# Mistry, Natasha (MTO)

From: Papafotis, George (MTO)

Sent: April-02-18 6:00 PM

To: Patrick Miller

Subject: Re: 250 Scenario

Thank you Patrick!

George Papafotis, P.Eng (416) 949-1634

On Apr 2, 2018, at 2:12 PM, Patrick Miller < <a href="mailto:Patrick.Miller@sdgworld.net">Patrick.Miller@sdgworld.net</a> wrote:

Hi George,

The average speed we have is 195.7 kph.

Cheers, Patrick

#### **Patrick Miller**

Principal Consultant, PhD

#### **Steer Davies Gleave**

direct 1-416-360-0227 switchboard +1 (647) 260 4860

From: Papafotis, George (MTO) [mailto:George.Papafotis@ontario.ca]

Sent: March 29, 2018 11:22 AM

To: Patrick Miller < Patrick. Miller@sdgworld.net>

Subject: RE: 250 Scenario

Sorry, I misguided you. I meant the average speed for HSR in the KI to LON segment.

From: Patrick Miller [mailto:Patrick.Miller@sdgworld.net]

Sent: Thursday, March 29, 2018 11:20 AM

**To:** Papafotis, George (MTO) **Subject:** RE: 250 Scenario

Hi George,

Can you confirm the question? We have not analyzed RER on the KI to London segment at this time.

Cheers, Patrick

## **Patrick Miller**

Principal Consultant, PhD

### **Steer Davies Gleave**

direct 1-416-360-0227 switchboard +1 (647) 260 4860 From: Papafotis, George (MTO) [mailto:George.Papafotis@ontario.ca]

**Sent:** March 29, 2018 11:18 AM

To: Patrick Miller <Patrick.Miller@sdgworld.net>

Subject: RE: 250 Scenario

Hey Patrick,

Do you happen to know what the average operating speed with both RER and HSR is between KI and LON segment based on the model? We calculated approximately 178kph however wanted to confirm.

**From:** Patrick Miller [mailto:Patrick.Miller@sdgworld.net]

Sent: Tuesday, March 20, 2018 3:48 PM

**To:** Papafotis, George (MTO) **Subject:** RE: 250 Scenario

Hi George, No problem – see below for some follow up. Cheers, Patrick

### **Patrick Miller**

**Principal Consultant** 

Steer Davies Gleave direct 1-416-360-0227 switchboard +1 (647) 260 4860

From: Papafotis, George (MTO) [mailto:George.Papafotis@ontario.ca]

Sent: March 19, 2018 9:50 AM

To: Patrick Miller < <a href="mailto:Patrick.Miller@sdgworld.net">Patrick Miller @sdgworld.net</a>>

Subject: RE: 250 Scenario

Sorry, hit send accidently prior to finalizing my email. I only have two questions;

1. Was the spreadsheet you sent used to derive the values in the table below? if so, which one (speed limit or without speed limit)

Our spreadsheet runtime model was used to derive the information for the HSR Study. The runtimes were used to develop an outline timetable, which provided for interoperation of HSR with the future RER services. The runtime model was used in conjunction with the interoperability requirements and the track geometry restrictions to identify the maximum speeds station to station. The average speed is based on the timetabled time not the runtime from the runtime model. (So the speed limited or full speed runtimes, do not effect the values in the table, they remain the same, i.e. the runtime provide about 5 minutes of recovery/ operability time, even when the train speed was limited, it is assumed to be capable of operating up to 250 kph)

2. What is the nature of the speed limits? Is it a result of interoperations? The speed limits as above are governed by interoperability between Union Station and west of Brampton, within this there are also track geometry limits. Between the west of Brampton and Windsor, there are a number of track geometry limits that reduce the speeds in places, but the train still runs in places at 250kph Thanks, George.

<image001.jpg>

----Original Message-----

From: Papafotis, George (MTO)

Sent: Monday, March 19, 2018 9:44 AM

To: 'Patrick Miller'

Subject: RE: 250 Scenario

Thanks Patrick, this is perfect.

----Original Message-----

From: Patrick Miller [mailto:Patrick.Miller@sdgworld.net]

Sent: Friday, March 16, 2018 12:56 PM

To: Papafotis, George (MTO) Subject: RE: 250 Scenario

Hi George,

I have attached some speed/time and speed/distance graphs to this email. They include a 250kph run with and without speed limits. Is this what you were looking for?

Please let me know if we can provide anything else.

**Patrick** 

Patrick Miller
Principal Consultant

direct 1-416-360-0227 mobile +1 647 381 9215 switchboard +1 (647) 260 4860 -----Original Message-----

From: Papafotis, George (MTO) [mailto:George.Papafotis@ontario.ca]

Sent: March 12, 2018 5:16 PM

To: Patrick Miller <Patrick.Miller@sdgworld.net>

Subject: Re: 250 Scenario

Yup no problems

George Papafotis, P.Eng (416) 949-1634

On Mar 12, 2018, at 5:11 PM, Patrick Miller <a href="mailto:Patrick.Miller@sdgworld.net">Patrick.Miller@sdgworld.net</a> wrote:

Hi George,

Thanks for the email - we had multiple versions of the model and analysis so it may take some time to assemble this information. If I get it to you by Wednesday is that soon enough?

Cheers, Patrick

Patrick Miller Principal Consultant, PhD

Steer Davies Gleave direct 1-416-360-0227 switchboard +1 (647) 260 4860

From: Papafotis, George (MTO) [mailto:George.Papafotis@ontario.ca]

Sent: 12 March 2018 15:47

To: Patrick Miller <Patrick.Miller@sdgworld.net<mailto:Patrick.Miller@sdgworld.net>>

Subject: 250 Scenario

Hi Patrick

Thanks for offering to look into this for us. As discussed, can you please send me the speed/time graph for the 250kph scenario (there were ones included in the appendices for the 200kph and 300kph scenarios as part of the June business case), as well as any other information that was developed showing the corridor travel time performance (runtime, achievable top speed, average top speed) on a segment by segment section (snippet below from a draft technical note for your reference). I need to get an understanding of the overall speed profile for the proposed 250 route.

<image001.jpg>

Thank you,

George Papafotis, P.Eng | Senior Advisor - Rail Engineer High Speed Rail Office, Ministry of Transportation

T: 416-212-3716 | C: 416-949-1634

900 Bay St., Macdonald Block, Room M1-21 Toronto, ON, M7A 2A2 <image003.png>

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