

Due Diligence Checklist #20

Russell Hill Subway Train Accident of August 11, 1995

Update re: Recommendations Open as of August 27, 2008

Revised September 4, 2009

<i>Recommendation</i>	<i>Scheduled Completion Date</i>	<i>Actual Completion Date</i>	<i>Responsibility</i>	<i>Budget</i>	<i>Notes</i>
Coroner's Jury Recommendations 7(i, v)					
(7) We strongly recommend the TTC conduct a comprehensive review and re-examination of the existing signal system with comparison to other Transit Authorities in North America. Attention should be focused on a human factors analysis with particular attention to signal interpretation. Action must be taken on the following items where deemed appropriate to improve safety.	Report: S: Oct. 31/96	Report Presentation (Internal): Nov.22/96 (Commission): Dec.10/96	M. Reidak		All of the recommendations below were addressed through the comprehensive Strategic Signal Plan which was presented to the Commission on December 10, 1996.

Budget - Incorporated in existing Operating Budget unless otherwise noted (CP = Capital Program).

S: = Scheduled
R: = Revised Scheduled Date

SR = Safety Report
RT = Review Teams

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7 (i) the use of lunar white aspect in conjunction with red aspect. Red is to be seen as absolute.	Study: Oct 31/96 Work: Dec 31/98 R: Jan 1999	Subsection Closed May 31/99	M. Reidak	Study Budgeted in CP 2.4	Flashing Red Signals completed May 31, 1999.
	S: Dec 31/2001 R: Dec 31/2003 R: Dec 31/2005 R: Mar 31/2002 R: Dec 31/2006 R: Dec 31/2007 R: July 2008 R: Dec 2008 R: June 2009 R: June 2010		K. Watling		<p>Medium Term - A speed control system will eliminate all lunar white aspects. Scheduled for completion December 31, 2006. This will be done in accordance with the Strategic Signal Plan, which was presented on November 22, 1996.</p> <p>Update August 2005 – To be operational on Sheppard Line by 1st Quarter of 2006, and balance of subway by the end of 2007.</p> <p>Update August 2006 – To be operational on Sheppard Line by 1st Quarter of 2007, and balance of subway by mid 2008.</p> <p>Update August 2007 – To be operational on Sheppard Line by 2nd Quarter of 2008, and balance of subway in last Quarter 2008.</p> <p>Update August 2008 – To be operational on Sheppard Line by end of 2008, and balance of subway in 2nd Quarter 2009.</p> <p><u>Update August 2009</u> – Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2nd quarter 2010. Delays are attributable to software changes, track access for testing and system debugging (hardware & software), based on operating experience.</p>

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7 (v) progressive speed control.	Study - Oct. 31/96 Installation - S: Dec. 1/2001 R: Dec. 1/2003 R: Dec. 1/2005 R: Dec 31/2006 R: Dec 31/2007 R: July 2008 R: Dec 2008 R: June 2009 R: June 2010		K. Watling	CP 2.4	A speed control system will be installed. Completion of installation is scheduled for December 31, 2006. Update August 2005 – To be operational on Sheppard Line by 1 st Quarter of 2006, and balance of subway by the end of 2007. Update August 2006 – To be operational on Sheppard Line by 1 st Quarter of 2007, and balance of subway by mid 2008. Update August 2007 – To be operational on Sheppard Line by 2 nd Quarter of 2008, and balance of subway in last Quarter 2008. Update August 2008 – To be operational on Sheppard Line by end of 2008, and balance of subway in 2nd Quarter 2009. <u>Update August 2009</u> – Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2 nd quarter 2010. Delays are attributable to software changes, track access for testing and system debugging (hardware & software), based on operating experience.

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Signals Design Recommendation 16					
(16) Analyze signal design in older section of subway where signals are located within stations and determine if modifications are feasible without affecting system design adversely.	S: Jun. 30/97 R: Dec. 31/01 R: Dec. 31/03 R: Dec. 31/05 R: Dec. 31/06 R: Dec. 31/07 R: July 2008 R: Dec. 2008 R: June 2009 RT R: June 2010		K. Watling	CP 2.4	<p>This is not cost effective in the short term with the existing signal system. This will be addressed when a speed control system is installed. A decision has been made to proceed with a speed control system for completion December 2006.</p> <p>Update August 2005 – To be operational on Sheppard Line by 1st Quarter of 2006, and balance of subway by the end of 2007.</p> <p>Update August 2006 – To be operational on Sheppard Line by 1st Quarter of 2007, and balance of subway by July 2008.</p> <p>Update August 2007 – To be operational on Sheppard Line by 2nd Quarter of 2008, and balance of subway in last Quarter 2008.</p> <p>Update August 2008 – To be operational on Sheppard Line by end of 2008, and balance of subway in 2nd Quarter 2009.</p> <p><u>Update August 2009</u> – Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2nd quarter 2010. Delays are attributable to software changes, track access for testing and system debugging (hardware & software), based on operating experience.</p>

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