

File No.: 04-1000-20-2020-018

April 22, 2020

s.22(1)

Dear s.22(1)

Re: Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")

I am responding to your request of January 7, 2020 for:

In regards to the totem bicycle counter/scoreboard located near the south end of the Burrard Bridge, copies of all work orders and correspondence related to maintenance and repairs, from January 1, 2019 to January 7, 2020.

All responsive records are attached. Some information in the records has been severed, (blacked out), under s.15(1)(l) and s.21(1) of the Act. You can read or download this section here: http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/96165_00

Under section 52 of the Act, and within 30 business days of receipt of this letter, you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your FOI request by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number (#04-1000-20-2020-018); 2) a copy of this letter; 3) a copy of your original request; and 4) detailed reasons why you are seeking the review.

Yours truly,

Cobi Falconer, FOI Case Manager, ATIP, for

(Signature on File)

Barbara J. Van Fraassen, BA
Director, Access to Information & Privacy

Barbara.vanfraassen@vancouver.ca
453 W. 12th Avenue Vancouver BC V5Y 1V4

*If you have any questions, please email us at foi@vancouver.ca and we will respond to you as soon as possible. Or you can call the FOI Case Manager at 604.871.6584.

Encl.

:ma

From: "Matthew Dorfman" <matthew.dorfman@eco-counter.com>
To: "Bonderud, Erik" <Erik.Bonderud@vancouver.ca>
"Quintero, Liliana" <Liliana.Quintero@vancouver.ca>
CC: "Neal Poku" <neal.poku@eco-counter.com>
Date: 1/7/2020 9:30:14 AM
Subject: [EXTERNAL] RE: Eco-Counter Maintenance - proposed dates: Feb 24-28

City of Vancouver Cybersecurity WARNING: This is an external email. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Erik,
I'll await Lilianna's confirmation.

Best,

Matthew Dorfman

Technical Support Specialist, Eco-Counter Inc.
604-3981 St-Laurent | Montreal, QC | H2W 1Y5
Office: (514) 849-9779 | Toll Free: 1-866-518-4404
matthew.dorfman@eco-counter.com | www.eco-counter.com

From: Bonderud, Erik <Erik.Bonderud@vancouver.ca>
Sent: January 6, 2020 4:51 PM
To: Matthew Dorfman <matthew.dorfman@eco-counter.com>; Quintero, Liliana <Liliana.Quintero@vancouver.ca>
Cc: Neal Poku <neal.poku@eco-counter.com>
Subject: RE: Eco-Counter Maintenance - proposed dates: Feb 24-28

Hi Matthew,

I think that should be fine. You also wouldn't be able to work on the non-battery powered ones during the weekend because we need to have our electrical crew there for those ones.

I will confirm that weekend work is fine with Liliana when she returns on Thursday

Kind regards,
Erik

From: Matthew Dorfman [<mailto:matthew.dorfman@eco-counter.com>]
Sent: Thursday, January 2, 2020 2:09 PM
To: Quintero, Liliana; Bonderud, Erik
Cc: Neal Poku
Subject: RE: Eco-Counter Maintenance - proposed dates: Feb 24-28

Hello Liliana,

I'm coordinating an installation with MetroVancouver, that will be added on to my trip to Vancouver. I've proposed Friday February 21st or Friday February 28th for Metro Vancouver Installation. My preference is to arrive in Vancouver Sunday Feb 23rd, work with the City of Vancouver February 24-27, do the installation for Metro Vancouver on the 28th, and work an additional day on the 29th or March 1st for the City of Vancouver. I've reviewed the sites for City of Vancouver with Guilhem (who has conducted the maintenance in the past) and he's informed me that several of the sites contain only Eco-Counter Equipment, and are accessible without need for accompaniment from a City employee.

Are you amenable to me working independently on Saturday Feb 29th or Sunday March 1st? I will of course document all work done.

Thank you!

p.s. Happy New Year!

Best,

Matthew Dorfman

Technical Support Specialist, Eco-Counter Inc.
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Office: (514) 849-9779 | Toll Free: 1-866-518-4404
matthew.dorfman@eco-counter.com | www.eco-counter.com

From: Matthew Dorfman <matthew.dorfman@eco-counter.com>
Sent: December 20, 2019 9:18 PM
To: Quintero, Liliana <Liliana.Quintero@vancouver.ca>; Bonderud, Erik <Erik.Bonderud@vancouver.ca>
Cc: Neal Poku <neal.poku@eco-counter.com>
Subject: Re: Eco-Counter Maintenance - proposed dates: Feb 24-28

Okay.
Thanks Liliana!

Best,
Matthew

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From: Quintero, Liliana <Liliana.Quintero@vancouver.ca>
Sent: Friday, December 20, 2019 6:49:45 PM
To: Matthew Dorfman <matthew.dorfman@eco-counter.com>; Bonderud, Erik <Erik.Bonderud@vancouver.ca>
Cc: Neal Poku <neal.poku@eco-counter.com>
Subject: RE: Eco-Counter Maintenance - proposed dates: Feb 24-28

Hi Matthew

Our electrical operations team is already on vacation, so we will need to check back with them on Jan 2nd,2020.
We will let you know then.

Liliana

From: Matthew Dorfman [<mailto:matthew.dorfman@eco-counter.com>]
Sent: Friday, December 20, 2019 9:22 AM
To: Quintero, Liliana; Bonderud, Erik
Cc: Neal Poku
Subject: Eco-Counter Maintenance - proposed dates: Feb 24-28

Hi Liliana,

As we discussed over the phone, I'd like to propose February 24-28 for the maintenance visit as our team already has installations scheduled for the preceding 2 weeks.

Please call me at my mobile number 514 835 3904 to confirm the dates if they work for your field team.

Thanks so much and have a wonderful holiday season!

Best,

Matthew Dorfman

Technical Support Specialist, Eco-Counter Inc.

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Office: (514) 849-9779 | Toll Free: 1-866-518-4404

matthew.dorfman@eco-counter.com | www.eco-counter.com



From: "Quintero, Liliana" <Liliana.Quintero@vancouver.ca>
To: "Bonderud, Erik" <Erik.Bonderud@vancouver.ca>
Date: 12/18/2019 11:22:40 AM
Subject: FW: CoV - Eco-Counter Repairs Jan 2020
Attachments: Copy of eco counter issues - MD Revision - phase 1 repairs.xlsx
Intersections with Bike Counters.txt

From: Kennett, Brian
Sent: Friday, December 06, 2019 12:24 PM
To: Quintero, Liliana; Pulgar, Armando; Nilsson, Brad; Fung, Peter
Cc: Bonderud, Erik; Zandbergen, Martin; Allard, Bruno
Subject: RE: CoV - Eco-Counter Repairs Jan 2020

Liliana, as far as I know, the highlighted locations are not CoV installed or owned assets.

Peter, please confirm.

Also, I have added column D to the attached spreadsheet, could you please update with the CoV asset #.

I have attached the Intersections with Bike Counters.txt...for the locations connected via the controller, any CoV locations not on the list would be stand alone plant equipment assets.

Let me if I can assist with providing any drawings I have.

Thanks,

Brian
604-871-6672

	A	B	C	
1	Priori	Counters	Serial #	P
2	1	Burrard and Cornwall - West side - logger	Y2G14075999	
3	1	Canada Line B	ECO09093261	L
4	1	Lions Gate Bridge West Sidewalk	Y2G12062352	L
5	1	Carrall and Keefer	Y2G12062356	
6	1	Central Valley Greenway at Foley	Y2G13074100	L
7	1	Denman & Comox	Y2H15118833	L
8	2	Cambie Bridge - East Sidewalk - Bikes	Y2G13043603	
9	2	Point Grey & Alma	Y2G14035346	
10	2	1800 York	Y2G14055708	L
11	2	Central Valley Greenway at Victoria	ECO09012644	2
12	2	Ontario and 11th Ave	Y2G12082600	L
13	2	CITIX Best Western Sands	YCH16059728	
14	2	CITIX Independent Grocers	YCH16059719	
15	2	CITIX Kingsgate Mall	YCH16059724	
16	2	Robson St Saphora	YUG14076164	
17	2	Seawall at Stanley Park, HMS Discovery	Y2G13074096	
18	2	Seawall at Stanley Park, Lumberman's Arch	Y2G13074097	
19	3	885 Dunsmuir	Y2G13043605	
20	3	Point Grey & Stephens	Y2G14045543	
21	3	Stephens & Point Grey	Y2G14045544	
22	3	Seawall at Stanley Park, 2nd Beach Pool	Y2G13074099	
23				
24				

From: Quintero, Liliana
Sent: Friday, December 06, 2019 8:40 AM
To: Kennett, Brian; Pulgar, Armando; Nilsson, Brad
Cc: Bonderud, Erik; Zandbergen, Martin; Allard, Bruno
Subject: RE: CoV - Eco-Counter Repairs Jan 2020

Hi Armando & Brad,

Please see attached the list of 22 locations.
You can use account number: CER-00240-CC.

If you could tell me which week of January 2020 would best for your team's availability.
Two Eco-counter techs are coming for Montreal for 1 week to do the repairs, so I need to make sure there is someone available to support them.

Thanks,

Liliana

From: Kennett, Brian
Sent: Friday, December 06, 2019 8:22 AM
To: Quintero, Liliana; Pulgar, Armando; Nilsson, Brad
Cc: Bonderud, Erik; Zandbergen, Martin; Allard, Bruno
Subject: RE: CoV - Eco-Counter Repairs Jan 2020

Hi Liliana,

Please send account and list of the 22 locations.
Please set up the schedule with Armando.
Please give Armando a couple weeks notice, so he can coordinate with Brad & confirm field crew availability.

Thanks,

Brian
604-871-6672

From: Quintero, Liliana
Sent: Friday, December 06, 2019 8:07 AM
To: Kennett, Brian
Cc: Bonderud, Erik; Zandbergen, Martin; Allard, Bruno; Bonderud, Erik
Subject: CoV - Eco-Counter Repairs Jan 2020

Hi Brian,

I am trying to get a technician from Eco-counter to come to Vancouver and work on the repair of 22 of our permanent bike & ped counters.
They will need access to cabinets/junction boxes, similar to previous visits.

Would you be the right contact to assist with this request? If I remember correctly you mentioned you were the one working with them during their visit?
I am planning to have them do the visit sometime in January 2020, would you be able to tell me which week of January would work best for your availability?

Thanks,

Liliana

From: Neal Poku [mailto:neal.poku@eco-counter.com]
Sent: Friday, December 06, 2019 6:36 AM
To: Quintero, Liliana
Cc: Bonderud, Erik; Matthew Dorfman
Subject: RE: CoV - Automatic Data Transmission Subscription 2019 - Eco-Counter

Hello Liliana,

Dec. 18th at 11 am will work best. I have just sent out a meeting invite.

Should there be a week that would work best in January for the City, we could already work on securing the dates ahead of time.

I imagine Matthew can access some sites on his own but others would likely require the assistance of a CoV employee or the appropriate key to access cabinets/junction boxes.

Regards,

Neal Poku
Client Consultant | **Eco-Counter**
604-3981 St. Laurent Blvd. | Montreal, QC | H2W 1Y5 | Canada
Office : 514-849-9779 | Toll Free : 866-518-4404
www.eco-counter.com |    

From: Quintero, Liliana <Liliana.Quintero@vancouver.ca>
Sent: December 5, 2019 8:15 PM

To: Neal Poku <neal.poku@eco-counter.com>

Cc: Bonderud, Erik <Erik.Bonderud@vancouver.ca>; Matthew Dorfman <matthew.dorfman@eco-counter.com>

Subject: RE: CoV - Automatic Data Transmission Subscription 2019 - Eco-Counter

Hi Neal

How about tomorrow at 1pm?

Or Dec 18th at 11am, or Dec 19th at 1pm.

Let us know,

Liliana

From: Neal Poku [mailto:neal.poku@eco-counter.com]

Sent: Thursday, December 05, 2019 3:07 PM

To: Quintero, Liliana

Cc: Bonderud, Erik; Matthew Dorfman

Subject: RE: CoV - Automatic Data Transmission Subscription 2019 - Eco-Counter

Hello Liliana and Erik,

Please find the attached spreadsheet revised by Matthew for the 22 sites in question.

Matthew has established next steps and identified a priority level for each of the issues from what could be determined from past notes and the most recent data files.

Could you please review the priorities levels in the document to make sure that they align with your vision? This will help inform the order in which the counters are visited.

Based on the analysis, we would envision a 5-day s.21(1) maintenance visit in January and a spare parts budget of s.21(1) s.21(1). The amount invoiced would depend on what parts were required for repairs or upgrades at each site. After the visit, a detailed report with the parts used at each site would be provided and then we would invoice accordingly.

Matthew will be out next week for a maintenance visit for the City of Dallas. Would you be available for a call either tomorrow before 2:30 PM PST or anytime before 2:30 PM PST during the week of December 16th to discuss next steps and questions you may have?

Please let me know when would work best.

Regards,

Neal Poku

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From: Quintero, Liliana <Liliana.Quintero@vancouver.ca>

Sent: December 4, 2019 12:26 PM

To: Neal Poku <neal.poku@eco-counter.com>

Cc: Bonderud, Erik <Erik.Bonderud@vancouver.ca>

Subject: RE: CoV - Automatic Data Transmission Subscription 2019 - Eco-Counter

Hi Neal

Invoice approved.

Also any updates on the assessment on the counters in need of repair we sent you before your vacation.

Thanks

Liliana

From: Neal Poku [<mailto:neal.poku@eco-counter.com>]
Sent: Tuesday, December 03, 2019 2:15 PM
To: Quintero, Liliana
Subject: CoV - Automatic Data Transmission Subscription 2019 - Eco-Counter

Hello Liliana,

I am contacting you with regards to the automatic data transmission subscription renewal for the CoV counters.

This is the service that allows for the counters to send their data to the server daily via the cellular network.

Please find the attached quote for your review. This includes counters that transmitted for all of most of 2019.

For the CITIX systems, we have applied an 80% to cover the cost of keeping the SIM cards active in case they are installed in the future.

I have attached last year's invoice 90621 for your reference. You will notice that the total for 2019 is lower as I have removed counters that did not transmit this year or are no longer in possession of the City.

Once I hear back from you with an approval, an invoice will be sent to your ap.central@vancouver.ca and your attention referencing **s.15(1)(l)**

Feel free to contact me with any questions.

Regards,

Neal Poku

Client Consultant| **Eco-Counter**

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Office : 514-849-9779 | Toll Free : 866-518-4404

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[illegible]

\Argyle & 59th 52-13 (01a).nvx
\Beatty & Dunsmuir 12-00 (06b).nvx
\Beatty & Nelson 66-01 (09).nvx
\Boundary & CVG 45-15 (02).nvx
\Burrard & Helmcken-Comox 04-13 (07).nvx
\Cambie & 10th 35-10 (06b).nvx
\Cambie & 59th 56-11 (05c).nvx
\Carrall & Hastings 17-03 (07b).nvx
\Carrall & Keefer 18-00 (03a).nvx
\Clancy & Midlothian 34-08 (01).nvx
\Columbia & Powell 17-06 (05).nvx
\Denman & Comox 01-10 (04).nvx
\Fleming & 57th 52-15 (01a).nvx
\Granville & 59th-Park 60-07 (11).nvx
\Homer & Dunsmuir 12-06 (04a).nvx
\Hornby & Drake 07-03 (04).nvx
\Hornby & Dunsmuir 13-05 (06).nvx
\Hornby & Hastings 14-03 (05b).nvx
\Hornby & Nelson 04-09 (05).nvx
\Hornby & Robson 04-04 (07).nvx
\Main & Union 20-05 (09b).nvx
\Ontario & Marine 55-09 (02).nvx
\Pacific-Cambie ramp & Smithe 18-08 (03).nvx
\Thurlow & Comox 06-08 (01a).nvx

---Top Content List -----
/things to search for in a file
Cyclist Loop Interface
CYC

---Bottom Content List -----
Search Results - Total Files = 886 Scanned Files = 886 Matches = 24

Cyclist Loop Interface File Matches = 8
CYC File Matches = 24

s:\Download\Argyle & 59th 52-13 (01a).nvx
ch 2 veh N/B Bike Loop CYC 1 N/B CYC 1 242 ECO (222)
FP.3 LOADPACK #3 FLASHING - White - ch 3 veh S/B Bike Loop CYC 2 S/B CYC 2 242 ECO (222)

s:\Download\Beatty & Dunsmuir 12-00 (06b).nvx
FP.2 LOADPACK #2 FLASHING - Red N/S - ch 2 veh E/B Cyclist Loop Interface CYC 1 E/B CYC 1 242 (222)
FP.3 LOADPACK #3 FLASHING - Red W/B (E/B) - ch 3 veh W/B Cyclist Loop Interface CYC 2 W/B CYC 2 242 (222)
FP.2 LOADPACK #2 FLASHING - Red N/S - ch 2 veh E/B Cyclist Loop Interface CYC 1 E/B CYC 1 242 (222)
FP.3 LOADPACK #3 FLASHING - Red W/B (E/B) - ch 3 veh W/B Cyclist Loop Interface CYC 2 W/B CYC 2 242 (222)

s:\Download\Beatty & Nelson 66-01 (09).nvx
ch 1 veh S/B system Lane 2 2 (SYS) 222
ch 1 system S/B Bike system Lane 1 (CYC) 18
2 4 (CYC) 242 (222)

s:\Download\Boundary & CVG 45-15 (02).nvx
FP.5 LOADPACK #5 FLASHING - Red - slot3 U W/B Bike counter CYC 1 CYC 1 ECO 242 (222) veh Buttons
FP.6 LOADPACK #6 FLASHING - Amber N/B (Near) - slot3 L E/B Bike counter CYC 2 CYC 2 ECO 242 (222) veh Buttons

s:\Download\Burrard & Helmcken-Comox 04-13 (07).nvx
slot7 U W/B Bike counter CYC 1 ECO CYC 1 242 (222) veh Buttons
slot7 L E/B Bike counter CYC 2 ECO CYC 2 242 (222) veh Buttons

s:\Download\Cambie & 10th 35-10 (06b).nvx
ch 1 veh E/B 10th Bike CYC 1 242 (222)
ch 4 veh W/B 10th Bike CYC 2 4 242 (222)

s:\Download\Cambie & 59th 56-11 (05c).nvx
slot3 U S/B Bike counter CYC 1 ECO CYC 1 242 (222) veh Buttons
FP.6 LOADPACK #6 FLASHING - Red N/B - slot3 L N/B Bike counter CYC 2 ECO CYC 2 242 (222) veh Buttons

s:\Download\Carrall & Hastings 17-03 (07b).nvx
FP.1 LOADPACK #1 FLASHING - White - ch 1 veh E/B BIKE CYC 1 Hastings CYC 1 (Curb) 242 (222)
FP.2 LOADPACK #2 FLASHING - Red E/B - ch 2 veh W/B BIKE CYC 3 Hastings CYC 3 (Curb) 242 (222)

s:\Download\Carrall & Keefer 18-00 (03a).nvx
ch 1 veh E/B BIKE CYC 1 Keefer CYC 1 (Curb) 242 (222)
FP.2 LOADPACK #2 FLASHING - Red N/S - ch 2 veh W/B BIKE CYC 2 Keefer CYC 2 (Curb) 242 (222)

s:\Download\Clancy & Midlothian 34-08 (01).nvx
slot3 U W/B Bike counter CYC 1 CYC 1 ECO 242 (222) veh Buttons
FP.6 LOADPACK #6 FLASHING - Red E/B - slot3 L E/B Bike counter CYC 2 CYC 2 ECO 242 (222) veh Buttons

s:\Download\Columbia & Powell 17-06 (05).nvx
slot3 U Upper Rack- W/B Powell (CYC 3) 1 (CURB) 242 ECO (222) veh Buttons
slot3 L Upper Rack- W/B Powell (CYC 4) 2 242 ECO (222) veh Buttons

s:\Download\Denman & Comox 01-10 (04).nvx
slot7 U E/B Bike Loop CYC 1 E/B CYC 1 242 ECO (222) veh Buttons
slot7 L W/B Bike Loop CYC 2 W/B CYC 2 242 ECO (222) veh Buttons

s:\Download\Fleming & 57th 52-15 (01a).nvx
FP.5 LOADPACK #5 FLASHING - Red - slot3 U N/B Bike counter CYC 1 CYC 1 ECO 242 (222) veh Buttons
FP.6 LOADPACK #6 FLASHING - Amber E/B - slot3 L S/B Bike counter CYC 2 CYC 2 ECO 242 (222) veh Buttons

s:\Download\Granville & 59th-Park 60-07 (11).nvx
FP.1 LOADPACK #1 FLASHING - White S/B L.T. & W/B R.T. - ch 1 veh S/B L.T. Granville Stop Bar 1 RENO 222 ch 1 system E/B Bike Loop CYC
1 E/B CYC 1 242 ECO (222)
FP.2 LOADPACK #2 FLASHING - Red N/B - ch 2 veh E/B 59th 4 RENO 222 ch 2 system W/B Bike Loop CYC
2 W/B CYC 2 242 ECO (222)

s:\Download\Homer & Dunsmuir 12-06 (04a).nvx

FP.2 LOADPACK #2 FLASHING - Red N/B - ch 2 veh E/B Cyclist Loop Interface CYC 1 E/B CYC 1 242 (222)
FP.3 LOADPACK #3 FLASHING - Red W/B (E/B) - ch 3 veh W/B Cyclist Loop Interface CYC 2 W/B CYC 2 242 (222)
FP.2 LOADPACK #2 FLASHING - Red N/B - ch 2 veh E/B Cyclist Loop Interface CYC 1 E/B CYC 1 242 (222)
FP.3 LOADPACK #3 FLASHING - Red W/B (E/B) - ch 3 veh W/B Cyclist Loop Interface CYC 2 W/B CYC 2 242 (222)

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ch 1 veh N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242
FP.2 LOADPACK #2 FLASHING - Red N/B & S/B (Bike Phase) - ch 2 veh N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B) CYC 2 242
FP.3 LOADPACK #3 FLASHING - Red E/W - ch 3 veh S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242
ch 4 veh S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B) CYC 2 242
ch 1 veh N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242
FP.2 LOADPACK #2 FLASHING - Red N/B & S/B (Bike Phase) - ch 2 veh N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B) CYC 2 242
FP.3 LOADPACK #3 FLASHING - Red E/W - ch 3 veh S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242
ch 4 veh S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B) CYC 2 242

s:\Download\Hornby & Dunsmuir 13-05 (06).nvx

FP.1 LOADPACK #1 FLASHING - White N/B L.T. - ch 1 veh N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242 ch 1
system E/B Cyclist Loop Interface CYC 5 E/B CYC 1 242
FP.2 LOADPACK #2 FLASHING - Red N/B & S/B (Bike Phase) - ch 2 veh N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B R) CYC 2 242 ch 2
system E/B (W/B Reverse) Cyclist Loop Interface CYC 6 (W/B R) CYC 2 242
FP.3 LOADPACK #3 FLASHING - Red W/B & E/B (Bike Phase) - ch 3 veh S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242 ch 3
system W/B Cyclist Loop Interface CYC 7 W/B CYC 1 242
ch 4 veh S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242 ch 4
system W/B (E/B Reverse) Cyclist Loop Interface CYC 8 (E/B R) CYC 2 242
FP.1 LOADPACK #1 FLASHING - White N/B L.T. - ch 1 veh N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242 ch 1
system E/B Cyclist Loop Interface CYC 5 E/B CYC 1 242
FP.2 LOADPACK #2 FLASHING - Red N/B & S/B (Bike Phase) - ch 2 veh N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B R) CYC 2 242 ch 2
system E/B (W/B Reverse) Cyclist Loop Interface CYC 6 (W/B R) CYC 2 242
FP.3 LOADPACK #3 FLASHING - Red W/B & E/B (Bike Phase) - ch 3 veh S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242 ch 3
system W/B Cyclist Loop Interface CYC 7 W/B CYC 1 242
ch 4 veh S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242 ch 4
system W/B (E/B Reverse) Cyclist Loop Interface CYC 8 (E/B R) CYC 2 242

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FP.1 LOADPACK #1 FLASHING - Red N/B R.T. - ch 1 system N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242
FP.2 LOADPACK #2 FLASHING - Red N/S (Bike Phase) - ch 2 system N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B R) CYC 2 242
FP.3 LOADPACK #3 FLASHING - Red E/W - ch 3 system S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242
FP.4 LOADPACK #4 FLASHING - Red N/B - ch 4 system S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242
FP.1 LOADPACK #1 FLASHING - Red N/B R.T. - ch 1 system N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242
FP.2 LOADPACK #2 FLASHING - Red N/S (Bike Phase) - ch 2 system N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B R) CYC 2 242
FP.3 LOADPACK #3 FLASHING - Red E/W - ch 3 system S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242
FP.4 LOADPACK #4 FLASHING - Red N/B - ch 4 system S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242

s:\Download\Hornby & Nelson 04-09 (05).nvx

FP.1 LOADPACK #1 FLASHING - Red N/B R.T. - ch 1 system N/B Cyclist Loop Interface CYC 3 N/B CYC 1 242
ch 2 system S/B Cyclist Loop Interface CYC 2 S/B CYC 1 242
ch 3 system S/B (N/B Reverse) Cyclist Loop Interface CYC 3 (N/B R) CYC 2 242
ch 4 system S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242

FP.2 LOADPACK #2 FLASHING - Red N/S (Bike Phase) - CYC 4 (S/B R) CYC 2 242	ch 2 veh N/B R.T. Stop Bar 1 RENO 222	ch 2 system N/B (S/B Reverse) Cyclist Loop Interface
FP.3 LOADPACK #3 FLASHING - Red E/B - 1 242		ch 3 system S/B Cyclist Loop Interface CYC 5 S/B CYC
FP.4 LOADPACK #4 FLASHING - Red N/B - CYC 6 (N/B R) CYC 2 242		ch 4 system S/B (N/B Reverse) Cyclist Loop Interface
FP.1 LOADPACK #1 FLASHING - Red N/B R.T. - 1 242		ch 1 system N/B Cyclist Loop Interface CYC 3 N/B CYC
FP.2 LOADPACK #2 FLASHING - Red N/S (Bike Phase) - CYC 4 (S/B R) CYC 2 242	ch 2 veh N/B R.T. Stop Bar 1 RENO 222	ch 2 system N/B (S/B Reverse) Cyclist Loop Interface
FP.3 LOADPACK #3 FLASHING - Red E/B - 1 242		ch 3 system S/B Cyclist Loop Interface CYC 5 S/B CYC
FP.4 LOADPACK #4 FLASHING - Red N/B - CYC 6 (N/B R) CYC 2 242		ch 4 system S/B (N/B Reverse) Cyclist Loop Interface

s:\Download\Hornby & Robson 04-04 (07).nvx

FP.2 LOADPACK #2 FLASHING - Red S/B (Bike Phase) -	slot1 U N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242 Buttons
	slot1 L N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B R) CYC 2 242 Buttons
	slot2 U S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242 Buttons
	slot2 L S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242 Buttons
FP.2 LOADPACK #2 FLASHING - Red S/B (Bike Phase) -	slot1 U N/B Cyclist Loop Interface CYC 1 N/B CYC 1 242 Buttons
	slot1 L N/B (S/B Reverse) Cyclist Loop Interface CYC 2 (S/B R) CYC 2 242 Buttons
	slot2 U S/B Cyclist Loop Interface CYC 3 S/B CYC 1 242 Buttons
	slot2 L S/B (N/B Reverse) Cyclist Loop Interface CYC 4 (N/B R) CYC 2 242 Buttons

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slot4 U E/B Cyclist Loop Interface CYC 3 E/B CYC 1 242 Buttons
slot4 L E/B (W/B Reverse) Cyclist Loop Interface CYC 4 (W/B) CYC 2 242 Buttons
slot6 U W/B Cyclist Loop Interface CYC 5 W/B CYC 1 242 Buttons
slot6 L W/B (E/B Reverse) Cyclist Loop Interface CYC 6 (E/B) CYC 2 242 Buttons
slot4 U E/B Cyclist Loop Interface CYC 3 E/B CYC 1 242 Buttons
slot4 L E/B (W/B Reverse) Cyclist Loop Interface CYC 4 (W/B) CYC 2 242 Buttons
slot6 U W/B Cyclist Loop Interface CYC 5 W/B CYC 1 242 Buttons
slot6 L W/B (E/B Reverse) Cyclist Loop Interface CYC 6 (E/B) CYC 2 242 Buttons

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	ch 2 veh N/B Ontario (Bike) CYC 1 4 242 ECO (222)
FP.3 LOADPACK #3 FLASHING - White -	ch 3 veh S/B Ontario (Bike) CYC 2 242 ECO (222)

s:\Download\Pacific-Cambie ramp & Smithe 18-08 (03).nvx

slot9 U E/B Bike CYC 1 ECO SYS 1 242 (222) veh Buttons
--

s:\Download\Thurlow & Comox 06-08 (01a).nvx

slot7 U E/B CYC 1 CYC 1 222 (242) veh Buttons
slot7 L W/B CYC 2 CYC 2 222 (242) veh Buttons

From: Bonderud, Erik
Sent: Thursday, March 19, 2020 8:36 AM
To: Bonderud, Erik
Subject: FW: Permanent Eco-Counter Assessment - City of Vancouver

From: Quintero, Liliana
Sent: Wednesday, November 27, 2019 2:49 PM
To: Matthew Dorfman; Neal Poku; Bonderud, Erik; Hojjat, Ali
Cc: Guilhem Malichier
Subject: RE: Permanent Eco-Counter Assessment - City of Vancouver

Hi Matthew

- 22 sites: ok let us know once you have an idea of the issues and the cost to repair
- API: Ali Hojjat from our team was requesting the access to the API demo (adding him to this email), is this what you need Ali?

Liliana

From: Matthew Dorfman [mailto:matthew.dorfman@eco-counter.com]
Sent: Wednesday, November 27, 2019 2:47 PM
To: Quintero, Liliana; Neal Poku; Bonderud, Erik
Cc: Guilhem Malichier
Subject: RE: Permanent Eco-Counter Assessment - City of Vancouver

Hi Liliana,

- 22 sites is plenty for a first visit. I'll start with a thorough review of the sites indicated in the spreadsheet. I think an incremental approach is wise, given the scale of the program.
- The API can be purchased for an annual cost of **s.21(1)** [Documentation is available here](#), and a [demo here](#).

Best,

Matthew Dorfman

Technical Support Specialist, Eco-Counter Inc.
604-3981 St-Laurent | Montreal, QC | H2W 1Y5
Office: (514) 849-9779 | Toll Free: 1-866-518-4404
matthew.dorfman@eco-counter.com | www.eco-counter.com

From: Quintero, Liliana <Liliana.Quintero@vancouver.ca>
Sent: November 27, 2019 5:36 PM
To: Matthew Dorfman <matthew.dorfman@eco-counter.com>; Neal Poku <neal.poku@eco-counter.com>; Bonderud, Erik <Erik.Bonderud@vancouver.ca>

Cc: Guilhem Malichier <gm@eco-counter.com>

Subject: RE: Permanent Eco-Counter Assessment - City of Vancouver

Forgot to ask, would you know how we can get access to the Eco API? Or should we wait for Neal to come back for this?

From: Quintero, Liliana

Sent: Wednesday, November 27, 2019 2:17 PM

To: 'Matthew Dorfman'; Neal Poku; Bonderud, Erik

Cc: Guilhem Malichier

Subject: RE: Permanent Eco-Counter Assessment - City of Vancouver

Hi Matthew

The list Erik sent with our 22 sites that have issues, just shows the locations where issues were found and we want to get those repaired first.

Would this amount of counters for review be enough for a first visit?

Most likely there will be more sites in need of repair besides the 22, but we haven't investigated them all yet to know which ones. Unfortunately we don't have staff with historical knowledge of the program anymore, as all the staff involved left the City.

Nonetheless we can still have the discussion based on what we know or have learned from past emails. As there are some counters that belong to the BIAs but we can view it on our account.

Liliana

From: Matthew Dorfman [<mailto:matthew.dorfman@eco-counter.com>]

Sent: Wednesday, November 27, 2019 1:56 PM

To: Neal Poku; Bonderud, Erik; Quintero, Liliana

Cc: Guilhem Malichier

Subject: RE: Permanent Eco-Counter Assessment - City of Vancouver

Hello Liliana, Erik

I'm beginning a review of the City of Vancouver's Domain to determine which sites will require maintenance in an upcoming visit.

Our records indicate that there are 125 counters belonging to the City of Vancouver manufactured between 2007 and 2019. Additionally, Erik's Eco-Visio account contains 170 count-sites.

Are the only sites in consideration for maintenance the 22 sites indicated on the *eco_counter_issues.xlsx* document, or is it necessary to do a full review of the domain? If a more extensive review is required I will need to meet with someone from the City of Vancouver with historical knowledge of the counting program to pair down our list to the correct number of counters and counting sites presently in deployment.

Thanks for your help!

Best,

Matthew Dorfman

Technical Support Specialist, Eco-Counter Inc.

604-3981 St-Laurent | Montreal, QC | H2W 1Y5

Office: (514) 849-9779 | Toll Free: 1-866-518-4404

matthew.dorfman@eco-counter.com | www.eco-counter.com

From: Neal Poku <neal.poku@eco-counter.com>
Sent: November 7, 2019 7:38 PM
To: Bonderud, Erik <Erik.Bonderud@vancouver.ca>; Quintero, Liliana <Liliana.Quintero@vancouver.ca>
Cc: Guilhem Malichier <gm@eco-counter.com>; Matthew Dorfman <matthew.dorfman@eco-counter.com>
Subject: RE: Permanent Eco-Counter Assessment - City of Vancouver

Hello Erik,

Thank you for sending this information over.

We will review over next weeks to put together a game plan and perhaps set-up a follow up call for some site specific clarifications.

The goal will be to determine which parts are required in order to plan for the upcoming maintenance visit.

I will be out of the office over the next three weeks, so Matthew from our support team will be the lead on this while I am away.

I have also cc'd my colleague Guilhem that has been involved in past CoV maintenance trips in the past and would have some historic knowledge.

Regards,

Neal Poku
Client Consultant | Eco-Counter
604-3981 St. Laurent Blvd. | Montreal, QC | H2W 1Y5 | Canada
Office : 514-849-9779 | Toll Free : 866-518-4404
www.eco-counter.com |    

From: Bonderud, Erik <Erik.Bonderud@vancouver.ca>
Sent: November 6, 2019 7:28 PM
To: Neal Poku <neal.poku@eco-counter.com>; Quintero, Liliana <Liliana.Quintero@vancouver.ca>
Subject: RE: Permanent Eco-Counter Assessment

Hi Neal,

Here is the list of counters we are having issues with as well as the issue we are having. I've also attached the verification sheets for these counters.

Kind regards,
Erik Bonderud, EIT
Transportation Engineer | Traffic & Data Management
Engineering Services | City of Vancouver
 erik.bonderud@vancouver.ca
 604.829.9707

Index	Date	Time	Manual Count	Date Time from eco	Automatic Coun	Remove	Auto. C. squared / 10E4	Difference, d	Absoulte Difference	Absolute Difference Rank	Sign Difference	Residual	W i	(A t-M t)/M t	M t-M bar	A t-A bar	(M t-M bar)^2	(A t-A bar)^2
2	2-Aug-2018	8:00	36	Thu 2 Aug 2018 08:00	34		0.1156	-2	2	25	-	-1.57791918	-25	-0.055555556	2.859375	3.5625	8.176025391	12.69140625
3	2-Aug-2018	8:15	39	Thu 2 Aug 2018 08:15	40		0.16	1	1	22	+	-4.876079111	22	0.025641026	5.859375	9.5625	34.33227539	91.44140625
4	2-Aug-2018	8:30	39	Thu 2 Aug 2018 08:30	41		0.1681	2	2	25	+	-5.876079111	25	0.051282051	5.859375	10.5625	34.33227539	111.5664063
5	2-Aug-2018	8:45	36	Thu 2 Aug 2018 08:45	42		0.1764	6	6	58	+	-9.57791918	58	0.166666667	2.859375	11.5625	8.176025391	133.6914063
6	2-Aug-2018	9:00	45	Thu 2 Aug 2018 09:00	42		0.1764	-3	3	38	-	-1.472398975	-38	-0.066666667	11.859375	11.5625	140.6447754	133.6914063
7	2-Aug-2018	9:15	38	Thu 2 Aug 2018 09:15	40		0.16	2	2	25	+	-5.776692468	25	0.052631579	4.859375	9.5625	23.61352539	91.44140625
8	2-Aug-2018	9:30	33	Thu 2 Aug 2018 09:30	29		0.0841	-4	4	45	-	0.720240752	-45	-0.121212121	-0.140625	-1.4375	0.019775391	2.06640625
9	2-Aug-2018	9:45	32	Thu 2 Aug 2018 09:45	35		0.1225	3	3	38	+	-6.180372604	38	0.09375	-1.140625	4.5625	1.301025391	20.81640625
10	2-Aug-2018	10:00	25	Thu 2 Aug 2018 10:00	21		0.0441	-4	4	45	-	1.515333903	-45	-0.16	-8.140625	-9.4375	66.26977539	89.06640625
11	2-Aug-2018	10:15	21	Thu 2 Aug 2018 10:15	20		0.04	-1	1	22	-	-1.087119522	-22	-0.047619048	-12.140625	-10.4375	147.3947754	108.9414063
12	2-Aug-2018	10:30	25	Thu 2 Aug 2018 10:30	21		0.0441	-4	4	45	-	1.515333903	-45	-0.16	-8.140625	-9.4375	66.26977539	89.06640625
13	2-Aug-2018	10:45	22	Thu 2 Aug 2018 10:45	22		0.0484	0	0	0	=	-2.186506165	0	0	-11.140625	-8.4375	124.1135254	71.19140625
14	2-Aug-2018	11:00	28	Thu 2 Aug 2018 11:00	24		0.0576	-4	4	45	-	1.217173971	-45	-0.142857143	-5.140625	-6.4375	26.42602539	41.44140625
15	2-Aug-2018	11:15	30	Thu 2 Aug 2018 11:15	28		0.0784	-2	2	25	-	-0.981599317	-25	-0.066666667	-3.140625	-2.4375	9.863525391	5.94140625
16	2-Aug-2018	11:30	33	Thu 2 Aug 2018 11:30	40		0.16	7	7	61	+	-10.27975925	61	0.212121212	-0.140625	9.5625	0.019775391	91.44140625
17	2-Aug-2018	11:45	32	Thu 2 Aug 2018 11:45	27		0.0729	-5	5	54	-	1.819627396	-54	-0.15625	-1.140625	-3.4375	1.301025391	11.81640625
33	16-May-2018	8:00	31	Wed 16 May 2018 08:00	34		0.1156	3	3	38	+	-6.08098596	38	0.096774194	-2.140625	3.5625	4.582275391	12.69140625
34	16-May-2018	8:15	48	Wed 16 May 2018 08:15	40		0.16	-8	8	64	-	3.229441094	-64	-0.166666667	14.859375	9.5625	220.8010254	91.44140625
35	16-May-2018	8:30	49	Wed 16 May 2018 08:30	45		0.2025	-4	4	45	-	-0.081632653	-45	-0.081632653	15.859375	14.5625	251.5197754	212.0664063
36	16-May-2018	8:45	49	Wed 16 May 2018 08:45	42		0.1764	-7	7	61	-	2.13005445	-61	-0.142857143	15.859375	11.5625	251.5197754	133.6914063
37	16-May-2018	9:00	52	Wed 16 May 2018 09:00	40		0.16	-12	12	70	-	6.831894518	-70	-0.230769231	18.859375	9.5625	355.6760254	91.44140625
38	16-May-2018	9:15	31	Wed 16 May 2018 09:15	21		0.0441	-10	10	67	-	6.91901404	-67	-0.322580645	-2.140625	-9.4375	4.582275391	89.06640625
39	16-May-2018	9:30	32	Wed 16 May 2018 09:30	34		0.1156	2	2	25	+	-5.180372604	25	0.0625	-1.140625	3.5625	1.301025391	12.69140625
40	16-May-2018	9:45	8	Wed 16 May 2018 09:45	26		0.0676	18	18	76	+	-18.79509315	76	2.25	-25.140625	-4.4375	632.0510254	19.69140625
41	16-May-2018	10:00	12	Wed 16 May 2018 10:00	17		0.0289	5	5	54	+	-6.192639727	54	0.416666667	-21.140625	-13.4375	446.9260254	180.5664063
42	16-May-2018	10:15	15	Wed 16 May 2018 10:15	11		0.0121	-4	4	45	-	2.509200342	-45	-0.266666667	-18.140625	-19.4375	329.0822754	377.8164063
43	16-May-2018	10:30	24	Wed 16 May 2018 10:30	26		0.0676	2	2	25	+	-4.385279453	25	0.083333333	-9.140625	-4.4375	83.55102539	19.69140625
44	16-May-2018	10:45	26	Wed 16 May 2018 10:45	16		0.0256	-10	10	67	-	7.415947259	-67	-0.384615385	-14.4375	50.98852539	208.4414063	
45	16-May-2018	11:00	23	Wed 16 May 2018 11:00	20		0.04	-3	3	38	-	0.714107191	-38	-0.130434783	-10.140625	-10.4375	102.8322754	108.9414063
46	16-May-2018	11:15	22	Wed 16 May 2018 11:15	22		0.0484	0	0	0	=	-2.186506165	0	0	-11.140625	-8.4375	124.1135254	71.19140625
47	16-May-2018	11:30	8	Wed 16 May 2018 11:30	13		0.0169	5	5	54	+	-5.795093151	54	0.625	-25.140625	-17.4375	632.0510254	304.0664063
48	16-May-2018	11:45	21	Wed 16 May 2018 11:45	15		0.0225	-6	6	58	-	3.912880478	-58	-0.285714286	-12.140625	-15.4375	147.3947754	238.3164063
49	29-Jul-2019	8:00	33	Mon 29 Jul 2019 08:00	29		0.0841	-4	4	45	-	0.720240752	-45	-0.121212121	-0.140625	-1.4375	0.019775391	2.06640625
50	29-Jul-2019	8:15	48	Mon 29 Jul 2019 08:15	52		0.2704	4	4	45	+	-8.770558906	45	0.083333333	14.859375	21.5625	220.8010254	464.9414063
51	29-Jul-2019	8:30	32	Mon 29 Jul 2019 08:30	28		0.0784	-4	4	45	-	0.819627396	-45	-0.125	-1.140625	-2.4375	1.301025391	5.94140625
52	29-Jul-2019	8:45	50	Mon 29 Jul 2019 08:45	52		0.2704	2	2	25	+	-6.969332194	25	0.04	16.859375	21.5625	284.2385254	464.9414063
53	29-Jul-2019	9:00	37	Mon 29 Jul 2019 09:00	35		0.1225	-2	2	25	-	-1.677305824	-25	-0.054054054	3.859375	4.5625	14.89477539	20.81640625
54	29-Jul-2019	9:15	34	Mon 29 Jul 2019 09:15	34		0.1156	0	0	0	=	-3.379145892	0	0	0.859375	3.5625	0.738525391	12.69140625
55	29-Jul-2019	9:30	50	Mon 29 Jul 2019 09:30	47		0.2209	-3	3	38	-	-1.969332194	-38	-0.06	16.859375	16.5625	284.2385254	274.3164063
56	29-Jul-2019	9:45	44	Mon 29 Jul 2019 09:45	41		0.1681	-3	3	38	-	-1.373012331	-38	-0.068181818	10.859375	10.5625	117.9260254	111.5664063
57	29-Jul-2019	10:00	33	Mon 29 Jul 2019 10:00	31		0.0961	-2	2	25	-	-1.279759248	-25	-0.060606061	-0.140625	0.5625	0.019775391	0.31640625
58	29-Jul-2019	10:15	22	Mon 29 Jul 2019 10:15	22		0.0484	0	0	0	=	-2.186506165	0	0	-11.140625	-8.4375	124.1135254	71.19140625
59	29-Jul-2019	10:30	17	Mon 29 Jul 2019 10:30	16		0.0256	-1	1	22	-	-0.689572946	-22	-0.058823529	-16.140625	-14.4375	260.5197754	208.4414063
60	29-Jul-2019	10:45	31	Mon 29 Jul 2019 10:45	29		0.0841	-2	2	25	-	-1.08098596	-25	-0.064516129	-2.140625	-1.4375	4.582275391	2.06640625
61	29-Jul-2019	11:00	22	Mon 29 Jul 2019 11:00	22		0.0484	0	0	0	=	-2.186506165	0	0	-11.140625	-8.4375	124.1135254	71.19140625
62	29-Jul-2019	11:15	26	Mon 29 Jul 2019 11:15	24		0.0576	-2	2	25	-	-0.584052741	-25	-0.076923077	-7.140625	-6.4375	50.98852539	41.44140625
63	29-Jul-2019	11:30	55	Mon 29 Jul 2019 11:30	46		0.2116	-9	9	66	-	3.533734586	-66	-0.163636364	21.859375	15.5625	477.8322754	242.1914063
64	29-Jul-2019	11:45	31	Mon 29 Jul 2019 11:45	31		0.0961	0	0	0	=	-3.08098596	0	0	-2.140625	0.5625	4.582275391	0.31640625
65	12-Aug-2019	8:00	46	Mon 12 Aug 2019 08:00	33		0.1089	-13	13	74	-	8.428214381	-74	-0.282608696	12.859375	2.5625	165.3635254	6.56640625
66	12-Aug-2019	8:15	52	Mon 12 Aug 2019 08:15	40		0.16	-12	12	70	-	6.831894518	-70	-0.230769231	18.859375	9.5625	355.6760254	91.44140625
67	12-Aug-2019	8:30	53	Mon 12 Aug 2019 08:30	41		0.1681	-12	12	70	-	6.732507874	-70	-0.226415094	19.859375	10.5625	394.3947754	111.5664063
68	12-Aug-2019	8:45	46	Mon 12 Aug 2019 08:45	44		0.1936	-2	2	25	-	-2.571785619	-25	-0.043478261	12.859375	13.5625	165.3635254	183.9414063
69	12-Aug-2019	9:00	31	Mon 12 Aug 2019 09:00	29		0.0841	-2	2	25	-	-1.08098596	-25	-0.064516129	-2.140625	-1.4375	4.582275391	2.06640625
70	12-Aug-2019	9:15	35	Mon 12 Aug 2019 09:15	27		0.0729	-8	8	64	-	4.521467464	-64	-0.228571429	1.859375	-3.4375	3.457275391	11.81640625
71	12-Aug-2019	9:30	35	Mon 12 Aug 2019 09:30	48		0.2304	13	13	74	+	-16.47853254	74	0.371428571	1.859375	17.5625	3.457275391	308.4414063
72	12-Aug-2019	9:45	40	Mon 12 Aug 2019 09:45	22		0.0484	-18	18	76	-	14.02453424	-76	-0.45	6.859375	-8.4375	47.05102539	71.19140625
73	12-Aug-2019	10:00	26	Mon 12 Aug 2019 10:00	20		0.04	-6	6	58	-	3.415947259	-58	-0.230769231	-7.140625	-10.4375	50.98852539	108.9414063
74	12-Aug-2019	10:15	33	Mon 12 Aug 2019 10:15	22		0.0484	-11	11	69	-	7.720240752	-69	-0.333333333	-0.140625	-8.4375	0.019775391	71.19140625
75	12-Aug-2019	10:30	16	Mon 12 Aug 2019 10:30	19		0.0361	3	3	38	+	-4.590186302	38	0.1875	-17.140625	-11.4375	293.8010254	130.8164063
76	12-Aug-2019	10:45	20	Mon 12 Aug 2019 10:45	20		0.04	0	0	0	=	-1.987732878	0	0	-13.140625	-10.4375	172.6760254	108.9414063
77	12-Aug-2019	11:00	41	Mon 12 Aug 2019 11:00	34		0.1156	-7	7	61	-	2.925147601	-61	-0.170731707	12.859375	3.5625	61.76977539	12.69140625
78	12-Aug-2019																	

Average Auto Count/15min	36.9
Least Squares Slope	0.9006
R2	0.69 R2 is too low
sample size, n	79
T-test p-value	0.016172769
APD	-0.0274769
AAPD	0.149467498
A_bar	30.4375
M_bar	33.140625
r	0.830188743 r must be 0
Correction Factor	1.11

Sum of Automatic Count	Column Labels	
Row Labels	5/23/2019	8/2/2018 5/16/2018
8:00		34
8:15	176	40
8:30	147	41
8:45	114	42
9:00	92	42
9:15	69	40
9:30	61	29
9:45	40	35
10:00	22	21
10:15	38	20
10:30	26	21
10:45	26	22
11:00	44	24
11:15	25	28
11:30	31	40
11:45	54	27
Grand Total	965	506

