Variable Speed Limits on Alberta Highways

ITS Canada ACGM - Québec, Québec

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What is the key objective of the study?

To develop a framework for how and when **Alberta Transportation** applies, evaluates and monitors Variable Speed Limit systems on its network.

What is a Variable Speed Limit system?

Traffic engineering application used to manage traffic conditions.

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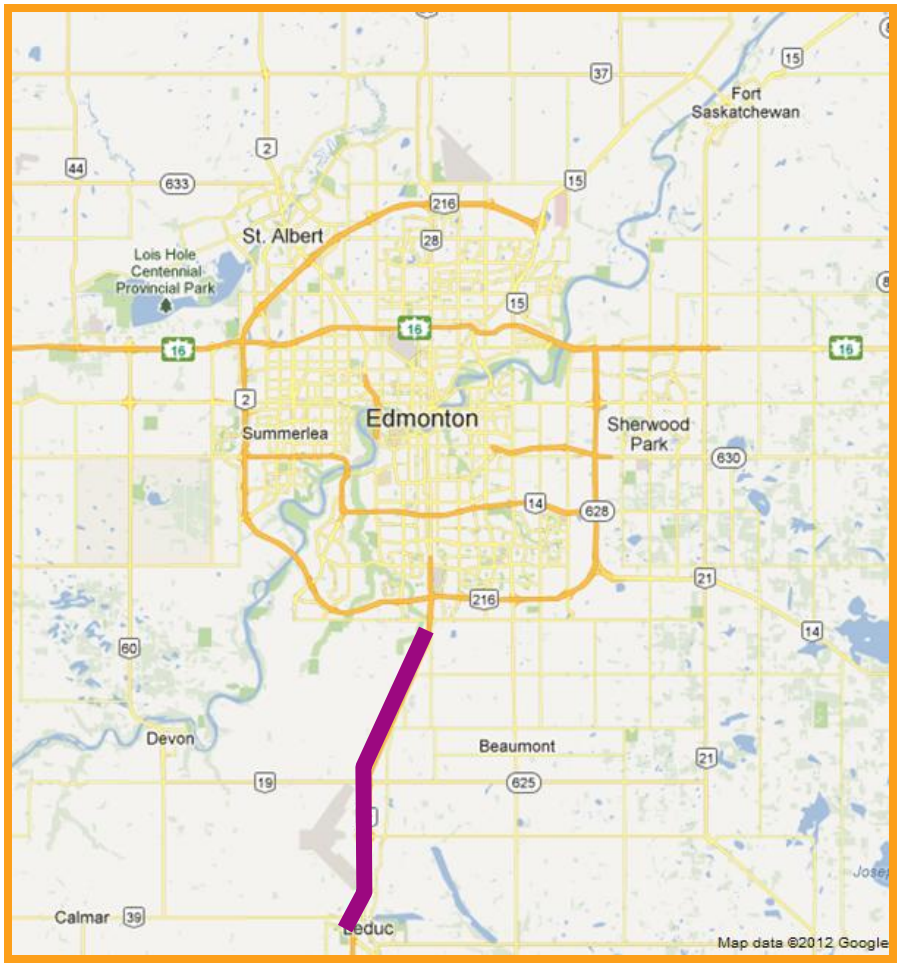
Are there any benefits?

- Increase in capacity
- Reduction in travel time variability
- Reduction in crashes
- Reduction in CO_2 emissions
- Reduction in noise

How did we select a pilot site?

- Highway Type
- Speed Limit
- Collision
- Congestion / Level of Service
- Adverse Weather & Surface Conditions
- Length of Segment
- Monitoring / Maintenance
- ITS Integration

And the selected highway segment is …
Hwy 2:32 Southbound



- Speed = 110km/h
- Collision Rate = 0.48 MVK
- Peak LOS = F
- Surface Conditions = 55% crashes
- Length of Segment = 15km (98% cs crashes)
- Monitoring = Proximity to AT and HMC
- ITS Integration = DMS + RWIS

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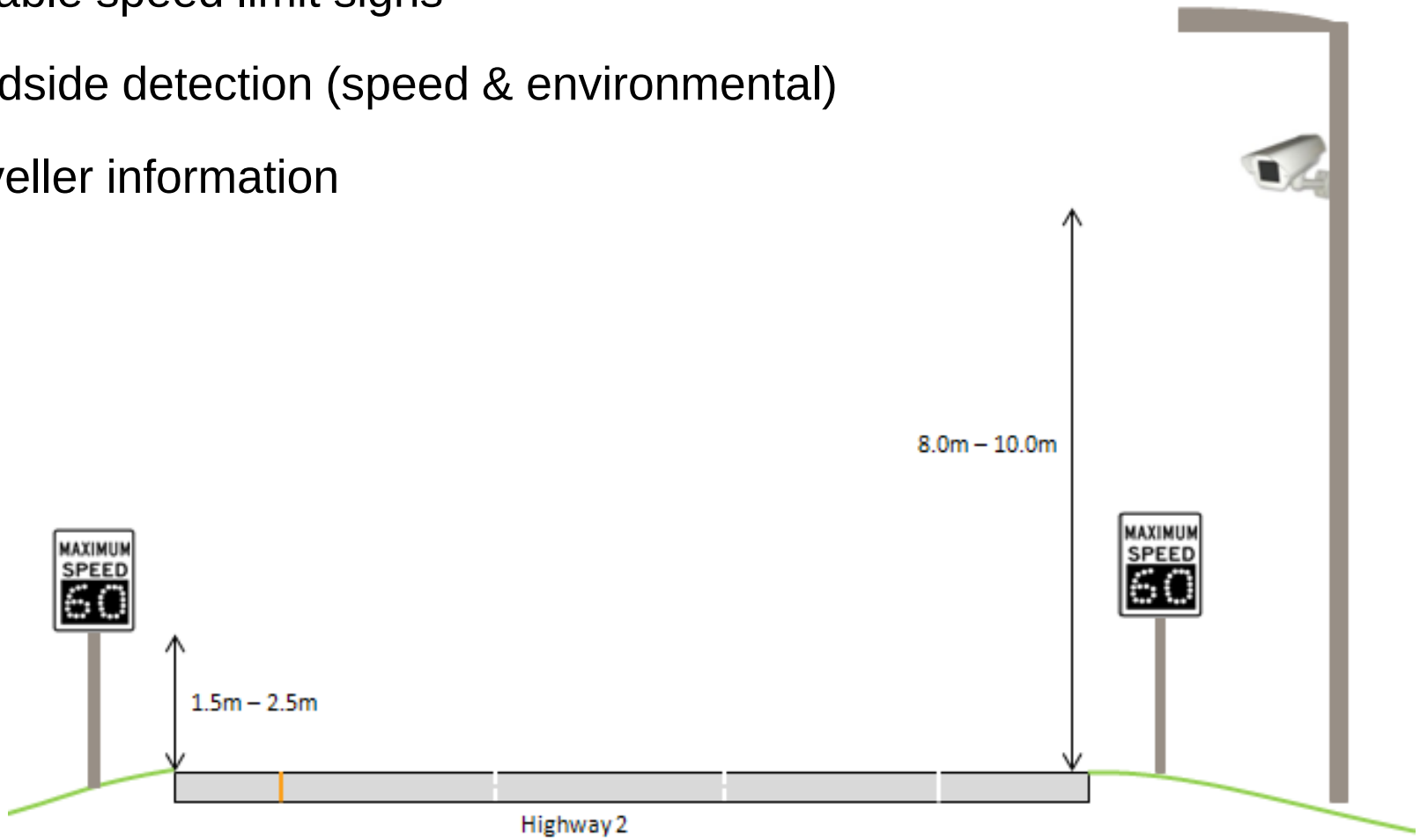
What will the proposed system look like?

- Variable speed limit signs
- Roadside detection (speed & environmental)
- Traveller information



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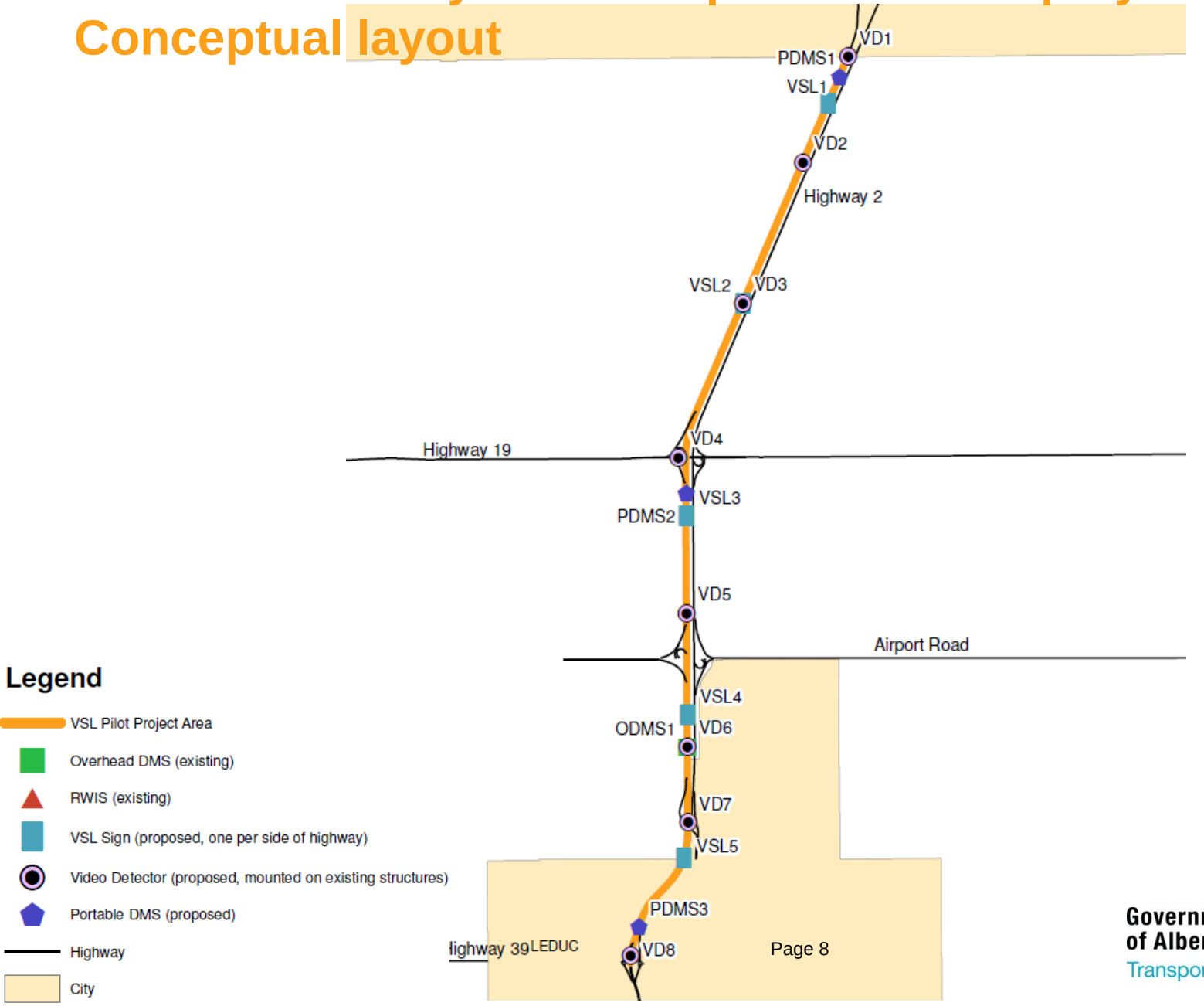
Where will the system components be deployed?
Conceptual layout



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Sounds great … will it work?

Compliance is strongly linked to:

- Strong public education program
- Visible enforcement strategy

How will the pilot system be evaluated?

- Traffic Flow and Congestion
- Safety
- Travel Time Reliability
- Environment
- User Feedback

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Questions?

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