Ottawa Light Rail Commission

Thomas Prendergast on Wednesday, April 27, 2022



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5	OTTAWA LIGHT RAIL COMMISSION
6	STV - Thomas Prendergast
7	APRIL 27th, 2022
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13	Held via Zoom Videoconferencing, with all
14	participants attending remotely, on the 27th day
15	of April, 2022, 2:00 p.m. to 5:09 p.m.
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    COMMISSION COUNSEL:
2
   Christine Mainville, Co-Lead Counsel Member
3
   Mark Coombes, Litigation Counsel Member
4
5
    PARTICIPANTS:
6
    Thomas Prendergast, STV
7
   Michael O'Brien, Eileen Church Carson: Tyr LLP
8
9
10
    ALSO PRESENT:
11
   Helen Martineau, Stenographer/Transcriptionist,
12
    Elizabeth Deasy, Virtual Technician
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1 Upon commencing at 2:00 p.m. 2. THOMAS PRENDERGAST: AFFIRMED. 3 CHRISTINE MAINVILLE: So the purpose 4 of today's interview is to obtain your evidence, 5 under oath or solemn declaration, for use at the 6 Commission's public hearings. This will be a 7 collaborative interview, such that my cocounsel, 8 Mr. Coombes may intervene to ask certain 9 questions. 10 If time permits, your counsel will 11 also -- may also ask follow-up questions at the 12 end of the interview. 13 The interview is being transcribed and 14 the Commission intends to enter the transcript 15 into evidence at the Commission's public 16 hearings, either at the hearings themselves or 17 by way of procedural order before the hearings 18 commence. The transcript will be posted to the 19 Commission's public website along with any 20 corrections made to it after it's entered into 21 evidence. 22 The transcript, along with any 23 corrections later made to it, will be shared 24 with the Commission's participants and their

counsel on a confidential basis before being

2.

entered into evidence.

You will be given the opportunity to review your transcript and correct any typos or other errors before the transcript is shared with the participants or entered into evidence. Any non-typographical corrections made will be appended to the transcript.

And finally, pursuant to section 33(6) of the Public Inquiries Act 2009, a witness at an inquiry shall be deemed to have objected to answer any question asked of him upon the ground that his answer may tend to incriminate the witness or may tend to establish his liability to civil proceedings at the instance of the Crown or of any person. And no answer given by a witness at an inquiry shall be used or be receivable as evidence against him in any trial or proceedings against him thereafter taking place, other than a prosecution for perjury in giving such evidence.

And as required by section 33(7) of that Act, you are advised that you have the right to object to answer any question under section 5 of the Canada Evidence Act.

THOMAS PRENDERGAST: Thank you.

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1
              CHRISTINE MAINVILLE: And so if we can
2
   begin simply by having you explain your role in
3
   Stage 1 of Ottawa's LRT project.
4
              THOMAS PRENDERGAST: My role was to
5
   serve as a member and leader of the independent
6
   assessment team that OC Transpo convened as they
7
   were approaching completion of the construction
8
   of the project, moving toward revenue service
9
   availability.
10
              CHRISTINE MAINVILLE: And who did you
11
   work for at that time?
12
              THOMAS PRENDERGAST: I worked for STV
13
   Incorporated.
14
              CHRISTINE MAINVILLE: And this is a
15
   consulting company?
16
              THOMAS PRENDERGAST:
                                  Yes.
17
   Engineering, construction management, consulting
18
   company, headquartered in the United States.
19
              CHRISTINE MAINVILLE:
                                     Is that where
20
   you are located, in the U.S?
21
              THOMAS PRENDERGAST: Yes, in the New
22
   York office.
23
              CHRISTINE MAINVILLE: And what was the
24
   role of the independent assessment team?
25
              THOMAS PRENDERGAST:
                                    In general terms,
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1 it was a team of professionals with discipline, expertise and project experience in the delivery 3 of rail transportation systems for public sector 4 clients. 5 And their role was to assist 6 OC Transpo in terms of the actions being taken 7 by the constructor, RTG, and the to-be 8 maintainer, RTM, to deliver on the work they 9 contracted with OC Transpo, working toward 10 revenue service start up. 11 CHRISTINE MAINVILLE: And was STV 12 involved beyond this independent assessment team 13 in the project? 14 THOMAS PRENDERGAST: Yes. 15 CHRISTINE MAINVILLE: What were its 16 other roles. 17 THOMAS PRENDERGAST: STV was a joint 18 venture partner with AECOM, Jacobs, we call it 19 little Jacobs, a tunneling niche firm in the 20 United States, and I forget the first name, a 21 double named Canadian firm that was part of a 22 joint venture program management team, 23 supporting OC Transpo. 24 CHRISTINE MAINVILLE: Was that 25 throughout the project?

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1
              THOMAS PRENDERGAST: No.
                                         It was near
2
   the, you know, as -- the program management
3
   contract was throughout the project.
                                           The IAT
4
   was very late in the development, but the
5
   program management contract was for, you know,
6
   the entire effort at Stage 1.
7
              CHRISTINE MAINVILLE: So you were not
8
   involved in that. However, you only became
9
   involved in the IAT towards the end --
10
              THOMAS PRENDERGAST: That's correct.
11
              CHRISTINE MAINVILLE: And when exactly
12
   did you become involved?
13
              THOMAS PRENDERGAST: It was April or
14
   May of 2017, I believe.
15
              CHRISTINE MAINVILLE: And did your
16
   involvement continue following revenue service?
17
              THOMAS PRENDERGAST:
                                    Yes.
                                          But I
18
   believe a short period of the time.
                                          Much
19
   shorter than what preceded revenue service.
2.0
              CHRISTINE MAINVILLE: So did your
21
   involvement end in 2019 or 2020?
22
              THOMAS PRENDERGAST: I don't recall.
23
   It was toward the end of 2019 or early 2020, but
24
   I don't recall.
25
              CHRISTINE MAINVILLE:
                                     Were you
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```
1
   embedded with the City at all in terms of
2
   working directly in Ottawa on site with the
3
   City?
4
              THOMAS PRENDERGAST:
                                    No.
                                         The -- T
5
   would come up when the IAT was on site
6
   performing some of its duties. So it was at
7
   various times throughout the time from when the
8
   IAT was convened through to its completion of
9
   work, we would come up for a week to 10 days at
10
   a time in response to an ask that the client
11
   would make of us.
12
              CHRISTINE MAINVILLE: Was there any
13
   kind of division of responsibilities or
14
   different roles within STV's team as it related
15
   to the IAT work? So because I take it -- maybe
16
   I should ask if there were others from STV also
17
   at --
18
              THOMAS PRENDERGAST:
                                    Yes.
19
              CHRISTINE MAINVILLE: Was your role
20
   different from any of the other people involved?
21
                                    Well, I was the
              THOMAS PRENDERGAST:
22
   leader of the IAT team. So AECOM, STV, early on
23
   Jacobs, but then they weren't involved because
24
   there wasn't a need for them to be involved.
25
   But throughout the majority of the IAT's time,
```

1	which was made up of employee representatives
2	from AECOM and STV. I was an employee of STV at
3	the time.
4	CHRISTINE MAINVILLE: Got it. And you
5	were the lead for everybody?
6	THOMAS PRENDERGAST: Yes.
7	CHRISTINE MAINVILLE: Was the City
8	represented on the IAT team?
9	THOMAS PRENDERGAST: No.
10	CHRISTINE MAINVILLE: And who did the
11	team report to?
12	THOMAS PRENDERGAST: Well, when you
13	say the "City", does that include OC Transpo?
14	CHRISTINE MAINVILLE: Yes, sorry.
15	THOMAS PRENDERGAST: At times I
16	believe there were representatives from OC
17	Transpo that would provide technical support to
18	the IAT team.
19	CHRISTINE MAINVILLE: Who did the IAT
20	team report to at OC Transpo?
21	THOMAS PRENDERGAST: John Manconi.
22	CHRISTINE MAINVILLE: And do I
23	understand that part of the IAT's role was to
24	provide advice with respect to operations and
25	maintenance?

1	THOMAS PRENDERGAST: Yes.
2	CHRISTINE MAINVILLE: So it wasn't
3	simply about construction and the system being
4	ready from a building perspective. The team was
5	looking at preparedness of the system at all
6	levels? Is that how you would describe it?
7	THOMAS PRENDERGAST: Yes. And that
8	was why I made the distinction early on between
9	RTG and RTM.
10	CHRISTINE MAINVILLE: And you now work
11	for AECOM, correct?
12	THOMAS PRENDERGAST: That's correct.
13	CHRISTINE MAINVILLE: And have you had
14	any involvement, since you've been there, with
15	Ottawa's LRT?
16	THOMAS PRENDERGAST: I may have come
17	up for one meeting, but it was related more to
18	Stage 2. It was related, I think, entirely to
19	Stage 2.
20	CHRISTINE MAINVILLE: And maybe we can
21	bring up your resume and just speak briefly
22	about your background and experience?
23	THOMAS PRENDERGAST: Okay.
24	CHRISTINE MAINVILLE: You recognize
25	this, first of all, as your resume?

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1
              THOMAS PRENDERGAST: Yes. This is the
2
   resume that AECOM has for me as it relates to
3
   when we do business with clients, a summary of
4
   my work experience and expertise.
5
              CHRISTINE MAINVILLE: And you have not
6
   just experience, but you've been educated in
7
   engineering and urban transportation systems?
8
              THOMAS PRENDERGAST:
                                    Yes.
                                          T have a
9
   degree in systems engineering with a
10
   specialization in urban transportation systems.
11
              CHRISTINE MAINVILLE:
                                    So you are a
12
   certified engineer?
13
              THOMAS PRENDERGAST: I'm not a
14
   certified engineer. I'm a graduate engineer.
15
   So a certification, like a professional
16
   engineering licence, I do not have.
17
              CHRISTINE MAINVILLE: And we see under
18
   STV that you served in respect of various --
19
   several major transportation projects as the
20
   principal client relationship manager?
21
              THOMAS PRENDERGAST:
                                    Yes.
22
              CHRISTINE MAINVILLE: Would that
23
   include the City of Ottawa in this case?
24
              THOMAS PRENDERGAST:
                                    Yes.
25
              CHRISTINE MAINVILLE: And I just want
```

1 to ask you about at the top, you indicate your 2 experienced with highly visible and politically 3 sensitive public arenas. 4 And I would just ask you, would you 5 consider this project one of these --6 THOMAS PRENDERGAST: 7 CHRISTINE MAINVILLE: And I take it 8 that's not necessarily uncommon in projects of 9 this nature? 10 THOMAS PRENDERGAST: No, it's not 11 uncommon. You're correct. 12 CHRISTINE MAINVILLE: And would you 13 consider, however, in this case the political 14 sensitivities were heightened? Did you get that 15 sense? 16 THOMAS PRENDERGAST: Well, that's a 17 relative term. So if you take a look at my 18 resume, I was the CEO of New York City Transit, 19 the CEO of Long Island Railroad, the two 20 largest -- the largest transit and the largest 21 commuter rail system in North America and the 22 Chairman of the MTA and CEO, dual role. So all 23 projects of this nature have that political 24 sensitivity. They're -- and I don't think -- I would not distinguish one as being more 25

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1
   pronounced from the other.
2.
              CHRISTINE MAINVILLE: And in terms of
3
   public attention to the project and public level
4
   of outspokenness perhaps, was this any different
5
   than others?
6
              THOMAS PRENDERGAST:
                                    The only
7
   difference is it was the construction of a new
8
   system that didn't exist before. I had been
9
   involved in extensions of existing systems, and
10
   so that's a distinction between the two.
11
   it's a brand new system where there is no rail,
12
   highly visible. The highly visible, they're all
13
   the same. But the brand new system
14
   distinguishes it from, like, my other
15
   experiences, as CEOs.
16
              CHRISTINE MAINVILLE: So had you
17
   otherwise been involved in new systems or brand
18
   new projects like that?
19
              THOMAS PRENDERGAST: The majority of
20
   my time was spent in running existing systems,
21
   legacy systems.
22
              CHRISTINE MAINVILLE: We'll file this
23
   as the first exhibit and we can take it down.
24
              EXHIBIT NO. 1: Curriculum vitae of
25
              Thomas Prendergast:
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1 CHRISTINE MAINVILLE: So you mentioned 2 you reported to John Manconi. Who else at the 3 City would you mostly interact with in terms of 4 being your counterparts? 5 THOMAS PRENDERGAST: Jocelyne Begin 6 would be one. I'm trying to remember who had 7 the role that Michael Morgan has now. He was 8 the lead of the project for OC Transpo, Steve 9 Cripps. Steve Cripps. 10 And then members of their team, as I 11 responded earlier, when we needed to interface 12 with people that could provide technical 13 information to them. 14 So -- but the primary people would be, 15 on Stage 1, would be John Manconi, Jocelyne 16 Begin, first Steve Cripps and then Michael 17 Morgan. 18 CHRISTINE MAINVILLE: And did you 19 interact a lot with Tory Charter? 2.0 THOMAS PRENDERGAST: Yes. 21 CHRISTINE MAINVILLE: And the Mayor? 22 THOMAS PRENDERGAST: It was nowhere 23 near the same level of involvement with the 24 Mayor. 25 CHRISTINE MAINVILLE: And aside from

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1
   the advisors that you mentioned as being part of
2
   IAT, would you have many interactions with other
3
   advisors or consultants for the City?
4
              THOMAS PRENDERGAST: Specifically from
5
   the set of consultants for the City?
6
              CHRISTINE MAINVILLE: City, which I
7
   take it as including OC Transpo.
8
              THOMAS PRENDERGAST: No. No other --
9
   I can't recall any other contacts with any other
10
   consultants, to be honest with you. It was the
11
   majority, if not solely OC Transpo staff.
12
              CHRISTINE MAINVILLE: For instance,
13
   are you aware of one called Boxfish?
                                          And, in
14
   particular, a consultant called Brian Guest?
15
              THOMAS PRENDERGAST: I know the name
16
   and I may have met with him, but I can't recall
17
   specifically. Seriously, I can't.
18
              CHRISTINE MAINVILLE: And how would
19
   you characterize the City's experience for a
20
   project like this? How -- did you feel that it
21
   had the requisite experience? And to what
22
   extent was that supplemented by people like
23
   yourself?
24
              THOMAS PRENDERGAST: I can't make a
25
   judgment on the requisite experience.
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1
   offer that not only with respect to the IAT and
2
   the reachout and the ask of people and firms who
3
   could provide expertise to raise issues, provide
4
   answers to issues, et cetera, they were doing
5
   the right things. So -- and they were reaching
6
          If a resource was needed, we either
7
   provided it or the City got it. When I say
8
    "City", excuse me, OC Transpo would get that
9
   resource.
10
              CHRISTINE MAINVILLE: So you didn't
11
   perceive any gaps in terms of what the City
12
   required in terms of experience and expertise?
13
                                   No, I did not.
              THOMAS PRENDERGAST:
14
              CHRISTINE MAINVILLE: And did you have
15
   the information you needed to fully advise the
16
   City and perform your role?
17
              THOMAS PRENDERGAST:
18
              CHRISTINE MAINVILLE: And did you get
19
   the sense that OC Transpo or the City had the
20
   information it needed as well?
21
              THOMAS PRENDERGAST:
                                   Yes, because we
22
   would go to OC Transpo and then we would get
23
   that information so, yes.
24
              CHRISTINE MAINVILLE: And what was the
25
   level of receptiveness of -- by the City, or OC
```

1 Transpo, of STV's advice or of the IAT team's 2 advice? 3 THOMAS PRENDERGAST: Very high level 4 of receptivity. 5 CHRISTINE MAINVILLE: Were there 6 instances where the City did not follow the 7 advice provided by the IAT? 8 THOMAS PRENDERGAST: I want to make 9 sure I answer that question correctly. So we 10 never provided prescriptive advice. We provided 11 advice based upon knowledge of -- based on that 12 experience and expertise set that we had, 13 knowledge of similar projects, and 14 identification of issues that needed to be 15 addressed. So there was no prescriptive like, 16 you should do this. 17 So it's hard for me to answer the 18 question. It was a high level of receptivity on 19 the part of the client of listening, making sure 20 they understood the significance of the issue, 21 and why the IAT team felt it needed to be 22 addressed. 23 CHRISTINE MAINVILLE: Were there 24 instances where the City faced constraints, like 25 internal or external constraints, that didn't

```
1
   allow it to fully implement the advice being
2
   provided by IAT?
3
              THOMAS PRENDERGAST: I can't answer
4
   that question in a complete way. The only thing
5
   I can say is that the -- there was a contract
6
   mechanism between OC Transpo and RTG and RTM
7
   that was the guiding document as to how that
8
   relationship went forward.
9
              So -- and I don't even know if that's
10
   a constraint, but everything was -- because
11
   that's the starting point. But, no, I don't
12
   know of any constraints.
13
              CHRISTINE MAINVILLE: For instance,
14
   any financial constraints or resourcing or
15
   schedule pressures and the like that would have
16
   them say, you may be right on this and we would
17
   love to do that, but we can't?
18
              THOMAS PRENDERGAST: Never. Seriously
19
   that never came up.
20
              CHRISTINE MAINVILLE: And did you or
21
   others on your team have any areas of concern in
22
   terms of actions the City took that you deemed
23
   not advisable?
24
              THOMAS PRENDERGAST:
                                    No.
25
              CHRISTINE MAINVILLE:
                                     One of the
```

1 roles, as I understand it, of the IAT was to give the City a sense of the schedule for the 3 project and how it was progressing and timelines, is that right? 4 5 THOMAS PRENDERGAST: Yes. 6 CHRISTINE MAINVILLE: And what was 7 your understanding of the reason for that? 8 THOMAS PRENDERGAST: Reason for what? 9 I'm sorry. 10 CHRISTINE MAINVILLE: For needing --11 for the City wanting that from the IAT team? 12 THOMAS PRENDERGAST: Very early on, 13 first or second meeting, the IAT was assembled 14 in performing its job. We were trying to get --15 ascertain to what extent the project schedule 16 was impacted by the tunnel collapse. 17 So we were asking questions with 18 respect to, how was the contractor performing 19 with respect to its own schedule? And the 20 contractor wasn't really willing to share that 21 with us. 22 So we had a dialogue with the client, 23 with OC Transpo, that, for whatever reason, the 24 contractor wasn't sharing that, with either OC 25 Transpo or us, there was a need for OC Transpo

IAT team?

Yes.

1 to have granularity, greater detail as to where 2 the project stood from a schedule standpoint. 3 So we basically said we could take our 4 own data, talking to people, the IAT, working in 5 concert with OC Transpo staff, and create its own assessment as to how well the project was 6 7 proceeding against whatever published materials 8 the contractor provided OC Transpo. And OC 9 Transpo agreed with our doing that. 10 CHRISTINE MAINVILLE: Was that 11 unusual, based on your experience in various 12 other projects? Was that concerning --13 particularly concerning to you or unusual that 14 you -- that the City would not be receiving the 15 information it was requesting on the schedule at 16 that point in time? 17 THOMAS PRENDERGAST: I think you 18 asked -- I think you asked, I'm not trying to 19 play games, I think you asked a couple of 20 questions there. Was it concerning? Yes. Ι 21 think you then added some language about, you 22 know, had seen it before? So the answer to the 23 first question, was it concerning? Yes. 24 Had we seen it before in terms of the 25

And even in a design-bid-build

procurement, which this was not, it was a design, build procurement, there was reluctance on the part of the contractor to show those types of information.

But those contract mechanisms usually

But those contract mechanisms usually have a requirement that they should share that information. But design builds are, by their very nature, different and more of the risk is transferred to the contractor and less detailed oversight, question-asking from a behaviour standpoint as to what you would find in a design-bid-build.

So the answer to the second question is, yes, concern, had seen it before, but then revert to the first one, which is, you need greater granularity in terms of where the project sits in relation to its schedule.

Projects are all about scope, schedule, budget. Those are basic tenets of the project.

CHRISTINE MAINVILLE: So do I understand that this was not a scenario where the City could enforce a requirement or insist on that being provided, could only request it? Or was there a clear requirement that this

needed to be provided, and they were just not complying with it?

THOMAS PRENDERGAST: I recall a conversation along the lines of what the PA called for and didn't call for, but it got to a point where OC Transpo, rather than spend a lot of time dwelling on that, let's figure out how we can develop a schedule based on the inputs I talked about, to give them that granularity they needed.

CHRISTINE MAINVILLE: And you said that there can be some reluctancy or, I don't want to put words in your mouth, but hesitation in providing this type of information in some projects. What is it that makes the contractor reluctant? If you're able to speak to that.

THOMAS PRENDERGAST: One of the underlying reasons for going with design, build is to let the contractor do what he or she needs to do to deliver the project. Theoretically, remove as much bureaucratic red tape as possible and allow them to do their job.

Traditionally, the former mechanism, design-bid-build, you had more bureaucracy, and I don't mean that in a negative, just the checks

1 and balances and asks for information. So once 2 you cross into the design, build framework, the 3 contractors are reluctant to let it slip back to 4 a design-bid-build. 5 So in answer to your question, was 6 that -- I don't know the exact word you used, 7 but was that a behaviour on the part of the 8 contractor that had been seen before? The 9 answer is, yes, to varying degrees. 10 CHRISTINE MAINVILLE: You talked about 11 the tunnel collapse and that impacting the 12 schedule. Are you able to -- and of course the 13 collapse occurred before your involvement, 14 correct? 15 THOMAS PRENDERGAST: Yes. 16 CHRISTINE MAINVILLE: By the time you 17 get there, are you able to speak to the impact 18 that that did have beyond scheduling, for 19 instance, on the relationships or on the project 20 more broadly? 21 THOMAS PRENDERGAST: Can't comment on 22 the relationships. All that I recall is a 23 clear, almost unanimous feeling on the part of 24 the IAT that the progress of the project kind of

got in a suspended animation mode while they

```
1
   were dealing with tunnel collapse issue.
                                               Its
2
   cause, how they're going to come out of it,
3
   things of that nature. That's as far as it got.
4
              CHRISTINE MAINVILLE: Was it perceived
5
   as a momentous event for a project like this in
6
   terms of being something that would materially
7
   impact --
8
              THOMAS PRENDERGAST: Yes. That's as
9
   far as it got.
10
              CHRISTINE MAINVILLE: This may be --
11
   well, first of all, were you ever asked to
12
   provide any advice on how to address this event
13
   from the City's perspective in terms of the
14
   request for a relief event or delay event or
15
   anything like that?
16
              THOMAS PRENDERGAST: In relation to
17
   the tunnel collapse?
18
              CHRISTINE MAINVILLE:
                                     Yes.
19
              THOMAS PRENDERGAST:
                                   No. No, we were
20
   not asked.
21
                                    Okay. Are you
              CHRISTINE MAINVILLE:
22
   able to speak to the relationship generally? So
23
   leaving aside the tunnel collapse, what you
   perceived in terms of the level of collaboration
24
25
   or partnership as between the City and the
```

2.

project company?

THOMAS PRENDERGAST: Could you repeat the question, because you're talking about an assessment of a relationship. I just want to make sure I understand correctly.

CHRISTINE MAINVILLE: I'm wondering how you would describe or how you perceive the relationship between the City and -- as the owner and the project company? And you may have seen it evolve over time, but if you could generally speak to your perception of it.

THOMAS PRENDERGAST: The relationship, at a very high level, was fine. There was no acrimony. There wasn't, you know, disagreements that spilled over to any of the meetings we had. There was an agreement on making sure that we could get aligned on priorities because John Manconi was very clear that while we had a task to do and it was important, we did not want to unduly impact the delivery of the project.

So I wouldn't characterize -- it was not acrimonious. It was probably cordial, or maybe just a step below, but very professional in the exchange of the information, with the exception of the schedule.

1 CHRISTINE MAINVILLE: And were -- did 2 in terms of collaboration, and aside vou see, 3 from the schedule, any lack of partnership? 4 know, in terms of the approach being taken, this 5 is a P3 contract, did you think there was 6 something lacking on the partnership front? 7 THOMAS PRENDERGAST: No. No. 8 CHRISTINE MAINVILLE: Are you aware or 9 were you aware of the City underwriting RTG's 10 debt? 11 THOMAS PRENDERGAST: I was aware and 12 the team was aware that there were a separate 13 set of discussions between the City, OC Transpo, 14 and RTG in a general sense, but the details of 15 which I don't recall a lot of information or 16 knowledge on that. That's my recollection. 17 CHRISTINE MAINVILLE: Did you -- would 18 you have perceived any change in terms of the 19 involvement of the senior creditors' technical 20 advisors? 21 No, because we THOMAS PRENDERGAST: 22 didn't interact with them. If there was any 23 interaction with them, it was very, very late. 24 It wasn't the full IAT, but, no. 25 CHRISTINE MAINVILLE: And what was

1 your level of interaction with RTG or its subcontractors, OLRTC, or others? 3 THOMAS PRENDERGAST: What was the 4 level of interaction? 5 CHRISTINE MAINVILLE: Yes. 6 THOMAS PRENDERGAST: As we would be 7 doing these reviews on a periodic basis, don't 8 hold me to the frequency, but like generally 9 ever two, three months, we'd be there for 10 to 10 12 days at a time. So we would identify the 11 list of areas that we would want to meet with 12 them on and get alignment on that. 13 For the most part, they were 14 agreeable. They didn't say no, we won't meet 15 with you on it. 16 And then it was the understanding of 17 what resources they needed to bring to the 18 table, what specific individuals, so that they 19 could address the issues we had and have an open 20 discussion. 21 And our expectation -- their 22 expectation of us was that we didn't want to 23 unduly impact the delivery of the project, 24 because you may want to be talking to someone 25 who is critical to a construction item in the

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   field, or some activity taking place.
2.
              So that was the nature of the
3
   interaction and the involvement. And it was,
4
   you know, we always found a way to be able to
5
   meet, and everybody's priorities being met.
6
              CHRISTINE MAINVILLE: Did you have any
7
   awareness of how systems integration was
8
   performed on this project by RTG or OLRTC?
9
              THOMAS PRENDERGAST: Yes. The IAT did
10
   and I did, yes.
11
              CHRISTINE MAINVILLE: Can you speak to
12
   that?
          What was your perception of that?
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              THOMAS PRENDERGAST:
                                  Well, to begin
14
   with, I'm a systems engineer, so it's my subject
15
   area of expertise.
                        In terms of experience in
16
   delivery of complex technological systems, it's
17
   been an area I spent a lot of time in. So --
18
   and just about everybody on the IAT team
19
   understood the importance of systems
20
   integration, testing and commissioning.
21
              So that was -- and to be frank, that
22
   would be the case of any project of this type
   and this magnitude. It would be one of the
23
24
   first areas you look to. So the overall answer
25
   to that question is, yes.
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2.0

CHRISTINE MAINVILLE: And so did you assess that -- and you can speak to when you arrived or over time, were there gaps there that you saw?

THOMAS PRENDERGAST: Well, the most pronounced one was once we were able to, with better granularity, assess where they were based on their own schedule, based on this shadow schedule, maybe we shouldn't call it shadow, but a parallel schedule that we set up, what we realized was is that there was this, I talked about it a minute ago, this suspended animation, the suspended animation because they were dealing with the tunnel collapse issue, but the end date of revenue service availability was not moving.

So somewhere in the schedule something is happening, either something's being eliminated or something's being compressed.

And we didn't see any elimination. We saw possibly some, I don't want to say short stopping, but definitely compression. And early on, we saw compression that we just knew could not be sustained given the level of testing that needed to be done, integration testing. You

know, first of all, component testing, assembly testing, integration testing, and commissioning of service. And the difference between the two is commission means it's okay for service, you're blessing it.

So very early on, we saw that what they had done was just compress that schedule to a point that they didn't move the end date, but they had unrealistic time constraints placed on testing and commission.

CHRISTINE MAINVILLE: And did that compression remain even as the RSA date was pushed back?

THOMAS PRENDERGAST: Yes, to a point. And what I mean by that is for the longest time, they basically, these weren't their exact words, but they basically said, we hear you, but don't worry, we got this. Meaning, we're still going to deliver it.

And then as the compression continued and the date was approaching, the realization on their part that they could no longer sustain that, either explainability-wise or actually project delivery-wise, they started to apply thought to, are there ways we can appropriately

2.

compress the testing commission.

And actually there was a third element that's more than just testing and commissioning. It's all the documentation that needed to be delivered in relation to the project because the term used in U.K. or in Canada, safety case, you need to meet and demonstrate on paper that something has met a standard.

So there was a point in time in the process where they either got honest with themselves or realized they had to explain they have to do something. If the date isn't going to move, and figure out ways to be wiser and smarter and more efficient on testing and commissioning, and do some of the documentation review.

So that's the full answer to -- so early on it was no, we hear you. And then at some point in time, no, we have to do something. And then they started to do some things.

CHRISTINE MAINVILLE: And so what did the integration testing look like at the end, if you're able to say?

THOMAS PRENDERGAST: All projects of that magnitude and that type, the integration

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1
   testing is difficult. You're never lucky enough
2
   for all things to match up and not have things
3
   to deal with, that's why you do the integration
4
   testing. So a lot of people think that the
5
   whole is equal to the sum of the parts and it's
6
   not.
7
              You build A perfectly, you build B
8
   perfectly, you put them together to get a
9
   functionality of C, and it's in that integration
10
   testing you find out you don't get that C, so
11
   you have to do something, either to the design
12
   of A or B, or some type of interface to get
13
   that.
14
              So integration testing is difficult to
15
                 They had to go through that process
   begin with.
16
   and learn on their own that, oh, it really is
17
   difficult and we need to do something about it.
18
              CHRISTINE MAINVILLE: So would you say
19
   there was a lack of appreciation on -- you say
20
   RTG, but I'm going to say perhaps OLRTC or at
21
   least on the project company side, was there a
22
   lack of understanding of the level of complexity
23
   and perhaps importance of that component,
24
   integration component?
25
              THOMAS PRENDERGAST: Well, I want to
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1 qualify the answer. There's certainly a sense 2 of that. To be able to prove it in fact, we 3 would have had to do more analysis, but the 4 sense was very clear that they didn't get it. 5 And it wasn't our job to determine, you know, 6 whether they had the capability or not, because 7 this date is out there, the public is expecting 8 a project to be completed, so that was what the 9 focus was. 10 CHRISTINE MAINVILLE: And just on the 11 OLRTC and the RTG point, did you perceive a 12 distinction or would you be able to say who was 13 part of OLRTC as opposed to RTG? 14 THOMAS PRENDERGAST: I wouldn't make a 15 distinction because, at the end of the day, it's 16 the sum total of RTG, OLRTC, and RTM that had to 17 deliver a successful project. 18 I just wanted to CHRISTINE MAINVILLE: 19 be clear on that, so when you say RTG, it could 20 be them or their subcontractor? 21 Yes, yes. THOMAS PRENDERGAST: It's 22 definitely the consortium that made up the 23 delivery of the project. 24 CHRISTINE MAINVILLE: So would you be 25 able to give us a sense of how much the

integration testing phase changed from what may have been the original plan and what ultimately ended up happening?

THOMAS PRENDERGAST: I'm certainly not going to give you a quantitative one because it would be -- we didn't run numbers. I can't do a quantitative one. It changed over time.

And it goes back to my earlier comment about first they just acknowledged hearing us. And then over a period of time they went, well, I guess maybe there was substance to what you were saying. And then finally, like, there is substance to what you're saying, we got to do something.

So it was kind of the same thing with integration. And they started to devote the right type of resources and level of resources to dealing with it.

Because you need to understand, a person that has the accountability of delivering integration needs to understand it. You can't give it to just anybody. And it's a combination of learned experience in terms of the degree and -- learned expertise and learned experience in real-life application of that expertise.

1 CHRISTINE MAINVILLE: And so they 2 ultimately did bring in someone like that to 3 finalize the integration piece? 4 THOMAS PRENDERGAST: That was a very 5 good choice of words. They ultimately did bring 6 someone in, yes, and the operative word is 7 "ultimately". 8 CHRISTINE MAINVILLE: And that testing 9 period, I take it, would have still been 10 compressed? 11 THOMAS PRENDERGAST: To meet the 12 original date, yes. 13 CHRISTINE MAINVILLE: Well, even at 14 the end in terms of what transpired, would you 15 characterize that as a --16 THOMAS PRENDERGAST: I would, but I 17 would also tell you that on the delivery of any 18 major project of this nature, you've got two 19 extremes. 2.0 One extreme is, you have people that 21 are, I don't want to say perfectionists or 22 purists, but they wait until everything is 23 totally resolved and the date keeps moving. 24 And on the other end of the spectrum 25 you've got people that say you don't need to do

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1
   that testing, just put it into service, and
2
   you'll learn things as you go along.
3
              And neither one of those are
4
   acceptable positions to be in. So they were
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   moving toward the critical mass of, no, this is
6
   now ready to go into service. It had to meet
7
   the safety requirement. There was no movement
8
   on the safety, none whatsoever.
9
              It was the issue of the reliability --
10
   functionality of the system and the reliability
11
   of the service being delivered.
12
              CHRISTINE MAINVILLE: Let me put it
13
   this way, would it have been -- I take it -- let
14
   me rephrase.
15
              I take it it ultimately met the
16
   require -- the necessary requirements for
17
   passing the integration testing?
18
              THOMAS PRENDERGAST:
                                   Yes.
19
              CHRISTINE MAINVILLE: But beyond that,
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   would you say it would have been advisable to
21
   conduct more integration testing than they
22
   ultimately performed?
23
              THOMAS PRENDERGAST: I wouldn't make
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   that statement. It's -- because that's why I
25
   defined the extremes. There are some people who
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1 always say, make sure it's perfect and make sure 2 you have no failures at all. That's not 3 realistic in any project. And the other end of 4 the spectrum is just throw caution to the wind. 5 It was in between those. So I would not make 6 the representation that they could have gone 7 along. I would not. 8 CHRISTINE MAINVILLE: Do you recall 9 the integration testing being done in bits and 10 pieces and parts on different parts of the 11 track, or on different vehicles? 12 THOMAS PRENDERGAST: 13 CHRISTINE MAINVILLE: And so in terms 14 of the -- well, how long would the entire system 15 have been able to run, in a fully integrated 16 fashion? 17 THOMAS PRENDERGAST: Well, there's two 18 points there. One of which is the fact that 19 they were doing the testing, as you characterize 20 it, different places and bits and pieces is 21 characteristic of a project like that, where you 22 have the time and the space and the availability 23 to run that testing. 24 And then you get to a point where you 25 would like to be able to have a sufficient

1 period of time that you're running -- they call 2 the term "shadow service". So you're not really 3 running revenue service, but you're acting like 4 you're running revenue service. So you're 5 meeting your fleet requirement. You're 6 operating the trains according to schedule. 7 You're stopping in the stations, opening and 8 closing doors, things of that nature. And 9 that's the second part of the testing. 10 That's where, clearly, the IAT team 11 said that you shouldn't really be compressing 12 any part of the testing or commissioning, but 13 that part of it you definitely have to get 14 right. You don't want to be Beta testing this 15 in revenue. 16 CHRISTINE MAINVILLE: Is that what you 17 would call the trial running period? 18 THOMAS PRENDERGAST: Once again, we're 19 using a formal contract term in the PA and so it 20 would include that, but it may be some testing 21 even in advance of that. 22 And I think, just for clarity, what I 23 meant by that last piece is is that if you know 24 you're taking a final exam with somebody, and 25 it's a final exam that you have to pass, you

1 can't get the certification you need, people 2 that have taken that exam or those exams, or 3 educators will tell you, take a couple of dry 4 Here's tests from last year. See how 5 well you do on these. So even before you enter 6 that test, you're gauging where you are and how 7 well prepared you are. So that's the piece 8 before trial running. 9 But trial running is a specific 10 contract term that I don't recall exactly what 11 it meant so. 12 CHRISTINE MAINVILLE: Just to finish 13 up on the integration testing, would you have 14 had any sense of whether Thales, who supplied 15 the signaling system on the project, right, 16 whether Thales felt there had been sufficient 17 integration testing or would have --18 THOMAS PRENDERGAST: I can't speak for 19 I can't speak for any of the subsystem 20 suppliers or system suppliers. I dealt with 21 them; I had a relationship with them; I 22 understand them, but I can't opine because I 23 can't get into their heads. I can't answer that 24 question for you.

CHRISTINE MAINVILLE:

Fair enough.

1 What can you say about the CBTC system 2 that Thales applied? Are you familiar with it 3 to some extent? 4 THOMAS PRENDERGAST: Very familiar 5 with it because, for 19 months, I was the CEO of 6 TransLink out in Vancouver. And that Thales 7 system was the original -- the original Alcatel 8 system is the building blocker for the Thales 9 system, so I understand that system very well. It has been modified over the years and 10 11 improved. 12 And Thales was one of the suppliers 13 that we selected in New York City transit to 14 convert one of the lines to communication-based 15 train control. 16 So am a signal engineer that can 17 design a track circuit? No. Am I a systems 18 engineer who can understand a track circuit and 19 understand the basic functionality of the signal 20 Yes. So I am very familiar with the system? 21 Thales system. 22 CHRISTINE MAINVILLE: And would you 23 consider the system that was used here as fairly 24 standard for Thales? 25 THOMAS PRENDERGAST: That's -- I don't

1 know if I'd use the word -- I'm just keying up in case you want to get -- if you want to refer 3 to documents. 4 By their very nature there is a basic 5 underlying element of a communication-based train control system that is standard, the basic 6 7 architecture. That architecture, though, is 8 modified or tailored to the specific application 9 for what they're going to put it in, depending 10 upon the service patterns the client has. 11 So on one hand, is it a standard 12 Thales system? Yes, at the underpinning level. 13 But it was uniquely specified for OC Transpo's 14 needs. 15 CHRISTINE MAINVILLE: What would you 16 say is unique to Thales' system that other 17 providers may not have, if you're able to say? 18 THOMAS PRENDERGAST: I wouldn't make 19 it -- I'm sure there are some distinguishing 20 elements between -- if you take a look, there's 21 Thales is in that space, Alstom is in that 22 space, Siemens is in that space, and they all 23 have proprietary design elements that 24 differentiate them from their competitors. 25 But -- and some are more useful at a

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   specific application than others, but they're
2
   all in that space. So it's hard for me to
3
   differentiate between -- among or between them.
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              CHRISTINE MAINVILLE:
                                     Sure.
                                            What
5
   about the Citadis train model that was used by
6
             Do you understand the Citadis Spirit,
7
   which was the name of this model, was some
8
   adaptation of their Citadis model used
9
   elsewhere?
10
              THOMAS PRENDERGAST: I don't know the
11
   answer to that if it was used elsewhere.
                                               Ι
12
   don't know.
13
              CHRISTINE MAINVILLE: Did you have any
14
   sense of how service proven or new this system
15
          How that may have compared to other
   was?
16
   projects you've been involved in?
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              THOMAS PRENDERGAST:
                                   Yes.
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              CHRISTINE MAINVILLE: What would you
19
   say on that?
2.0
              THOMAS PRENDERGAST: I've had a lot of
21
   experience with car builders. And car builders
22
   build depending upon whether it's a performance
23
   spec or detail spec, according to what the
24
   client's asking of it.
25
              My experience has been primarily with
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1 Kawasaki or Bombardier directly and Alstom. And 2 there's always an iterative development of 3 improving upon a prior product. 4 And then every once in a while they 5 come out with a totally new technology that you wouldn't call it an iteration. It's just a 6 7 brand new vehicle. 8 And this vehicle was, whether it was 9 the first in a delivery of one like that, or one 10 of the first deliveries, it was for a specific 11 purpose, what I would call a light rail system 12 similar to Ottawa's, versus a heavy rail transit 13 like New York City Transit or Boston or 14 Philadelphia. 15 So and was the team aware of that 16 newness? Yes. 17 CHRISTINE MAINVILLE: And in terms of 18 integrating that with Thales' signaling system, 19 did you understand that to be a first? 2.0 THOMAS PRENDERGAST: I don't know if 21 we understood it to be a first, but we were 22 certainly -- it was an issue that required 23 attention because you had an interface on the 24 vehicle between signals and all the vehicle

functions. Whereas if you choose a supplier,

1 because Siemens and Alstom both have a signal system, so if you choose the vehicle supplier 3 and the signal supplier is the tame, it's less 4 of an interface issue than it is when it's two 5 different entities. But we did not know. 6 If you say that was the first time 7 that that particular signal system was put on that particular vehicle, I would not be shocked 8 9 by that, but I can't say that we knew that at 10 the time. Although we did know the car was 11 relatively new so. 12 CHRISTINE MAINVILLE: Right. And the 13 train operators, OC Transpo was new to light 14 rail? 15 THOMAS PRENDERGAST: Yes. 16 CHRISTINE MAINVILLE: And I've seen 17 reference to this not being a mature maintainer 18 in terms of the maintenance piece or contract. 19 What -- how would you explain that in 20 terms of the lack of maturity or lack of 21 experience? 22 THOMAS PRENDERGAST: When we looked at 23 the vehicle issue in total, and it had a 24 different sub element, number of issues, a 25 commitment was made to do as much of the car

2.

| 1 | building and assembly on site or in Ontario.

So they hired a workforce that built the vehicle and they trained them to build a vehicle. And that was probably local labour, and that's fine, we've seen that at other projects. But to build a railcar is different than inspecting and maintaining it and troubleshooting.

So the IAT team had concerns about, okay, you've developed a workforce that can build the car, and maybe you're going to use some of that talent to actually roll over into the operation and maintenance, and what skill set did they have to that, because it's a different skill set. To build something is different than to troubleshoot something.

about the people that they had on the team in terms of not having that skill set? Or was it specific to either RTM or Alstom, who was the maintenance subcontractor under RTM? Is it about their level of experience as an entity or is it just about the people on -- hired for the project?

THOMAS PRENDERGAST: It's the former.

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1
   It's the first thing you said. It's more than
    just the people. It's the structure; it's the
3
   supervision; it's the management; it's
4
   understanding that construction delivery
5
   requires certain skill sets distinctly different
6
   than operations maintenance.
7
              CHRISTINE MAINVILLE: So RTM --
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              THOMAS PRENDERGAST: There is
9
   sometimes people that can bridge both, but there
10
   are a lot of times people that no, they stay in
11
   their lanes and they just do one and they hand
12
   the baton to somebody else.
13
              CHRISTINE MAINVILLE: And I take it,
14
   you're speaking primarily of RTM as being
15
   responsible for maintenance? So they --
16
              THOMAS PRENDERGAST:
                                   Yes.
17
              CHRISTINE MAINVILLE: And they --
18
   well, (a) they're a consortium; they're new in
19
   terms of an entity. Just for the record if you
20
   could say yes?
21
              THOMAS PRENDERGAST:
                                   Yes.
22
              CHRISTINE MAINVILLE: And then they
23
   wouldn't have, you know, pre-existing
24
   maintenance plans, and the like, is part of it?
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              THOMAS PRENDERGAST: They may, but
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1 you -- we would ask questions to affirm that 2 they had those maintenance plans. 3 CHRISTINE MAINVILLE: And I just want 4 to be clear on this -- the maturity of this 5 maintenance piece. Well, first of all, Alstom, 6 I would imagine, though, I don't know, you 7 correct me if I'm wrong, has much experience in 8 maintaining their trains. Would that not be the 9 case? 10 THOMAS PRENDERGAST: Yes, it would be 11 the case, because they had -- because they --12 and they did have contracts with entities where 13 they not only built the vehicle, but they 14 maintained the vehicle. So the answer to your 15 question is yes. 16 CHRISTINE MAINVILLE: Right. So in 17 terms of their level of maturity, is it still 18 considered -- would you still consider it not 19 mature in respect of this particular project 20 either because it's a new line or because it's 21 new people, or a new supervising authority? 22 THOMAS PRENDERGAST: It's probably the 23 And the reason I say that is because it's 24 not a matter of maturity. They have the

maturity. The question is did they have the

right resources with that maturity in place in the management structure? Because it all emanates from the management structure.

Even if you have well-skilled people, if the management structure, in terms of supervision and the managers, don't understand that distinction, it's -- you're going to have issues.

CHRISTINE MAINVILLE: Okay. So can you tell me about that on this project? What gaps did you perceive on that front, on the maintenance management or structure?

THOMAS PRENDERGAST: As we got into the -- as the client was approaching revenue service availability and the focus of the IAT was starting to -- we had dealt with many of the constructability issues and getting stations built, getting track built, getting cars built, getting the testing done. There was a look at the RTM organization because this is just from experience at other agencies, you don't want to a ribbon cutting ceremony and then problems with the delivering service days two, three, four and five.

So we started looking at that and

2.

1 looking at the RTM structure.

CHRISTINE MAINVILLE: And what did you see?

THOMAS PRENDERGAST: Saw a couple of very serious concerns, maybe glaring, and some lack of awareness as to what the priority issues were. And it would start with the term "making score for service".

So when you're delivering a rail service, I don't care where you are, you have a morning rush hour, you have an afternoon rush hour. The way service is delivered is you've got a peak in the morning because everybody's coming into work. It's going to change with the pandemic, but it's there up until that time.

Everybody is demanding service requirements, like 13 trains in the morning, and then between rush hours, it comes down. Then you have another one in the afternoon. And it's called making score. If you need 13 trains to deliver the level of service, you have to have 13 trains ready for service. They have to be inspected. If there's a failure that occurred on one, it has to be troubleshot and prepared.

And it was apparent, in terms of

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1
   talking to the RTM structure, they weren't aware
2
   of the significance of making score.
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              CHRISTINE MAINVILLE: So they wouldn't
4
   have adequate plans for having the number of
5
   vehicles in service that would be required at
6
   any given time?
7
              THOMAS PRENDERGAST: With respect to
8
   making score, yes, absolutely. At any given
9
   time, but the time you're most concerned is
10
   making score in the morning rush, leading into
11
   the morning rush hour, and the afternoon rush
12
   hour.
13
              CHRISTINE MAINVILLE: So was the
14
   concern that they wouldn't have enough vehicles
15
   available or -- if something went wrong?
                                               Is
16
   that the --
17
              THOMAS PRENDERGAST: There were a host
18
   of issues that drive that concern. Vehicle
19
   availability is one. Right-of-way issues, if
20
   you had switch problems, if you had signal
21
   problems, if you had weather-related problems.
22
   But we were really concerned about the vehicle
23
   availability, especially with their challenges
24
   in terms of delivering all 34 cars.
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              CHRISTINE MAINVILLE: And did that --
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1 was that still the case going into RSA that you 2 had those concerns? 3 THOMAS PRENDERGAST: It's in the very 4 being of the people that operate these systems. 5 Your concern is daily. The concern of the individual is daily. I can't emphasize it more 6 7 importantly. So even when I ran systems that 8 were fully steady, good repair, whatever, 9 there's this sense of focus and sense of urgency 10 on making score on a per line basis. 11 So -- and that was kind of lacking, to 12 begin with, in a general sense. And then it was 13 more pronounced because of the -- not having the 14 full 34 cars. Because you'll read in the 15 documentation, you needed 30 cars to meet your 16 train service schedule requirement. You had two 17 spares in the event that you had a failure of a 18 car when it was in revenue service. And two 19 cars, that is what we call a float for ongoing 20 inspection because every so many kilometres, 21 you've got to inspect cars and they're not 22 available for service that day. 23 So if you don't have the full 34 cars, 24 it puts additional pressure on the service

provider to having a full complement of 30 cars

1 to provide service. 2. But when you operate this system 3 it's -- it's like you're going out to drive your 4 car, you've got to have your wallet. You don't 5 go out without your wallet. You've got to have your driver's licence. You don't leave the door 6 7 unlocked without your key. These are just 8 basics that are drilled into your head. 9 CHRISTINE MAINVILLE: So -- well, 10 first of all, fewer than 34 cars went into --11 were available or -- for going into service, 12 correct? 13 THOMAS PRENDERGAST: Yes. 14 CHRISTINE MAINVILLE: Was that 32 or 15 30? 16 THOMAS PRENDERGAST: There were 17 various times the numbers were different. 18 the answer to the question is that one time it 19 might have been 30 and then passed a certain 20 date it got to be 32. And then, you know, it 21 eventually got to 34, but that was months after 22 when they were projecting the best case, when 23 the realization hit that 33 and 34 were going to 24 come well beyond what the start of revenue 25 service availability was going to be.

1 CHRISTINE MAINVILLE: And beyond this 2 number of cars, did you believe that RTM was 3 still not, sort of, getting it in terms of 4 making score for service, entering into RSA? 5 THOMAS PRENDERGAST: The awareness 6 finally sunk in, they were dealing with 7 additional resources as well as some other 8 techniques that they would use. So for lack of 9 a better phrase, they were climbing an awareness 10 curve and a deployment of resource curve to meet 11 the service level requirements. 12 CHRISTINE MAINVILLE: When RSA began, 13 you would say, they had awareness? 14 THOMAS PRENDERGAST: Yes. 15 CHRISTINE MAINVILLE: To what extent 16 would the City have been concerned in going into 17 service with a reduced number of vehicles in 18 light of this? In light of these pre-existing 19 concerns. 20 THOMAS PRENDERGAST: Yeah, I mean, the 21 only reason I'm frowning is I don't know how I 22 answer to what extent. Was there an awareness 23 on the part of the City and OC Transpo? 24 Absolutely. Did they communicate those concerns 25 to RTM? Yes. And was a clear set of

1 requirements spelled out to RTM? Yes. And 2 that's about as far as I can say. 3 CHRISTINE MAINVILLE: Are you able to 4 say why the City was prepared to start service 5 without the full complement of vehicles? 6 THOMAS PRENDERGAST: Well, I'm 7 definitely not going to get into the minds of 8 people -- I don't like when people try to get 9 into my mind, but I was not part of those 10 conversations. But I can tell you, I'll go back 11 to my earlier comment about, you know, when you 12 deliver projects like this, ideally you'd like 13 to have every I dotted and T crossed in terms of 14 all requirements being met. 15 And certainly not foolheartedly 16 entering into service when you don't have enough 17 cars, but it's a judgment issue because it's 18 never perfect and we understood that. I mean, 19 every one of the people on IAT team had been 20 involved in some, way, shape or form with system 21 start up. So we understood that. It's not a 22 pass/fail, black/white. You go through shades 23 of grey. 24 CHRISTINE MAINVILLE: And not. 25 ultimately your call to make, but did you make

1 any recommendations on that front as to whether 2 it was advisable or not? 3 THOMAS PRENDERGAST: No. What we 4 would try to do is assess qualitatively what the 5 risks were and what, in a general sense, the 6 level of impact that would have. And it's not 7 necessarily linear. 8 What do I mean by that? If you're at 9 30 trains for service -- 30 cars, I should say, 10 15 trains, and then you drop down to 28, so you 11 have 14 trains, there'll be some impact to 12 service. 13 If you drop down to 26 cars, 13 14 trains, that'll increase. And then at some 15 point in time, it's like the service is so 16 compromised. 17 And so we would offer input along 18 those lines, but it's not an exact science and 19 it's not exceptionally quantitative. 20 combination of qualitative and the quantitative. 21 And it's also -- there's a 22 relationship between the level of ridership, 23 because the way the system was procured and 24 designed was for ridership, you know, the peak 25 level of ridership in the life of the system.

So that generally isn't in the first year of operation. It's sometime out in the future.

So the comments and the guidance and the technical support we provided to the client was in a qualitative sense along those lines.

CHRISTINE MAINVILLE: And qualitatively, how would you have framed the -- or assessed the level of risk that you foresaw in terms of this maintenance preparedness in particular, including the risk of relating to vehicle availability and so forth that you've been discussing? Like, what would have been your take, as RSA is now right ahead of you, what would you have been telling the City about what the risks are that you're seeing at this point?

THOMAS PRENDERGAST: Well, we gave them those qualitative summaries and they had us talk directly to RTM about what those were. And a certain percentage of them can be made up with additional resources, meaning people, meaning staff.

So and for vehicle issues, that may mean additional staff around the clock to

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1 troubleshoot trains, get them off the line if 2 they're stalled. For switch issues, once you 3 get through early failure mode, you can shrink 4 the number of resources, but at the front end, 5 you put a lot of resources out. Those are 6 traditional approaches that agencies use when 7 they operate systems. They make up for 8 unsureness or concerns about reliability with 9 additional staffing. 10 CHRISTINE MAINVILLE: And I take it 11 some of the -- you conveyed this directly to RTM 12 or just to the City? 13 THOMAS PRENDERGAST: Well, to both. Τ 14 mean, the nature of the relationship from the 15 start of the IAT, whether it be with RTG or RTM, 16 and this came from John Manconi, no surprises, 17 share information, raise concerns, and provide 18 logic and rationale why there's a concern and 19 what they may want to consider doing, without 20 being prescriptive about what they should do.

CHRISTINE MAINVILLE: And what was your understanding from RTM at that point in time about the extent to which they were going to do that, to be responsive or increase their resources and whatnot?

1 THOMAS PRENDERGAST: As I said 2 earlier, a couple of times the awareness did 3 reach them finally and they realized they had to 4 do something with either a changed approach or 5 process or additional resources. 6 And so they were being more responsive 7 and more assertive in terms of meeting that 8 need. CHRISTINE MAINVILLE: And that was --10 that awareness that they gained, was that very 11 shortly before revenue service? 12 THOMAS PRENDERGAST: I can't recall 13 when it was. It wasn't just before revenue 14 service, but I can't remember how much in 15 advance of revenue service it was. 16 CHRISTINE MAINVILLE: And what 17 information did you or the City have about the 18 extent to which it was able to put that in 19 Did you have a good sense of what -- at 20 RSA, what their capabilities were like? 21 Well, OC Transpo THOMAS PRENDERGAST: 22 always made sure that they got back to the IAT 23 with a response. Like we agree with your 24 concern, we don't agree with your concern, 25 that's one example.

1 Another example is, we agree with your 2 concern, but instead of -- and I'm pulling a 3 number out of the air, instead of seven 4 additional staff to watch switches, we think we 5 can do it with four. And in some cases we'd 6 say, okay, fine, we get it. Other cases we'd 7 say, I don't know if you can do it with four. 8 So there was an exchange of 9 information, but ultimately the risk was theirs 10 under the contract, as guided or dictated by the 11 PA. 12 CHRISTINE MAINVILLE: So do I take 13 that to mean the risk was on them and so -- and 14 the City may not have had complete insight at 15 that point in time into what had been put in 16 place and how -- and whether they did front load 17 their resources because ultimately it was up to 18 them to figure out? 19 THOMAS PRENDERGAST: I can't answer 20 the question in terms of what the City thought 21 or did. 22 I will go back to the last part of 23 your comment which is, the underlying principle 24 of a design, build procurement is transference 25 of risk.

1 So if you say that your performance 2 needs to meet these standards and that's the 3 performance standard that's being held to under 4 the terms of the contract, it's really not 5 appropriate for either the client, or the IAT to 6 say, okay, you say you can do it with four, I 7 think you need seven. Because once I assert 8 that I need seven that risk transfers back over 9 to the client. You've taken that risk away from 10 And that's -- if something was unsafe, we 11 definitely would say that, so would the client, 12 namely John Manconi. But these were not 13 safe-unsafe issues. These were service 14 reliability issues. 15 CHRISTINE MAINVILLE: Yes. And maybe 16 I can ask you this way, in terms of what you 17 thought they should be doing, RTM, were you 18 ever -- did you ever gain the level of 19 satisfaction or assurance or information, even, 20 that that was in place, what you thought was 21 sufficient in term was of preparedness? 22 THOMAS PRENDERGAST: Well, the first 23 item we noticed was the awareness that okay, 24 there is something here, that's the first. 25 The second was, in some areas, even

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1 when they came out with a resource level that 2 was below what was needed, they would respond 3 with something higher. In other cases, they 4 didn't; they held firm. So that's about as far 5 as we took it, but we weren't asked, nor would 6 we say, that's the right level of resources. 7 We'd just say, these are some challenges. 8 And I'll give you an example. I mean, 9 it's like if you're talking about right-of-way 10 issues, if you have four people and you evenly 11 distribute them along the line, but you can't 12 tell where the failures are going to occur, 13 there's a time associated with that nearest 14 person getting to the vehicle, troubleshooting 15 and getting it done. 16 If you have seven resources out there, 17 that amount of time it takes to get to the 18 vehicle will be shorter and so you'll have a 19 higher level of confidence that service won't be 20 affected as drastically. 21 So that's the nature of the 22 conversations that were -- and they were 23 qualitative and -- they weren't pulling numbers

out of the air. It was based upon empirical

knowledge that people on the IAT team had with

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   systems like this.
2.
              CHRISTINE MAINVILLE: And did you
3
   ultimately observe, after the -- after the
4
   system went into service, whether they were
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   prepared or not?
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              THOMAS PRENDERGAST: I can't recall
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   the level of detail that we went to. It was a
8
   short period of time. Like I said earlier in
9
   terms of after revenue service availability
10
   versus before. So as I can't -- I can't recall.
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              CHRISTINE MAINVILLE: And is it fair
12
   to say that it was expected that there would be
13
   increased pressure on maintenance when the
14
   system went into operation?
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              THOMAS PRENDERGAST: Is it fair to say
16
           I want to make sure I understand the
17
   question.
18
              CHRISTINE MAINVILLE:
                                     That there was
19
   going to be increased pressure on maintenance?
2.0
              THOMAS PRENDERGAST: Oh, absolutely,
21
   yes.
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              CHRISTINE MAINVILLE: And did you
23
   understand that -- did you have any sense of
24
   Alstom maintenance preparedness more
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   specifically? So whether there were any
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   challenges in terms of them getting lined up and
2
   prepared ahead of revenue service?
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              THOMAS PRENDERGAST: I want to make
4
   sure when you say "Alstom", are you talking just
5
   about vehicles or all the responsibility that
6
   Alstom had under RTM?
7
              CHRISTINE MAINVILLE:
                                    The latter.
                                                  But
8
   then also more specifically the vehicles.
              THOMAS PRENDERGAST:
                                  Well, no, because
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   it was -- it wasn't till pretty far into the IAT
11
   team's work that we -- it was when we started to
12
   look at the RTM relationship and the
13
   organizational staffing, et cetera, that we
14
   realized that Alstom had a big piece of that.
15
   Because going into it, before we looked at the
16
   vehicles, we thought they were just limited to
17
   details, but they weren't. In the RTM
18
   framework, they got a lot of the scope.
19
   did start to pay attention to it. And we paid
20
   attention to both vehicle as well as
21
   non-vehicle.
22
              But a lot of the concerns and the
23
   high-level concerns were with the vehicles.
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              CHRISTINE MAINVILLE: And so did you
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   have any understanding of what they had done to
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   prepare for revenue service?
2.
              THOMAS PRENDERGAST: Well, through the
3
   meetings that, we learned of what their level of
4
   preparedness was.
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              CHRISTINE MAINVILLE: And what was
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   that?
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              THOMAS PRENDERGAST: Well, first of
8
   all, the window was toward the tail end of IAT
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   as we're rolling up to -- as the client was
10
   rolling up to RSA, and it was months, not -- I'd
11
   say weeks, 8, 10, 12 weeks before, maybe even
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   longer, but it's not a year before.
13
              CHRISTINE MAINVILLE: Did you ever
14
   hear of any -- anything about the fact that
15
   Alstom, on the maintenance side, didn't believe
16
   that their work started until RSA under the
17
   contract, such that that impacted their
18
   preparations?
19
              THOMAS PRENDERGAST: Say that again?
20
   I'm not sure I got it.
21
              CHRISTINE MAINVILLE: That in terms of
22
   the lead up to RSA, that there were some
23
   challenges in terms of Alstom preparing for
24
   revenue service availability, given some
25
   understanding that, under the contract, their
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maintain it.

1 work didn't start until RSA. Was that something 2 that you understood or was discussed? 3 THOMAS PRENDERGAST: It was discussed 4 in general terms and to create the framework as 5 to why the discussion would ensue, in any case. 6 Because for those of us that worked at agencies, 7 even when it wasn't a design build, when it was 8 one element in the organization delivering a 9 project and another element in the organization 10 accepting it from a standpoint of operations and 11 maintenance, there is a natural tendency within 12 an organization is the people delivering it 13 don't interface or communicate well with the 14 people that are going to have to operate and

And the people that don't have to operate and maintain it don't care about it until it's the magical date.

So any system, whether it's design-bid-build; design-build; done totally internally; combination of internal-external; that's an interface that needs to be managed.

So when we got to the point of looking at RTM and them getting to take it over, we would look at those issues in the context of our

1 own experience, and what was being done to 2 have -- what we call a smooth baton pass. 3 runners in a race, I'm handing you the baton. 4 I'm not throwing it at you and nor are you going 5 like this, I don't want it. I'm handing it to 6 That's the way we talked about it because 7 that's the best way that you ensure good 8 delivery and pass-on. And then clearly we saw 9 that there were some disconnects there. 10 CHRISTINE MAINVILLE: And did that 11 impact, from your perspective, readiness for 12 service? 13 THOMAS PRENDERGAST: Yes, because it 14 would impact it even if it was internally 15 delivered in a design-bid-build way. So, yes, 16 it did. 17 CHRISTINE MAINVILLE: Would you say 18 ultimately that RTM was ready for normal operations, but not for the enhanced needs that 19 20 ultimately were present? Or would you not even 21 say they were ready for normal operations? 22 THOMAS PRENDERGAST: Inherent in the 23 mindset of the people that were on the IAT, and 24 I don't want this to sound like a pontification, 25 but inherent in the mindset is there will be

1 service problems. There will be failures of 2 equipment and of assemblies and parts. And the 3 people that are responsible for operating it 4 have to be aware of that; have to have the 5 requisite resources in place, expertise and 6 experience wise, to respond to it, troubleshoot 7 it, and get the system running. So it's 8 inherent in the way we looked at it. So it was 9 just part of our being, part of our looking at 10 it. 11 So -- and that was -- and certainly 12 there's this passing of the baton. And now 13 you're really in a fishbowl. You are delivering 14 service. The public is immediately impacted and 15 it's -- and so we were -- we looked at it from 16 the standpoint -- the original question was, did 17 we look at it like is it okay with no problems 18 occurring or -- the two are synonymous because 19 the problems will occur. We didn't 20 differentiate between the two. 21 There's no such thing as five days of 22 perfect rush hour. It doesn't happen. 23 CHRISTINE MAINVILLE: But would you 24 say that on any line on any system, problems 25 would occur? Or, in particular, in this -- on

this project? Or was there an increase -- an enhanced sense that there would be problems or issues on this project, given the level of preparedness?

THOMAS PRENDERGAST: A lot of what we saw, as an IAT, was consistent with what we saw in other design-build projects. So the nature of the problems, you know, the likelihood of where those problems existed was characteristic of a design-build. So there was no shock there.

There was an increased level of concern that, in this particular case, it took a while for the "family" of RTG and RTM to acknowledge it and deal with it.

CHRISTINE MAINVILLE: But in terms of the performance of the trains, and we'll deal with pre-trial running period and trial running period, but as RSA is approaching and there are issues surfacing, and we can talk about what, if anything, they were, from your perspective, but was there not a sense that things were not going to run smoothly just based on what was being seen at that point in time?

THOMAS PRENDERGAST: There was a level of concern about what the quality of service

1 would be and its reliability would be. There 2 was a level of concern. There is always a level 3 of concern. This was probably a little bit more 4 pronounced. 5 CHRISTINE MAINVILLE: I know we have 6 to take a break, so we'll just go off record. 7 RECESSED AT 3:33 P.M. 8 RESUMED AT 3:53 P.M. 9 CHRISTINE MAINVILLE: Can you tell me 10 whether there were any discussions about a soft 11 start or a progressive start to operations? 12 THOMAS PRENDERGAST: I believe there 13 may have been, and -- but they were -- if they 14 were, they were very brief in nature. 15 CHRISTINE MAINVILLE: And why was 16 that? 17 THOMAS PRENDERGAST: Because, in large 18 part, we did not deviate from the constraints 19 spelled out in the PA. 2.0 CHRISTINE MAINVILLE: Because that was 21 the City's preference, I take it? 22 THOMAS PRENDERGAST: I don't know 23 whose preference it was. I mean, early on when 24 the ask was made of the IAT, and understanding 25 of the scope of the work we were to do, it

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   was -- there were a number of givens, but two or
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   three basic ones. One of which is we were not
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   going to opine on levels of detail where we
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   inherited operational risk. We weren't going to
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   go there.
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              And also it was -- the project was
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   being executed in accordance with the PA. So it
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   was like there was one of the original elements
9
   of the scoping discussion as to what the IAT was
10
   to do.
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              CHRISTINE MAINVILLE: What do you mean
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   by "where we inherited operational risks"?
13
                                  Well, earlier
              THOMAS PRENDERGAST:
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   in -- when we were discussing, or you asked some
15
   questions about, you know, if there was an
16
   interchange with RTG or RTM and I responded by
17
   saying that we were not -- we never gave
18
   prescriptive recommendations, that's what I
19
   meant by that. We were in no position to get
20
   anywhere near prescriptive because we did not
21
   want to inherit operational risk.
22
              CHRISTINE MAINVILLE: "We" being IAT
23
   or STV?
              THOMAS PRENDERGAST: The individual
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25
   members of the IAT. So individually and
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1 collectively, both. 2. CHRISTINE MAINVILLE: And that was 3 essentially the mandate that was given by the 4 City, is that fair? 5 THOMAS PRENDERGAST: It was part of 6 the scope and discussions. There was an 7 alignment that we weren't going to get into that 8 space. 9 CHRISTINE MAINVILLE: So would that 10 have prevented you from giving or recommending a 11 soft start, for instance, because it had been 12 aligned with the PA? 13 THOMAS PRENDERGAST: I don't recall 14 any conversations along those lines, I really 15 That's the best thing I can say. And don't. 16 it's like the PA was the PA. So it's like --17 because once you deviate from the PA you've got 18 another whole set of discussions. It's just --19 CHRISTINE MAINVILLE: Did you come to 20 believe that a soft start would have been 21 preferable? 22 THOMAS PRENDERGAST: The discussions 23 never got to that level. The experience of 24 someone who worked at an agency, there were 25 times that those experiences had soft starts,

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   but there are other times that it was not an
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   acceptable solution.
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              So if there was a dialogue it was
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   short in length and never gained critical mass
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   enough to say we should pursue this seriously,
6
   simple as that.
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              CHRISTINE MAINVILLE: And is it fair
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   to say there was no appetite on the City side
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   for a deviation from that requirement in the PA?
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              THOMAS PRENDERGAST: I'll go back to
11
   my earlier comment, there was an alignment that
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   it was not part of our scope.
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              CHRISTINE MAINVILLE: By that you
14
   mean --
15
              THOMAS PRENDERGAST:
                                    I can't get into
16
   somebody's mind, you'll hear that from me a
17
   number of times. I don't know what -- I can't
18
   say. So it's like we never pursued it, or if we
19
   did it was for very short periods of time.
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              CHRISTINE MAINVILLE: When you say
21
    "we", you mean STV or IAT?
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              THOMAS PRENDERGAST:
                                  The IAT.
23
              CHRISTINE MAINVILLE: I understand
24
   that you can't get into anybody's mind, but in
   terms of discussions that were had, you
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1 mentioned there may have been a brief discussion And I just wonder, is that as between 3 IAT and the City, or between IAT potentially 4 and -- sorry, between the City and RTG? 5 THOMAS PRENDERGAST: I don't know 6 I don't know of any discussions about that. 7 between OC Transpo and RTG, I don't. 8 literally ignorant. 9 Were there conversations on the IAT 10 level about different experiences they had --11 members had when they were dealing with system 12 expansions or system start-ups? Yes. But it 13 was more like this is what we did here, and this 14 is how it worked. But even when you don't have 15 a design-bid-build procurement it's problematic 16 as to -- it's not an easy thing to do in stages. 17 Like I said, were there conversations? 18 They were more fleeting and short in Yes. 19 length and not deep in nature. 2.0 CHRISTINE MAINVILLE: Is this --21 you've said you've seen it in some projects, not 22 Is there any kind of best practice in others. 23 in terms of whether it ought to be provided for 24 at the outset in the agreement when it's a new 25 rail system like this one?

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THOMAS PRENDERGAST: There's no established practice. People have used soft starts and people have made conscious decisions not to use soft starts, that's the best thing I can summarize, but I can't tell you it's an established practice. CHRISTINE MAINVILLE: And when it's not done, is there -- well, is there an effort to ensure that the system is operating at a higher level of reliability? THOMAS PRENDERGAST: Well, if you're not going to have a soft start and the benefit of experiences in terms of how the whole system is working together, then you do have to be more sure of the overall reliability, all the system elements working together to deliver the service. So the answer to the question is yes. CHRISTINE MAINVILLE: It strikes me that you can do it one of two ways. You can do more trial runs, more dry runs ahead of service and then have a full start, or perhaps less of that and then a more progressive start. Either might work it just -- but is that fair? THOMAS PRENDERGAST: Once you go into revenue service and you're having people use the

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1
   system, it's difficult to communicate to
2
   people -- it's either on or off in their mind.
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   They can use it or they don't use it.
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              And I hate to use the word "slippery
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   slope", but it's a very difficult position to be
   in because the alignment of expectations on the
6
7
   part of the customers, and users, may be totally
8
   different than what the expectations are of the
9
   agency in terms of what they're trying to get
10
   out of that soft start.
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              CHRISTINE MAINVILLE: So ideally
12
   you're ready because you can't fully control the
13
   customer?
14
              THOMAS PRENDERGAST:
                                   Right. And the
15
   level of expectation on their part -- and
16
   initial expectations are very, very
17
   long-lasting. Initial impression is you deliver
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   transit service, it's in a fish bowl. Everybody
19
   sees it and everybody, rightfully so, is their
20
   own expert at it because they use it. Even when
21
   you're in total control of your destiny you're
22
   not dealing with a contractor, it's not a
23
   threshold we cross lightly.
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              CHRISTINE MAINVILLE: So in light of
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   that, did the City -- you know, first
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1 impressions, did the City not want to be even 2 more prepared than the system was in this case? 3 Would they not have wanted to have a very high 4 level of assurance of the reliability? Again, 5 I'm not asking you to put yourself in their 6 shoes, but -- or in their minds, but in terms of 7 discussions that were had -- when the time 8 actually came for RSA in late 2019, would they 9 not have wanted a higher level of reliability 10 than they thought they were going to get? 11 THOMAS PRENDERGAST: Once again it's 12 getting into the space of somebody's mind and I 13 can't -- I won't do that. I can't do that. 14 There's no physical way I can do it. That's 15 what I mean by "can't". I won't do it because 16 it's -- when I've been handed that 17 responsibility it's -- it builds over time and 18 it can change over time, it can change a lot 19 faster. 20 If it's building positively and 21 changing negatively, it generally takes a longer 22 period of the time for things to build 23 positively, but they can change negatively 24 overnight based on some incident or something. 25 So it's hard for me to say, you know, what was

1 in their minds. I just can't. 2 And what the IAT was focused on was a 3 qualitative assessment of -- you'll see terms 4 like "high", "medium" and "low" confidence 5 levels. So high confidence level that you won't 6 have a problem in this area. Moderate 7 confidence level you won't have a problem. Low 8 confidence level you won't have a problem. 9 And then the impact of that, you know, 10 because some issues are -- a single door panel 11 on one train being problematic, that's different 12 than, you know, half the doors on a train not 13 being -- you know what I mean? So we would give 14 them those qualitative assessments. 15 CHRISTINE MAINVILLE: Why don't we go 16 to one of those to see about the issues that 17 were being experienced. STV565, which I think 18 you would have had the opportunity to review 19 recently. We'll bring it up on the screen. But 20 if you have your own copy that's fine. 21 THOMAS PRENDERGAST: So what number is 22 that? 23 CHRISTINE MAINVILLE: So you'll see 24 it's here on the screen, it's an email dated

June 24th, 2019, called "RTM readiness". The

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1
   number is STV565.
2.
              MARK COOMBES: I may be able to
3
   assist, it's tab number 4 in the documents you
4
   received, Mr. Prendergast.
5
              THOMAS PRENDERGAST: I'm clicking and
6
   I can't get it open, but I'll read it off yours
7
   so go ahead.
8
              CHRISTINE MAINVILLE: So you'll see
9
   this is one that is focused on RTM readiness?
10
              THOMAS PRENDERGAST:
                                    Yup.
11
              CHRISTINE MAINVILLE: And this is late
12
   June 2019, with trial running set for July.
13
   there you gave "readiness overall", on a scale
14
   of 1 to 10, a rating of 3 to 4, is that right?
15
   Do you see in the first paragraph?
16
              THOMAS PRENDERGAST:
                                  Yeah.
17
              CHRISTINE MAINVILLE: And then, as you
18
   said, you have different categories to -- that
19
   you give a rating for, one being "Vehicle
20
   Inspection Maintenance and Revenue Service
21
   Support", which is the second area?
22
              THOMAS PRENDERGAST:
                                    Yes.
23
              CHRISTINE MAINVILLE: That you deem to
24
   be of high importance and you give it a 3 to 4
25
   rating?
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1	THOMAS PRENDERGAST: That's correct,
2	yes.
3	CHRISTINE MAINVILLE: And it talks
4	about Alstom and their staff, that they have
5	been using to date, being relatively
6	inexperienced in these areas that you're
7	referencing?
8	THOMAS PRENDERGAST: Yes.
9	CHRISTINE MAINVILLE: Did that come to
10	change, to your knowledge, or you wouldn't know,
11	prior to RSA?
12	THOMAS PRENDERGAST: I'm not sure I
13	would know.
14	CHRISTINE MAINVILLE: And you say
15	there:
16	"When combined with what appears
17	to be limited resources for these
18	functions, (one could say 'lean and
19	mean',) limited to no ability to
20	'commit an overabundance of resources'
21	at the front end of early revenue
22	service operations, there is a strong
23	possibility that vehicle availability
24	will suffer."
25	And I just want to ask you about the

1 part where you say: 2. "[...] limited to no ability to 3 commit an overabundance of resources 4 at the front end [...]." 5 Do you know why that was that there 6 was such a limited or no ability to do so? 7 THOMAS PRENDERGAST: On a general 8 level, yes, on a specific level, no. And what 9 do I mean by that? Did each one of the -- did 10 the make-up of RTM have, within its family of 11 companies, the expertise to be able to provide 12 that level of support at -- when the system 13 first turned on? Yes. Were they located in the 14 right places and were there sufficient numbers 15 of them to do it? No, I don't believe there 16 But we weren't sure that they were there. 17 Certainly a vehicle manufacturer like 18 Alstom, who not only manufacturers vehicles but 19 they hold contracts throughout the world for 20 maintenance of vehicles, we knew they had -- in 21 their core competency they had those resources. 22 And did they put some of those 23 resources in Ottawa to assist? And we sometimes 24 use the word "flood", but overcompensate with 25 resources to make sure you have enough.

1 CHRISTINE MAINVILLE: And we touched 2 on this a bit earlier but do you know whether 3 that came to change for revenue service? Do you 4 know whether it improved? 5 THOMAS PRENDERGAST: My recollection 6 is that they did add some additional resources 7 in some areas, not all. And it was definitely 8 acknowledgment that they understood they needed 9 Was it the right level of resources? 10 can't answer that question. 11 CHRISTINE MAINVILLE: And you'll see 12 down below "Running Double Car Consists", and 13 how there was a -- the mindset to date from, 14 it's OLRTC and perhaps I think you're 15 referencing Alstom as well, has been on getting 16 15 consists of either one or two car lengths out 17 there daily for the practice running. 18 So I take it most of the practice 19 running, and we'll talk about it a bit more 20 shortly, was running single cars as opposed 21 to --22 THOMAS PRENDERGAST: I don't know if 23 it was most or not, but clearly there was 24 Even if you ran just 15, two-car benefit. 25 consists there would be a benefit to doing that.

1 Because you're exercising the signal system, 2 you're half exercising the traction power 3 system, and you're exercising the communication 4 systems and stuff like that, but it does not 5 fully replicate what full, two-car consists 6 would provide. 7 CHRISTINE MAINVILLE: And do you 8 recall during trial running was it -- did they 9 run more double-car consists? 10 THOMAS PRENDERGAST: I don't recall. 11 I think they ran as many as they could but they 12 still had availability problems. And it made 13 sense for them to at least get the experience 14 with single-car consists rather than wait until 15 they had a full capability of every consist, 16 being a two-car consist. 17 CHRISTINE MAINVILLE: But for service 18 operations they needed to run double car, is 19 that right? 2.0 THOMAS PRENDERGAST: Yes. 21 CHRISTINE MAINVILLE: So is it fair to 22 say there was perhaps less practice running with 23 double-car consists than you would have liked to 24 see? 25 THOMAS PRENDERGAST: I believe so but

1 I can't say we verified that, but I believe so. 2. CHRISTINE MAINVILLE: In terms of the 3 yard master, you said there were issues, as I 4 understand it, with there being a lack of 5 single-person accountability for the yard 6 operations, which you reference there and give a 7 low rating of 2 to 3, right? 8 THOMAS PRENDERGAST: Yes. 9 CHRISTINE MAINVILLE: And did that end 10 up being resolved, do you know, prior to revenue 11 service? 12 "Resolved" is a THOMAS PRENDERGAST: 13 relative term. Did they -- once again, did they 14 cross the threshold of understanding the 15 importance of it? Yes. 16 Did they resource it appropriately 17 with the qualified person and experience? We --18 I can't say we verified that. They may have, 19 they may not have. But they finally came to the 20 realization of the importance of the yard master 21 function and the assigning of the appropriate 22 authority of that person. 23 CHRISTINE MAINVILLE: Do you recall 24 there were other issues that you saw as 25 significant in terms of the operations of the

1 yard and the preparedness of the NSF? 2. THOMAS PRENDERGAST: In general terms, 3 I can't remember the specifics. 4 CHRISTINE MAINVILLE: And then if you 5 go down to "Revenue Service Support Incident 6 Response Structure and Resources" -- sorry, 7 the -- yes, right there at the end of the page. 8 That also is deemed out to be of high importance 9 and receives a low rating? 10 THOMAS PRENDERGAST: Yes. 11 CHRISTINE MAINVILLE: What were -- I 12 understand there were issues with incidence 13 response. Could you speak to that a bit? 14 THOMAS PRENDERGAST: The two most 15 prevalent ones, as I recall, leading up to RSA 16 and once they went into revenue service was 17 people that could respond to switch defects out 18 on the right-of-way in a timely manner. 19 Correct -- troubleshoot, correct and get service 20 restored. And the same thing for people that 21 would respond to vehicle defects that the train 22 was immoveable for. 23 So those were the two critical areas 24 that we had concerns about for sure, there may 25 have been others but those two for sure.

1 once again, they acknowledged they needed more 2 resources and they started to add more 3 I don't remember where they ended resources. 4 up. 5 Do you recall CHRISTINE MAINVILLE: 6 that this -- these issues of incident response 7 continued to materialize after service 8 operation? 9 THOMAS PRENDERGAST: I vaquely recall 10 that there were a couple of incidents, I can't 11 remember if it was the same frequency but there 12 were a couple of high-profile incidents that 13 occurred. 14 CHRISTINE MAINVILLE: So is it fair to 15 say that this issue you had identified had not 16 been entirely resolved prior to RSA? 17 THOMAS PRENDERGAST: Yes, I think I 18 could make that statement. 19 CHRISTINE MAINVILLE: Generally 20 speaking, this was your assessment in late June 21 When you got to RSA how much would this 22 assessment have improved, to your recollection? 23 THOMAS PRENDERGAST: It would have 24 I can't recall how much it would have improved. 25 It would not necessarily have been improved.

1 even across the patch. So some they responded to better than others and they were 3 acknowledging them in applying resources and 4 corrective actions, and others to a lesser 5 extent. But that's the best way that I can sum 6 it up right now, in my recollection. 7 CHRISTINE MAINVILLE: And would you 8 have provided this sort of assessment right --9 just in advance of RSA or around that time? Do 10 you recall? 11 THOMAS PRENDERGAST: I don't recall. 12 I mean, it was an ongoing concern being 13 addressed, to varying degrees, all the way up to 14 and including RSA and running of revenue 15 service. 16 CHRISTINE MAINVILLE: Okay, we can 17 bring this down. 18 So maybe we can talk about practice 19 running more generally. 2.0 I think -- am I right that there was a 21 period of time prior to the actual trial running 22 where there were some practice runs? 23 THOMAS PRENDERGAST: That's my 24 recollection, yes. 25 CHRISTINE MAINVILLE: And how would

1 you describe that -- first of all, were you 2 involved in that? 3 THOMAS PRENDERGAST: The IAT was 4 involved with it to the extent that we 5 communicated the benefits that would result from 6 doing that. Because that was, you know, one 7 area that I believe the PA did not call out but 8 we felt that it should be explored. 9 CHRISTINE MAINVILLE: And what was the 10 plan for that ultimately, once it was devised? 11 THOMAS PRENDERGAST: I can't recall 12 the details but there was an awareness on all 13 parties. Like I said, there would be benefit to 14 be obtained from it and to try to do as much of 15 it as possible, that's as much as I can recall 16 off the top of my head. 17 CHRISTINE MAINVILLE: Do you recall 18 whether there was an ability to do as much as 19 would have been -- as perhaps you had indicated 20 should be done? 21 THOMAS PRENDERGAST: Recollection that 22 once again their level of awareness got to a 23 point that they said, There is value in this. 24 We should do it. And they were trying to find 25 ways and means and time slots to do it, that's

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   as much as I recall.
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              CHRISTINE MAINVILLE:
                                      Do you
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   recall -- I mean, we've seen some of it in
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   relation to RTM in the email we just saw, but do
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   you recall what other concerns you had during or
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   at the close of practice running?
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              THOMAS PRENDERGAST: Not off the top
8
   of my head, no.
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              CHRISTINE MAINVILLE: Was there --
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   what plans was there for trial running? What
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   was the original plan, to your understanding?
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              THOMAS PRENDERGAST: I don't recall
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   what the original plan was and where they ended
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        I can't -- but I do know that you have
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   to -- once you start to run trains, even though
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   it's practice running or trial running and you
17
   don't have customers on board, you still have to
18
   follow basic rules and procedures for running
19
   trains because it's -- people could get hurt
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   even though there's no public on the system so
21
   to speak, employees on the right-of-way, or
22
   whatever. So that's my recollection.
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              CHRISTINE MAINVILLE: Did you believe
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   that the systems were ready for -- to start
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   trial running?
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1 In the general THOMAS PRENDERGAST: 2 sense, yes. 3 CHRISTINE MAINVILLE: Am I right that 4 there were fairly significant performance issues 5 over the summer leading up to trial running? 6 THOMAS PRENDERGAST: My recollection 7 is that there were a few, yes. 8 CHRISTINE MAINVILLE: What kind of 9 issues were surfacing? 10 THOMAS PRENDERGAST: Some or more of 11 the same switch problems, troubleshooting switch 12 problems, failure modes on vehicles that needed 13 to be overcome to get the train moving, either 14 in revenue service or just take it out of 15 revenue service and get it off the line so that 16 they could run trains. Because you can't go 17 around a train, you have to get it off the line. 18 That's my recollection in those areas. 19 CHRISTINE MAINVILLE: Do you recall 20 any brake issues or brake faults? 21 THOMAS PRENDERGAST: Yes, in a general 22 way, no in a specific way. I can't recall any 23 specific problems. 24 Did any of these CHRISTINE MAINVILLE: 25 issues appear to be or were related to

2.

integration issues?

THOMAS PRENDERGAST: Well, we kind of operate under the National Transportation Safety Board approach, which is you don't rule anything out until you can rule it out.

So for a certain type of failure there may be two or three causes, potential causes. There may be five or seven so you don't hone in on any one, you look at each one. And if you can affirmatively say that item number 7, that failure mode did not happen, then you take that off the table. And then you go through a process of -- through elimination. Like, what is the most likely -- if there was no indication on the vehicle that gives you a warning, This specific failure occurred, you have to do some level of investigation to try and ascertain what happened. So that's how it was being done.

And even going back to the brake issues, a lot of people think that "brake" means it didn't brake right. In some cases it could mean the brakes are locked and you can't move the vehicle, that's a brake issue too. So it's not just the issue of is it braking in the right manner? No. If the brakes are totally locked

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   and the train can't move that's a brake failure.
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   Or it's classified initially as a brake failure
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   until you find out what the failure really is.
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              CHRISTINE MAINVILLE:
                                    What was your
5
   level of participation in trial running?
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              THOMAS PRENDERGAST:
                                    Mine personally
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   limited, the team -- certain team members were
8
   more involved than others.
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              CHRISTINE MAINVILLE: And did you have
10
   much input in the planning?
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              THOMAS PRENDERGAST:
                                    Not me
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   personally, no.
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              CHRISTINE MAINVILLE: Even though you
14
   don't recall the original plan specifically, do
15
   you --
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              THOMAS PRENDERGAST: Let me just --
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   it's kind of qualifying the last answer I gave
18
   and then possibly where you were going with this
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   one.
2.0
              The basic purpose of trial running is
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   to replicate revenue service conditions to beta
22
   test the system. So I would have some level of
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   involvement to say, Okay, yeah, this is meeting
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   the standard of replicating revenue service
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   conditions. So to give you an example, we have
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1 to run 15 trains, not 12. You might start with 2 12 but eventually you get to a point where 3 you're running 15 and exercising the system and 4 seeing if it works. You're making sure doors 5 open and close at the appropriate place, and 6 you're testing the full functionality of the 7 system at large to make sure that it's -- even 8 though you're not carrying revenue service 9 customers, it's able and ready to carry revenue 10 service customers. 11 So my level of involvement would be at 12 that -- I mean, I would not be totally hands-off 13 on trial running, I would be making sure that 14 those elements are being done. But the actual 15 saying, like, on Tuesday, April 29th, we're 16 going to do this test. No, I didn't go to that 17 level of detail. 18 So could you CHRISTINE MAINVILLE: 19 speak then to the issues that surfaced during 20 trial running? What was observed? 21 THOMAS PRENDERGAST: Off the top of my 22 head I can't recall. I mean, I recall getting 23 reports on some, especially the more pronounced 24 failures. Like if a train was rendered immobile

for, you know, you're trying to run a 3-minute

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   headway and it's rendered immobile for 20
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   minutes, that's going to have a significant
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   impact on service. So I would be made aware of
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   those but the others I wouldn't necessarily be
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   made aware of.
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              And I can't recall, even in general
7
   form, where the problems occurred. If I read
8
   something I may be able to tell, it may bring
9
   back memory, but I can't recall off the top of
10
   my head.
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              CHRISTINE MAINVILLE: Would you have
12
   seen, for instance, the score cards or the
13
   actual results in terms of data?
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              THOMAS PRENDERGAST: For major
15
   incidents that came my way on the trial running
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   and stuff, yes, but for the others, no.
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              CHRISTINE MAINVILLE: So you do at
18
   least have some recollection that there were --
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   what you describe as "major incidents"?
2.0
              THOMAS PRENDERGAST:
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              CHRISTINE MAINVILLE: And some failed
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   days, and things of that nature, where they had
23
   to restart?
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              THOMAS PRENDERGAST:
                                    Right.
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              CHRISTINE MAINVILLE:
                                     So what was the
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1 level of concern about how -- about the 2 performance and how things were going at that 3 point? 4 THOMAS PRENDERGAST: Well, there's two 5 things, one of which is you used a term there, 6 in terms of what was required under the PA, in 7 terms of when you entered trial running and what you counted as a failure that restarted the 8 9 clock, and how many days you had to go without 10 certain failures and stuff. And that's one 11 track that had to be followed contractually. 12 And then the other is just from -- I wouldn't 13 say you throw that away but you don't consider 14 that. And you're just looking at it from the 15 standpoint of good reliable service by the 16 standards that the industry holds itself to on 17 time performance, major system delays, God 18 forbid train evacuations, you have to get people 19 off a train, for example, that's a pretty 20 serious defect or failure. Certainly on the 21 latter, you know, paying attention to how things 22 were going. 23 CHRISTINE MAINVILLE: So there were 24 concerns in terms of good -- there being not 25 good reliable service, is that fair?

1 THOMAS PRENDERGAST: Right. Right. 2 CHRISTINE MAINVILLE: And did that 3 continue up until the end of trial running, 4 concerns about that? 5 THOMAS PRENDERGAST: Concerns, but 6 they probably, you know, once again 7 qualitatively speaking, you know, the RTM was 8 learning more about what it had to do to manage 9 those issues and how to effectively manage them 10 and deliver reliable service so there was 11 improvements being made. 12 But, once again, all of those are 13 distinctly -- many of them were distinctly 14 different than what the PA called for. 15 CHRISTINE MAINVILLE: Right. 16 THOMAS PRENDERGAST: How do you reduce 17 the contract terms something that you want to be 18 concrete, black and white, fail/pass, isn't 19 easily translatable to people who run systems. 20 There are some elements that are, certain types 21 of failures are safety failures, take the 22 vehicle out of service. But other things like, 23 you know, 15 minutes response time is not 24 acceptable but 10 minutes is acceptable. Those 25 you'll -- they are very hard to reduce to

1 contract terms. So there was always that issue 2 to deal with, what the PA called for versus good 3 judgment on the part of experienced people 4 running systems. 5 CHRISTINE MAINVILLE: Sure. And we've 6 talked about this before, but then I quess the 7 way that these reliability concerns were 8 expected to be addressed was largely on -- by 9 way of RTM being -- properly managing them and 10 being better prepared? 11 Yes. THOMAS PRENDERGAST: And Yes. 12 there were -- there were definitely penalties in 13 the contract, in the PA, that measured their 14 performance. You know what I mean? I don't 15 know if you use the word "fines", but you can 16 have fines, I guess, and you can have payments 17 due to client versus payments for services 18 provided. And then that result could be a 19 positive or a negative. There were mechanisms 20 in the contract to do that. We were aware of 21 We didn't manage that. We manage more 22 from the standpoint of what it takes to deliver 23 a good service. 24 CHRISTINE MAINVILLE: And in terms of 25 the contract itself, you know, there was a

1 provision about how many days it had to go --2 what's your recollection of what the contract 3 required in that regard? 4 THOMAS PRENDERGAST: I don't recall 5 the details now, I know that it was -- at one 6 point in time we looked at it, especially in 7 light of, like, if you met the terms of the 8 contract PA was there a high likelihood that the 9 service delivery expectations, as we knew they 10 needed to be, would be met? And there was 11 dialogue around those issues but I can't 12 remember the details. 13 CHRISTINE MAINVILLE: And what would 14 have been your assessment of that, you know, in 15 terms of the requirements that were provided 16 Was it -- were they such that it was for? 17 expected that there would be a high reliability 18 if they were met? Or that they were too -- were 19 they unclear or what was the assessment? 2.0 THOMAS PRENDERGAST: Some were unclear 21 but most were clear. 22 But even on those that weren't clear 23 there was a concern as to whether or not meeting 24 them actually would ensure a high degree of 25 likelihood of delivering good service.

It's very difficult to reduce -- I said it earlier, it's very difficult to reduce to concrete contract terms what's acceptable or unacceptable. Certain things from a safety standpoint are very clear, but when you have these judgment decisions about level of service being provided, it's hard to reduce to contract terms, especially when you're trying to transfer risk appropriately and you're trying to get the best value for the money. It's very hard to -- it's difficult to reduce to contract terms.

CHRISTINE MAINVILLE: And what was -beyond the requirements in the contract, what
was the City's ability to say -- well, to
approve or not the sufficiency of the results or
the -- you know, based on the performance? What
was available to the City in terms of accepting
the system following trial running or not, in
terms of options?

THOMAS PRENDERGAST: Well, in terms of options the contract -- more than kind of, the contract spelled out what levers the City had to effectuate performance at a certain level, okay.

But if you're asking were they

1 sufficient? I'm reluctant because we didn't 2 spend a lot of time looking at that. And I'll 3 go back to my earlier comment, it's extremely 4 difficult to reduce to contract terms something 5 where you can hold someone accountable and 6 there's a direct correlation between -- you hold 7 them to that level of accountability and the 8 service will be at the level you expect it to 9 And that is not anything other than a 10 constructive comment. Because I'm not against 11 design builds or for design builds, there's a 12 mechanism for them, but as you're transferring 13 that risk and you're trying to get a performance 14 met that's a very difficult space to be in. Ιt 15 will get better over time industry-wise but 16 right now it's a challenge. 17 CHRISTINE MAINVILLE: I quess my 18 question is, if the -- let's say the 19 requirements of the contract are clearly met in 20 terms of commissioning and trial running. 21 Does -- but the reliability doesn't appear to be 22 that satisfactory, let's say, or there are 23 performance issues. Does the City have any 24 leeway or ability to say, It's not ready? 25 would their hands be tied?

1 THOMAS PRENDERGAST: I don't think 2 it's either or. Do they have some ability? 3 Yes. Are their hands tied? Yes. So it depends 4 on where -- I'm not trying to be facetious, it 5 depends on the level of -- because once you 6 start to step into the space of holding somebody 7 to a standard that is outside of what the 8 contract states, you're entering a space that 9 is -- that's not a threshold to be crossed 10 lightly, because you'll get claims coming back 11 and you'll get transfer of risk coming back. So 12 it's a difficult space to be in. 13 CHRISTINE MAINVILLE: Right. And 14 ideally it's provided for clearly in the 15 contract? 16 THOMAS PRENDERGAST: Yes. 17 CHRISTINE MAINVILLE: And was there 18 any deviation to the contract requirements in 19 respect of trial running? 2.0 THOMAS PRENDERGAST: I don't recall 21 and I can't answer. I don't recall. There may 22 have been but there may not have been, I don't 23 know. 24 CHRISTINE MAINVILLE: Do you recall 25 just a change to the procedure being followed

1 for trial running? 2. THOMAS PRENDERGAST: I remember there 3 was discussions about it and there were 4 discussions about different things, that if both 5 parties agreed it would increase the likelihood of success, "success" meaning reliable service, 6 7 but that's as far as I remember. I don't recall 8 if they went -- if they went further than that. 9 I don't recall. 10 CHRISTINE MAINVILLE: Do you recall 11 what prompted those discussions? 12 THOMAS PRENDERGAST: Concerns that I 13 think OC Transpo had, and concerns that the IAT 14 had. And then a level of awareness on the part 15 of RTM that, Okay, there's an issue there and we 16 need to discuss it. 17 CHRISTINE MAINVILLE: But was there 18 not a loosening of the criteria in some 19 respects? 2.0 THOMAS PRENDERGAST: Once again there 21 may have been, I don't recall. 22 CHRISTINE MAINVILLE: Do you recall 23 that the number of trains being run was reduced 24 from 15 to 13? 25 THOMAS PRENDERGAST: I do recall

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discussions. And I do recall ultimately, I'm using the word you used before, that I think it did come down. And now that you raise it it had to do with -- if you look at the PA document and its original purpose, it has to dictate what level of performance the system that RTM and RTG was delivering was going to meet the demands of the system when it was fully built out and fully utilized.

The fully built out part you're pretty close to at RSA, but the fully utilized you're So when you open up a new system the ridership doesn't hit peak right away, it takes a number of months or years to get there, for a variety of reasons. One of which is people start to come to use the system, but the other thing is you project the capacity of the system for a time into the future not the first day of revenue service operation. You project it like, you know, ten years in. You know, the growth of Ottawa and the jobs downtown are going to be this such-and-such and you want to make sure this system you're building is going to meet that capacity demand at that time.

So there was a realization day one

1 didn't need to do that. So you could go into 2 revenue service and then possibly relax some of 3 the performance standards, number of trains 4 running. 5 That's my recollection but I don't 6 remember if it was actually agreed to. 7 read something maybe my recollection would 8 change. Like I said, I remember the discussions 9 to the extent that I just said. 10 CHRISTINE MAINVILLE: Did it also not 11 have to do with the fact that all the vehicles 12 were not ready? 13 THOMAS PRENDERGAST: Oh absolutely. 14 CHRISTINE MAINVILLE: And then do you 15 recall the AVKR requirement was lowered in terms 16 of the average required being brought down from 17 98 percent to 96 percent? 18 THOMAS PRENDERGAST: To a much lesser 19 extent we were aware of those measures. 20 some people in the IAT were aware of them but I 21 wasn't aware of them to that level of detail. 22 CHRISTINE MAINVILLE: You don't recall 23 why that was done? 24 THOMAS PRENDERGAST: No. I can't 25 really shed any light on it. I mean, I think

they started to look at things from a standpoint of, you know, is there a way where we can understandably change some of these performance requirements at the front end? Because there's value in getting the asset up and running, for a variety of reasons, you know? And I think there were -- my recollection is there were discussions along those lines.

CHRISTINE MAINVILLE: Is it fair to say there was quite a bit of pressure to meet the RSA?

THOMAS PRENDERGAST: It's fair to say but there is on any project like that. So there was no greater or less than anything than any of us who have delivered projects have seen. It was pretty much in line with what we'd seen.

CHRISTINE MAINVILLE: Was there any thought given to pushing it back based on the performance during trial running?

THOMAS PRENDERGAST: I can't say it was based on performance and trial running, but there was always a -- once again I'll look at this in layers. If something was unsafe and something the IAT said, you know, if you keep to this state you're getting into the grey space of

1 what's safe and unsafe, there was an unwavering 2 commitment we were not going to get into that 3 space. 4 So from a safety standpoint, if 5 something was so unknown or so unresolved that 6 it would have affected safety, we would have 7 raised our hand and said, This can't continue. 8 But once you get passed that there was more 9 discussion about, what's the trade-off between 10 the utility provided for getting the system up 11 and running versus the not-ideal service quality 12 and reliability being met? 13 CHRISTINE MAINVILLE: And is that 14 something IAT would have provided any input on 15 at that point? 16 THOMAS PRENDERGAST: In qualitative 17 terms, yes, absolutely. 18 CHRISTINE MAINVILLE: And do you 19 recall what that input was? 2.0 THOMAS PRENDERGAST: It was along the 21 lines of the document that you saw. So we were 22 trying to give them a flavour in terms of what 23 the significance of the issue was and what the 24 confidence level was in terms of being able to 25 avoid, you know, a bad performance in that

1 particular area. 2. CHRISTINE MAINVILLE: Do you have any 3 sense of where on the scale it was in terms of 4 level of readiness and risk? 5 THOMAS PRENDERGAST: It was a long 6 ways away from where it started. It improved 7 considerably. Some areas they addressed much 8 better than other areas, that's my recollection. 9 CHRISTINE MAINVILLE: Would you say 10 your bottom line was that from a reliability 11 perspective that it was good enough to go into 12 service? Or, you know, I understand that from a 13 safety perspective that was not an issue. 14 in terms of reliability would you have said, 15 It's ready to go into service? 16 THOMAS PRENDERGAST: Well, when you 17 say "you" are you -- is that specifically 18 addressed to me or the IAT? 19 CHRISTINE MAINVILLE: Let's start with 20 you. 21 Well, the way I THOMAS PRENDERGAST: 22 was utilized and the way I entered the space of 23 being lead with the IAT was clearly as somebody 24 who had, when you went back to my resume, CEO 25 responsibility.

1 So CEO responsibility is different 2 than someone who is like a project manager 3 delivering a project. It's not that I'm 4 diminishing that level of responsibility, but 5 it's generally tighter in scope and it's more 6 absolute in terms of a contract document. 7 When it goes into operations it's 8 something different, it's not project scope it's 9 operational service. But at the CEO level it's 10 a variety of different things. 11 So one of the roles that I serve as 12 leader of the IAT was to make sure people 13 understood we were looking at it through a 14 number of different prisms, project management, 15 professional reliability, executive management 16 and we would share that information with OC 17 Transpo, individually and collectively. 18 CHRISTINE MAINVILLE: I'm not sure if 19 that answers the question of whether you --20 maybe I didn't quite get what you were getting 21 at. 22 Well, what I was THOMAS PRENDERGAST: 23 trying to convey is that there were three 24 different prisms, three different looks at it. 25 But I can't put myself in John Manconi's mind, I

1 may be the best suited to understand what some of his scope of responsibilities are, what some 3 of his accountabilities are, but I can't 4 replicate what is in John Manconi's mind. 5 CHRISTINE MAINVILLE: Fair enough. 6 THOMAS PRENDERGAST: So that's why I 7 was trying to answer the question that way. 8 CHRISTINE MAINVILLE: And he would 9 have to balance the -- a number of 10 considerations that --11 THOMAS PRENDERGAST: That's correct. 12 CHRISTINE MAINVILLE: But would you --13 just looking at it from what the anticipated 14 performance would be, and reliability of the 15 system, would you have deemed it advisable, just 16 looking at that piece, to have it enter into 17 full service when it did? 18 THOMAS PRENDERGAST: I can't opine 19 because I don't have the full set of 20 information. I mean, if someone would -- if 21 when I had that responsibility if someone would 22 challenge me and say, I think you made the wrong 23 call. The first question I would ask of them 24 is, What factors have you put into the equation 25 to reach that decision? Because if it's not the

1 same factors I had, you have D, E and F and I 2 have A, B and C, or I'm rating A, B and C 3 different than your A, B and C then fine. 4 So I would take umbrage with someone 5 from -- would I be more likely to listen to a 6 But I still would be -- and I former CEO? Yes. 7 wouldn't enter that space. So if you see a 8 little bit of reluctance because it's in my 9 being, I wouldn't do that. 10 If it was serious enough that it was a 11 safety problem or it's going to be terrible, 12 absolutely would have set a tone, but none of 13 those messages were conveyed by me personally or 14 the IAT. 15 CHRISTINE MAINVILLE: So there weren't 16 direct discussions about, this is not ready, 17 this shouldn't be going ahead, is what you are 18 saying? 19 THOMAS PRENDERGAST: That's correct. 2.0 CHRISTINE MAINVILLE: And do you 21 recall being apprised of the term sheet that was 22 devised for going into service? 23 THOMAS PRENDERGAST: Once again, that 24 was part of a separate set of actions and 25 exercises that we were aware of in a general

1 sense but I can't say that we knew at a detail 2 level what they were. 3 CHRISTINE MAINVILLE: Did you know 4 that there would be additional retrofits to be 5 done that were deferred until after revenue 6 service? 7 THOMAS PRENDERGAST: Yes. On the 8 vehicles, yes, definitely. Because we 9 characterized -- you'll see documentation in the 10 IAT file, once again shrunk to a smaller group, 11 it's primarily me and the vehicle experts on the 12 work, Greg Barstow, Scott Krieger, maybe Larry 13 Gaul, where we characterize saying, These have 14 to be done before revenue service. These can be 15 done after revenue service. And don't hang on 16 the number, but they should be done within three 17 to six months, and these other ones they can be 18 after six months. 19 CHRISTINE MAINVILLE: There was an 20 understanding though that that would also add to 21 the pressure on the maintenance side of things? 22 THOMAS PRENDERGAST: Yes, yes. 23 CHRISTINE MAINVILLE: So based on what 24 you've just said, I take it you endorsed the 25 term sheet in terms of what -- it wasn't your

```
1
   decision but you had no concerns ultimately with
2
   what was deferred or not?
3
              THOMAS PRENDERGAST: The reason you're
4
   seeing me hesitate is I'm having trouble
5
   remembering the use of the term "term sheet",
6
   because "term sheet" means something specific.
7
   And so there may have been a term sheet but, I
8
   mean, I don't know.
              Did we communicate those three
10
   categories? Yes. Were those three categories
11
   discussed by OC Transpo with RTM? Yes, that's
12
   my recollection. Whether it was reduced to a
13
   term sheet or not I don't know.
                                     I can't say.
14
              CHRISTINE MAINVILLE: And whether it
15
   reflected your input you're not sure? Whether
16
   it aligned with what your advice was?
17
              THOMAS PRENDERGAST: I can't say the
18
   degree to which it utilized our input. Did it
19
   utilize some of our input or the general
20
   approach? Yes. But to the degree it did I
21
   can't say.
22
              CHRISTINE MAINVILLE: And do you
23
   recall the City's go/no-go list?
24
              THOMAS PRENDERGAST: I vaquely recall
25
   a qo/no-qo list, absolutely, because it was
```

```
1
   discussed early on. I can't remember what the
2
   last iteration of it was.
3
                                    Do you recall
              CHRISTINE MAINVILLE:
4
   whether there was any deviation from it
5
   ultimately?
6
              THOMAS PRENDERGAST: No, I can't
7
   recall.
8
              CHRISTINE MAINVILLE: If one of them,
9
   and I'm not saying this was the last iteration
10
   because I don't know that it was, but if one of
11
   the criteria there was:
12
                   "System performance during trial
13
              running is sufficiently
14
              robust/resilient to absorb service
15
              impacts."
16
              Would you -- what would be your
17
   assessment of whether that was achieved?
18
                                    Well, the way
              THOMAS PRENDERGAST:
19
   that is worded it's all qualitative, there's
20
   nothing quantitative at all. There's some
21
    judgmental terms there.
22
              So early on in the process, whether
23
   the client -- whether OC Transpo had
24
   conversations with RTM and RTG, tied to the
25
    [indiscernible] or not I don't know.
                                           But when
```

1 the IAT was looking at it I could see that kind of wording coming out. But that wording would 3 need to be further reduced to more details, more 4 quantitative details. Because how do you define 5 "robust"? 6 CHRISTINE MAINVILLE: And in terms of 7 what the anticipated customer experience would 8 be, are you able to characterize that in terms 9 of whether there was a sense that there would be 10 major impacts or significant impacts on customer 11 experience? 12 THOMAS PRENDERGAST: There was an 13 awareness that both RTM and OC Transpo had to 14 pay attention to customer experience and 15 perceptions, especially initial perceptions. 16 How we used the combination of 17 qualitative and quantitative terms to define 18 that though I don't recall how far that 19 discussion got. 2.0 CHRISTINE MAINVILLE: Let's talk about 21 operations readiness. What was your sense of 22 how ready the operators were going into service? 23 THOMAS PRENDERGAST: If you're talking 24 about the actual training of the train 25 operators, the people that are going to be

1 responsible for the movement of the trains, there was a high level of engagement on the part 3 of OC Transpo early, often, commitment of 4 resources, both in terms of the supervisors that 5 needed to understand what they were supervising, 6 the performance of the train operators after 7 they were trained, their level of proficiency, 8 not only in terms of train operation but initial 9 levels of troubleshooting if a defect were to 10 And those were throughout the entire 11 effort of the IAT, those were being addressed in 12 a timely and complete manner. 13 CHRISTINE MAINVILLE: And were 14 there -- were there issues around co-ordination 15 with maintenance and, for instance, in terms of 16 incident response, troubleshooting and whatnot? 17 THOMAS PRENDERGAST: 18 CHRISTINE MAINVILLE: So was that an 19 area that was perhaps less ready coming into 20 revenue service? 21 THOMAS PRENDERGAST: Less ready and 22 lack of awareness, lack of awareness of the 23 significance of that. 24 CHRISTINE MAINVILLE: So that 25 interface between operations and maintenance

1 could have been better prepared I guess? 2. THOMAS PRENDERGAST: Yes. 3 CHRISTINE MAINVILLE: Were you aware 4 of any transparency issues, or issues with 5 maintenance getting access to information from 6 OC Transpo and that co-ordination after an 7 incident, for instance? 8 THOMAS PRENDERGAST: I can't 9 specifically say that I recall. I do recall the 10 opposite happening, OC Transpo not getting full 11 transparency and access to information that RTM 12 had, but I don't recall the other way, I have to 13 be honest with you, I don't. 14 Would you, CHRISTINE MAINVILLE: 15 looking at this project, taking a step back, 16 were there too many interfaces? Too many 17 entities involved? Was that a concern at all? 18 THOMAS PRENDERGAST: Yes, to varying 19 There were a lot of interfaces and 20 every additional interface has to be managed, 21 and it's not linear it's exponential. 22 So, you know, you have three 23 interfaces it doesn't go up linearly, it goes up 24 because -- I think you understand, I think you 25 do but it goes up exponentially.

1 It's far more complicated with the 2 number of interfaces you have to manage and 3 integrate. 4 CHRISTINE MAINVILLE: So planning this 5 at the outset you would ideally minimize the 6 number of interfaces you have to integrate? 7 THOMAS PRENDERGAST: Yes. And one of the challenges in design-build-procurement, and 8 9 I'm not against them, but where I think the 10 industry is in a learning mode, how do you 11 reduce to contract terms? Because what the 12 client sees from the consortium, and it's always 13 a consortium that responds, is supposedly a 14 one-person response back. But on the other side 15 of the curtain there's an intricate set of 16 relationship from all those different parties. 17 And when the public sector agency has 18 access to all those parties it's difficult to 19 get people aligned, but when it's behind the 20 contract barrier it's even more difficult to 21 get. 22 CHRISTINE MAINVILLE: And what would 23 you say is the preferred level of involvement of 24 the operator during the design and build period? 25 THOMAS PRENDERGAST: The reason I'm

shaking my head is because that's one of the biggest challenges with a design-build, is you don't want to cross the threshold where you take away the benefits of a design-build and you transfer risk back across.

But there are certain ways where you can appropriately have a mechanism that you can help the consortium or the contractor get to a more successful completion. And how you do that within a contract mechanism is one of the biggest challenges.

So it's an area that needs to be dealt with the industry at large and we've got a ways to go to improve upon.

CHRISTINE MAINVILLE: And I'm not sure if you have a sense of this given the time when you entered in project, but would you -- do you have any sense of whether OC Transpo here, as the operator, should have had any earlier involvement from this project, should have been involved from the get-go if that would have changed things?

THOMAS PRENDERGAST: The assessment of the team at large and me as a member of that team is -- OC Transpo did not stop at what the

1 limits of the contract document were, they would 2 extend themselves beyond that and ask questions. 3 And even if the contractor said, Well, that's 4 beyond the scope, they would still, you know, 5 press them for answers with the intent of, we 6 want to make this is a successful project, 7 that's the best way for me to say it. 8 CHRISTINE MAINVILLE: I know we're 9 almost out of time but if I can ask you, were 10 you or STV involved in the City's approach to 11 KPIs and the sort of testing of the work order 12 system leading up to RSA? 13 THOMAS PRENDERGAST: I believe so but 14 I can't recall the specific example. And the 15 other thing is that -- and the reason I say that 16 is there were certain conversations that the 17 IAT -- that the IAT participation shrunk to a 18 subset, like me and Scott Krieger, for example. 19 But the other issue is you have this program 20 management assignment that's running parallel. 21 And it's possible that in the scope of that work 22 OC Transpo asked for assistance in terms of how 23 they could manage things, separate and apart 24 from what the IAT was doing. So it's possible 25 but I can't, off the top of my head say for sure

1 yes or no. 2. CHRISTINE MAINVILLE: So do you recall 3 any program where, you know, teams of people 4 went out on the platforms and either simulated 5 real issues or service but also just tested them 6 in --7 THOMAS PRENDERGAST: I recall that. Т 8 recall that. I recall a number of times where 9 they were testing out things, or they were, I 10 would say, beta testing where they used OC 11 Transpo employees to exercise the system. So I 12 definitely recall that. But specifics as to where, when and how many, I don't recall. 13 14 CHRISTINE MAINVILLE: Do you recall 15 that causing issues in terms of backlog of work 16 orders to be dealt with by maintenance? 17 THOMAS PRENDERGAST: Well, in terms 18 of -- certainly on the vehicle side, and there 19 may have been outstanding work orders on the 20 vehicle facility side, but definitely recall the 21 outstanding work orders on the vehicle side. 22 CHRISTINE MAINVILLE: And do you 23 recall, would there have been any input given in 24 respect of that plan based on the anticipated 25 pressures on maintenance resulting from the

various other things we've discussed? So the retrofits to be done, the fact that there would be quite a bit of demand on RTM? Would that have been taken into account in terms of how the City should approach and OC Transpo should approach this exercising of the system? If you understand what I'm saying?

THOMAS PRENDERGAST: I think I do understand what you're saying and the answer to the question is, yes. Because the defects that had to be fixed, or the problems that had to be addressed before you went into revenue service, that was -- that had to be done so you don't go into revenue service.

But once you get passed revenue service you've dealt with all of those. So you have those other ones that have some time stamps on them. And don't hold me to an exact number but some needed to be done in 2 or 3 months and some of them beyond that.

If the failures on the system were greater than what RTM expected they would have demands on their resources, the personnel to do that work, and space in the maintenance shaft to get the work done.

So there was definitely a dialogue about, well, what's your level of expectation in terms of how many vehicle defects to make score for every day is going to be? And if they were off by half that meant they had half of their resources not committing to the schedule to get those 90 day defects fixed and the longer ones fixed. And the early part of that discussion was over RTM's head. They didn't even understand the significance of that. And then eventually they came around to it and they go, oh, okay.

And it was clear they had some people that just didn't have the experience. I'll stop short of saying they weren't qualified, but didn't have the experience in terms of what it took to run a system once it went into operation.

CHRISTINE MAINVILLE: But what about internally to the City, would there have been discussions about, well, in light of this and the fact that it seems to be over RTM's head, or at least that there's going to be pressure, would that inform the City's approach on how they ought to go about the work orders and how

1 much additional pressure they were going to be 2 putting on the system? 3 THOMAS PRENDERGAST: Certainly the 4 City, OC Transpo understood the significance of 5 what we were saying. They didn't just say, Hey, 6 the contract doesn't allow us to do that. 7 did not say that at all. 8 They engaged RTM and brought the issue 9 to them and said, what about this? What are you 10 going to do? What are your plans? They 11 challenged them. They in some cases confronted 12 them, like on the yard master issue, it was 13 closer to a confrontation. When I say 14 "confrontation" not physical but I'm not letting 15 you off the hook until we have a solution here. 16 Challenges like, Okay, fine, but in the next 17 three weeks you better come up with a plan. 18 Every one of those OC Transpo 19 responded to and kept the pressure on RTM. 20 CHRISTINE MAINVILLE: And not 21 necessarily seeing that RTM was fully ready or 22 not having that certainty? 23 THOMAS PRENDERGAST: In some places 24 they could see a response with additional 25 resources and then the training of those

1 resources, and they saw improvements, and other 2 cases not necessarily so. 3 CHRISTINE MAINVILLE: And so given the 4 not necessarily so, would it not be advisable 5 for the City to sort of, like, lift the foot off 6 the pedal a bit on work orders, KPIs and that 7 sort of testing of the system to not overwhelm, 8 basically, the maintainer? 9 THOMAS PRENDERGAST: I didn't see that 10 so I can't say that that was the case? I didn't 11 see that. 12 CHRISTINE MAINVILLE: You didn't see 13 that happening? 14 THOMAS PRENDERGAST: But we didn't 15 live up there day in and day out. Some members 16 of the IAT did because they were part of the 17 program management assignment but others did 18 not. So I didn't see a let-up on the 19 accelerator at all. 2.0 CHRISTINE MAINVILLE: You didn't see 21 what, sorry? 22 THOMAS PRENDERGAST: A let-up on the 23 accelerator. 24 CHRISTINE MAINVILLE: And I take it 25 you didn't provide input or advise that maybe

1 they should let up? 2. THOMAS PRENDERGAST: The best way for 3 me to answer that is that if you and I are 4 having a discussion and I'm not being effective 5 in terms of communicating to you the seriousness 6 of something, I'm going to retreat for a minute 7 and say, am I speaking a different language? Am 8 I not communicating clearly? And so I come back 9 at it a second time. So that's one example of 10 where you may pull back but then you come back. 11 Another example is, I overwhelm you. 12 I give you fifteen things but you can only 13 handle five. So I knowingly pull back on the 14 ten but not forever. I just say, You get the 15 first five under control and I'll come back for 16 the next five. You saw all those factors in 17 play. 18 It was not a combative relationship 19 between OC Transpo and RTM, it was not collegial 20 but it was not combative. It was healthy 21 tension and they never let up on it. And I 22 honestly -- my interpretation of it, as a CEO, 23 it was the right approach. I have to be honest 24 with you. 25 I think we're CHRISTINE MAINVILLE:

```
1
   out of time. Is there anything that I haven't
2
   asked you that you think is important to point
3
   out for --
4
              THOMAS PRENDERGAST: No, no, I can't
5
   think of any.
              MARK COOMBES: I just want to make
6
7
   sure, as a housekeeping point, that we mark
8
   number STV565 as Exhibit 2?
9
              CHRISTINE MAINVILLE: We're actually
10
   not going to -- if there is a document ID I
11
    think those will be incorporated as exhibits
12
    later so we don't need to make it a formal
13
    exhibit.
              Thank you.
14
              Anything you need to follow-up on,
15
   Mark?
16
              Michael, is there anything critical
17
   that you needed to ask?
18
                                 No, thank you.
              MICHAEL O'BRIEN:
19
              CHRISTINE MAINVILLE:
                                     Thank you.
2.0
                   Completed at 5:09 p.m.
21
22
23
24
25
```

1	REPORTER'S CERTIFICATE
2	
3	I, HELEN MARTINEAU, CSR, Certified
4	Shorthand Reporter, certify;
5	That the foregoing proceedings were
6	taken before me at the time and date therein set
7	forth;
8	That the statements of the presenters
9	and all comments made at the time of the meeting
10	were recorded stenographically by me;
11	That the foregoing is a certified
12	transcript of my shorthand notes so taken.
13	
14	Dated this 27t day of April, 2022.
15	,
16	Oby a stance
17	
18	PER: HELEN MARTINEAU
19	CERTIFIED SHORTHAND REPORTER
20	
21	
22	
23	
24	
25	

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