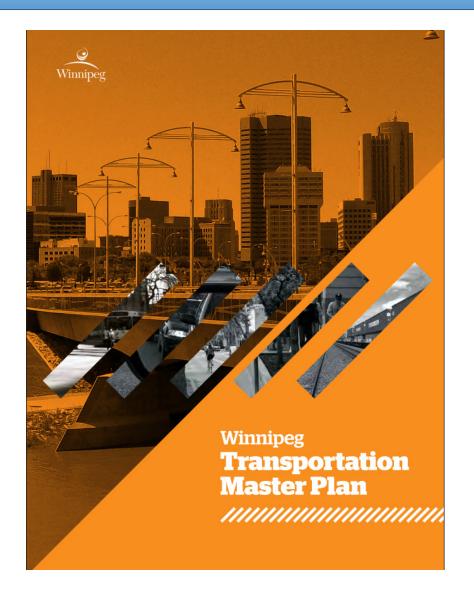
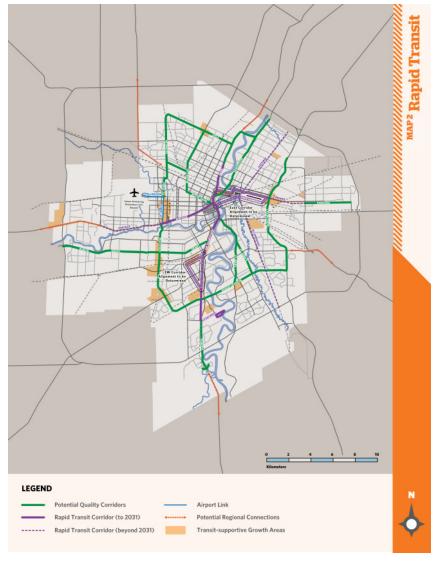






## **Transportation Master Plan**







## **Transportation Master Plan**

EX5-2Summary of Rapid Transit Corridors

			5			
	Rapid Transit Corridor					
	Southwest	West	East	North	Southeast	Northeast
	Graham Mall to	Portage & Main	Graham Mall to	Graham Mall to	Nairn to Bishop	Nairn to
Indicator	U of M	to Century	Lagimodiere	Burrows	Grandin	Perimter Hwy
Length (km)	13.5	4.9	5.8	2.5	7.3	7.3
2031 Peak Point Ridership (peak hour) (1)	1800	2050	1600	3200	250	500
2031 Average residential and employment density within 500 m of corridor (total residents+jobs per ha) (2)	76	151	90	187	23	35
Number of Regional Mixed-Use Centres within 1 km. <sup>(3)</sup>	0	1	1	0	0	0
Number of major redevelopment sites within 1 km <sup>(4)</sup>	5	0	1	1	1	1
Estimated capital cost \$millions (LRT) <sup>(5)</sup>	\$700	\$340	\$405	\$177	-	-
Estimated capital cost \$millions (BRT)	<b>\$275</b> for Stage 2	\$146	\$174	\$76		
Recommendation on Phasing	By 2016	Before 2031	By 2021	Before 2031	Beyond 2031	Beyond 2031

**Source: Winnipeg's Transportation Master Plan (2011)** 



#### **Project Details** – Southwest Transitway Stage 2

- Largest single infrastructure project in Winnipeg's history
- 10 stations
  - 7 transitway stations
  - 2 major on-street stops
  - 1 event day terminal at Investors Group Field stadium
- 7.6 km of runningway
- 1 overpass
- 2 transitway bridges
- 2 railway bridges
- 2 underpasses
- 1 tunnel
- Active transportation path built adjacent to the Transitway
- 2 Park & Ride facilities

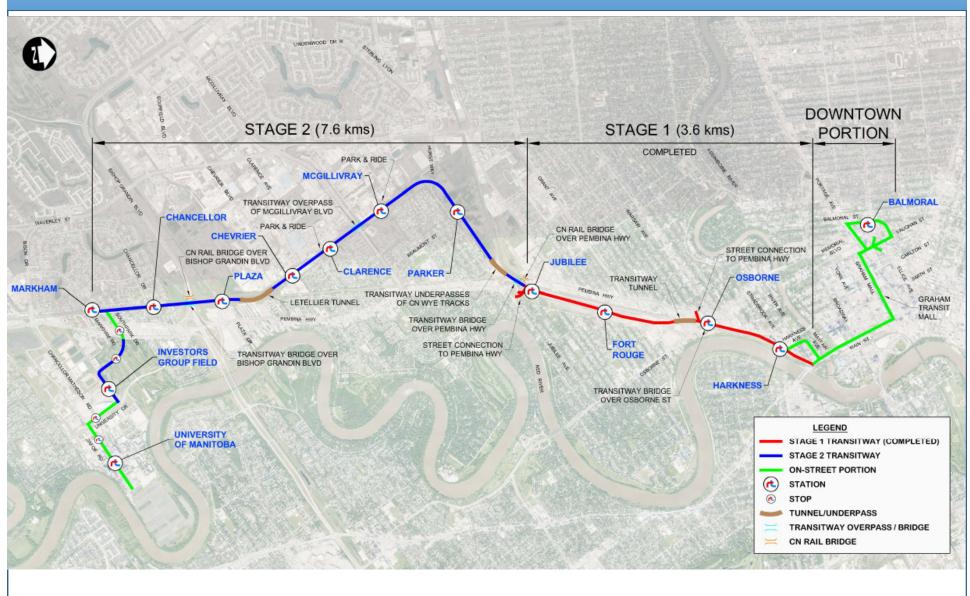


#### **Project Details** – Pembina Highway Underpass

- One of the busiest roads in the city nearly 70,000 vpd through the underpass
- 5 lanes (3 northbound / 2 southbound)
- Passes beneath the Jubilee Overpass and the CN mainline
- Narrow sidewalk on one side of street only



## **Project Context**





## **Project Overview**



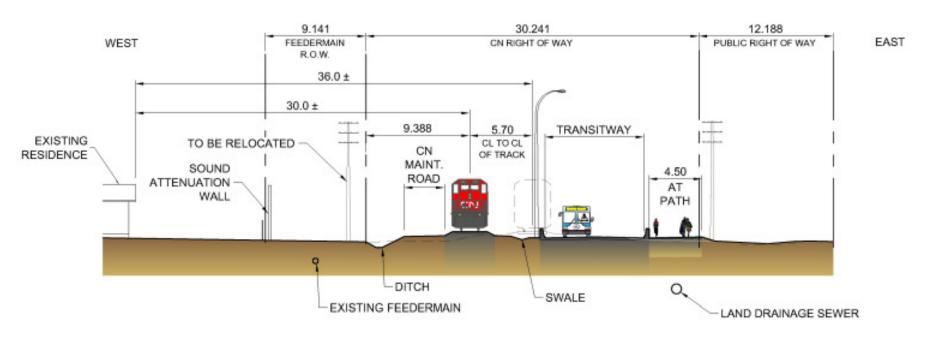


## Pembina & Jubilee





## Along the CN Letellier Sub



POTENTIAL CROSS SECTION NORTH OF MARKHAM LOOKING NORTH



#### **Project Phases**

- Phase I: Functional Design
  - Completed
- Phase II: Business Case and VFM Assessment
  - Completed draft (technically ongoing until Financial Close)
  - Submitted to PPP Canada to support funding request
- Phase III: P3 Procurement
  - Underway
  - RFQ completed, 3 proponents selected
  - RFP/PA issued in April/May 2015
  - RFP Open period until late 2015
  - Award to Project Co in early 2016
- Phase IV: Construction
  - -2016-2019





City of Winnipeg

Private Sector

P3: DBF(O)M

**Director of Transit Project Sponsor Manager of Major Projects** Project Manager **Administrative Fairness** Monitor **Assistant Project Project Transit Planner** Contracts Lawyer **Accountant Engineer Procurement Transit Scheduler Dillon Consulting Functional Design** P3 Procurement Owner's Advocate **P3 Project Co Deloitte** Final Design P3 Business Case Construction Value for Money Assessment *Finance* (Operations) P3 Procurement Maintenance



# **Functional** Design

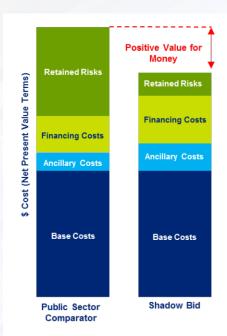
**Table 1:** Generic Design and Cost Estimate

	PRIMARY CHARACTERISTICS	SECONDARY CHARACTERISTICS			
Estimate Classification	Project Definition	Intended Purpose	Methodology	Level of Precision	Preparation Effort % of project costs²
Class A	Design Documents (100% Design)	Compliance with effective project approval (budget)	Measured, priced, full detail quantities	-5% to +10%	5% to 50%
Class B	Design Development (66% Design)	Seeking effective project approval	Mainly measured, priced, detail quantities	-10% to +15%	2.5% to 10%
Class C	Schematic Design (33% Design)	Seeking preliminary project approval	Measured, priced, parameter quantities, where possible	-15% to +20%	1.5% to 5%
Class D	Design	Screening of various alternative solutions	Various	-20% to + 30%	0.5%

Source: PPP Canada's Schematic Design Estimate Guide (2014)



# Value for Money



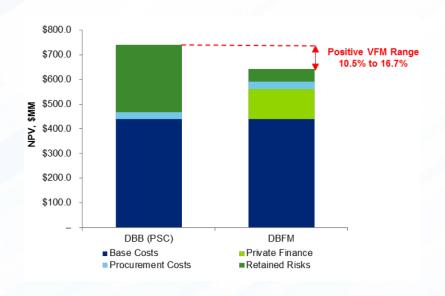


Table 2: VFM Sensitivity to Changes in Interest Rates

Assumed All-In City Borrowing Rate	VFM Savings through P3 transaction	
4.10%	12.0%	
4.35% (Base Case)	13.3%	
4.65%	14.6%	
5.00%	16.5%	

Source: City of Winnipeg Stage 2 Southwest Rapid Transit Corridor Project P3 Business Case Summary



## **Business Case/VFM**

#### **Capital Integration Project (P3):**

•	<b>Southwest Transitway (Stage 2)</b>	\$408 M
•	Pembina Underpass	\$73 M
•	Land Drainage Works	\$40 M
•	<b>Construction Contingency</b>	\$69 M
		4

Total ≈ \$590 M

#### **Funding:**

Total	\$587.6 M
PPP Canada	\$137.6 M
<ul> <li>Province of Manitoba</li> </ul>	\$225.0 M
<ul> <li>City of Winnipeg</li> </ul>	\$225.0 M



## **Procurement Schedule**

Item	Phase	Anticipated Dates	
1	RFQ Open Period	Sept 2014 – Nov 2014	
2	RFQ Evaluation / Shortlist of Prequalified Parties	Nov - Feb 2015	
3	RFP Open Period	Apr – Nov 2015	
4	RFP Evaluation / Selection of Preferred Proponent	Dec - Feb 2016	
5	Financial Close	Mar 2016	
6	Start of Design and Construction	Apr/May 2016	
7	End of Construction (Substantial Performance)	Nov 2019	
8	Start of Revenue Service	April 2020	
9	Maintenance Term	30 Years	



## **Lessons Learned**

No.	Lesson		
1	Bundle projects together from the start		
2	<ul> <li>Dedicate sufficient staff resources</li> <li>Getting as far as procurement is a full project unto itself</li> <li>You need an engineer, lawyer, procurement officer, admin support</li> </ul>		
3	Start talking to railways NOW!		
4	Start talking to major utilities NOW!		
5	Initiate funding discussions with your Province early		
6	Apply for federal funding early		
7	Understand Eligible vs. Ineligible Costs		
8	Do your best to educate the public and politicians about the P3 model		
9	Design – be more detailed than you think you need to be		
10	Allow 1.5 - 2 years for Schematic Design		
11	<ul> <li>Allow at least 2 years for procurement</li> <li>RFQ – develop, issue, short-list</li> <li>RFP/PA – develop, approve, issue, RFI/addenda, CCMs, award</li> </ul>		



# Thank you!

Bjorn Radstrom, P. Eng.

Manager of Service Development Winnipeg Transit bradstrom@winnipeg.ca



Dave Krahn, P. Eng.

Partner
Dillon Consulting Limited
dkrahn@dillon.ca

