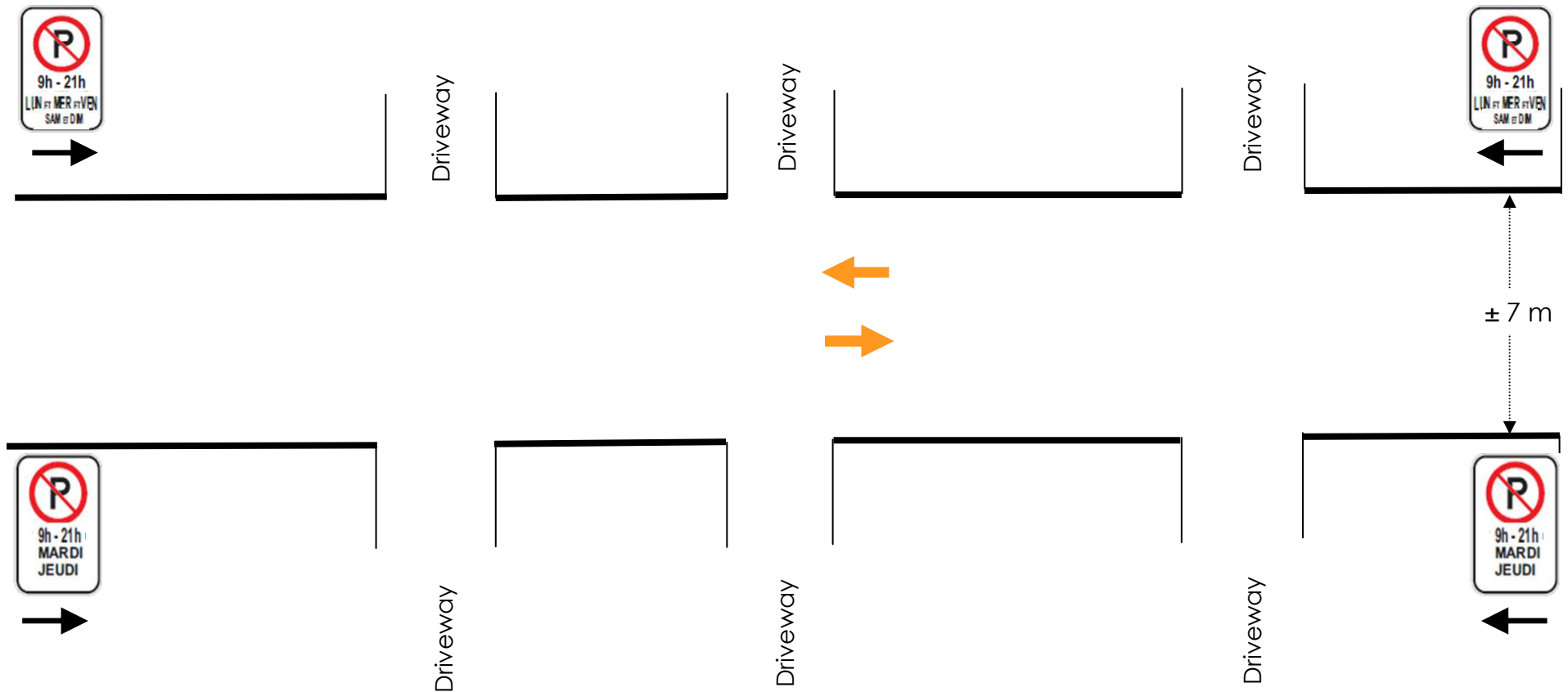
Concept 1 : Parking permit and alternated on-street parking

Application – Monday, between 9AM-6PM



Concept 2 : Alternated on-street parking

Concept



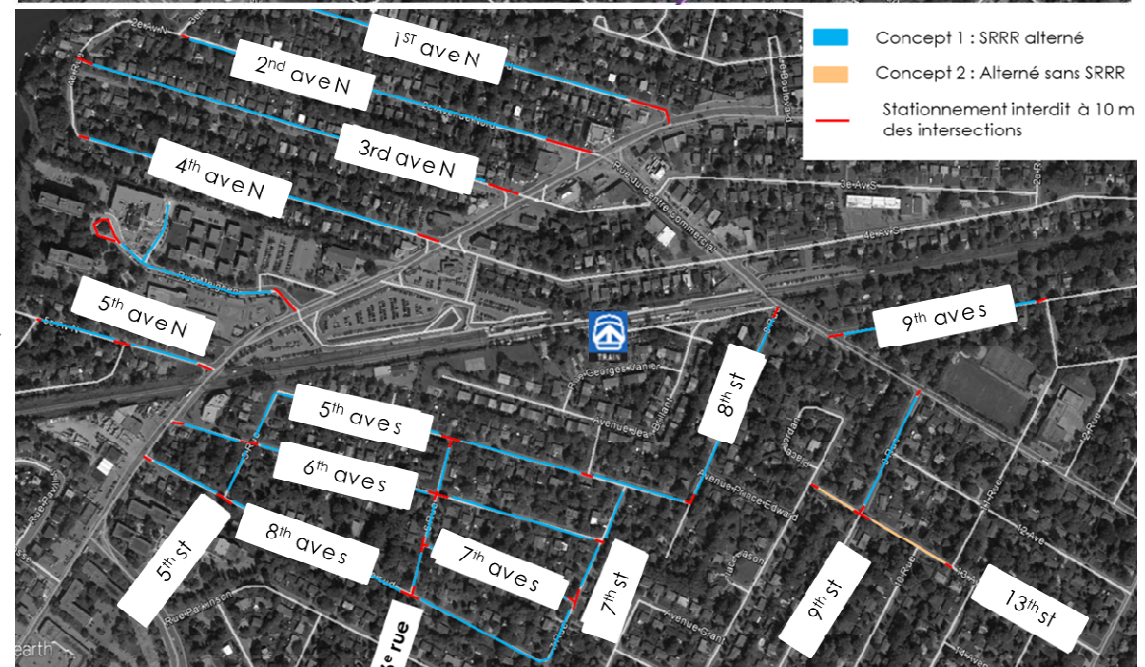
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Proposed concept around Roxboro- Pierrefonds train station

Existing regulation



Modification of regulation
considering their proximity
to the train station and their
current regulation



Parking regulation modifications (**short term**)

Pros

- + Guaranteed parking for residents
- + Increased parking capacity for residents and train users
- + Regulation tailored to road geometry
- + Street maintenance is possible
- + Solution for present and future needs

Cons

- Parking permit managements policy
- Complexity of the parking regulations
- Potential on-street parking on both sides of narrow streets (traffic and safety concerns)
- Potential increased traffic in residential areas

Modification of parking regulation (**short term**)

Future offer and demand evaluation

TRAIN STATION	EXISTING PARKING OVERFLOW	PROJECTED PARKING OVERFLOW	ESTIMATED PARKING SPACE FOR TRAIN USERS	ESTIMATED PARKING SPACE FOR RESIDENTS (PARKING PERMIT)
Roxboro-Pierrefonds	120 ± 10	200 ± 10	280	280

- An estimated 280 on-street parking spaces will be created for train users, which is sufficient for the projected parking overflow;
- 280 on-street parking space will also be created for residents only.

5 Conclusions & recommendations

Conclusions and recommendations

Assessments

- The park-and-ride facility of the Roxboro-Pierrefonds station is currently saturated;
- Access to the train station is primarily done by vehicle;
- The train users of Pierrefonds-Roxboro are from within or the neighbouring districts (DDO, Ile Bizard). Their destination is the Central Station in Montreal;
- Active transportation around the Roxboro-Pierrefonds train station is insufficient;
- There is parking overflow in the area surrounding the Roxboro-Pierrefonds train station;
- Data collection for parking overflow :
 - ± 120 around the Roxboro-Pierrefonds train station;
 - ± 200 in a 15-year horizon.
- Parking overflow is problematic and is a nuisance to residents (safety, noise, pollution).

Conclusions and recommendations

Recommendations

- Modify on-street parking regulations nearby to increase parking capacity and:
 - protect residents;
 - facilitate parking for train users
- The proposed concept divides each residential streets into two sections:
 - parking permits for residents;
 - public parking spaces for residents and train users.
- Develop active transportation infrastructure;
- Revisit the parking overflow situation and the solutions instilled for when the Caisse de Dépôt REM project is in operation;
- Perform feasibility studies for a multi-level Park-and-Ride facility.

Thank you for your attention

Questions?