From: Massari, Renzo (EOM)

To: Patil, Venkatesh (OCTO-Contractor); Sokol, Matthew (OCTO)

Subject: Re: Veraset home location data

Date: Tuesday, November 3, 2020 10:39:45 AM

Thanks! Will do, though later today (in-between obsessive refreshes of election results).

Renzo

From: Patil, Venkatesh (OCTO-Contractor) < venkatesh.patil@dc.gov>

Sent: Tuesday, November 3, 2020 9:28 AM

To: Sokol, Matthew (OCTO) <matthew.sokol@dc.gov>; Massari, Renzo (EOM)

<renzo.massari@dc.gov>

Subject: RE: Veraset home location data

Hi Renzo,

Please go through the link =>

https://docs.cloudera.com/documentation/enterprise/latest/topics/impala\_create\_table.html

#### CREATE TABLE LIKE PARQUET:

The variation CREATE TABLE ... LIKE

' lets you skip the column definitions of the CREATE TABLE st

The column names and data types are automatically data file

Regards,

Venkatesh R Patil

System Integration Analyst

#### Enterprise Data Integration | Data APIs & Systems

Office of the Chief Technology Officer (OCTO),

Government of the District of Columbia

200 I St. SE, 5<sup>th</sup> Floor, #5419-P, Washington, DC 20003

Work: 202-654-6488 | Mobile: 202-430-4690 | Email: Venkatesh.Patil@dc.gov

Website: http://www.octo.dc.gov | opendata.dc.gov

Follow @OCTODC | @OpenDataDC



From: Sokol, Matthew (OCTO) <matthew.sokol@dc.gov>

Sent: Tuesday, November 3, 2020 9:23 AM

To: Massari, Renzo (EOM) < renzo.massari@dc.gov>

Cc: Patil, Venkatesh (OCTO-Contractor) < venkatesh.patil@dc.gov>

Subject: RE: Veraset home location data

I'm all for getting folks more hands on!

Perhaps Venkatesh could send you some quick tutorials or guides for this

#### **Matt Sokol**

Program Manager

Big Data & Data Integration
Office of the Chief Technology Officer (OCTO)
Government of the District of Columbia
matthew.sokol@dc.gov

Office: 202-478-2439 | Mobile: 202-306-5150

octo.dc.gov | Follow @OCTODC

From: Massari, Renzo (EOM) < renzo.massari@dc.gov>

Sent: Monday, November 2, 2020 6:54 PM

**To:** Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u>>

**Cc:** Patil, Venkatesh (OCTO-Contractor) < <u>venkatesh.patil@dc.gov</u>>

**Subject:** Re: Veraset home location data

Yes, and I'd love to learn to do it, honestly.

Get Outlook for Android

From: Sokol, Matthew (OCTO) < matthew.sokol@dc.gov>

**Sent:** Monday, November 2, 2020 6:53:10 PM

**To:** Massari, Renzo (EOM) < renzo.massari@dc.gov>

**Cc:** Patil, Venkatesh (OCTO-Contractor) < <u>venkatesh.patil@dc.gov</u>>

**Subject:** RE: Veraset home location data

Hi Renzo,

Thanks for grabbing the data. If it's got the PII in it, then yes, let's make sure it gets to Level 3 or with the rest of the Veraset data.

I'll let Venkatesh comment on the best way to push it up there. I would imagine there's an easy to follow process to get it from your local HDD to the Data Lake that he can provide you with. Not ideal to have to send it to him via SFTP or Box or some other file sharing process, but if you can't get it to upload correctly, we can work on that. Or if he had to, he could grab it from the but since you already have it, definitely worth trying it from your side first!

Thanks	ļ
Matt	

Thanks, Matt

## **Matt Sokol**

Program Manager

Big Data & Data Integration
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matthew.sokol@dc.gov

Office: 202-478-2439 | Mobile: 202-306-5150

octo.dc.gov | Follow @OCTODC

From: Massari, Renzo (EOM) < renzo.massari@dc.gov>

Sent: Monday, November 2, 2020 4:41 PM

**To:** Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u>>

**Subject:** Veraset home location data

Hi Matt! I just downloaded the data Veraset shared, their 2020/09 home location data built from their cellphone mobility data. It came from an and now I have 127 files in my HDD which, together, make one table. I'd like to upload them to the datalake. It's Level-3 security. Is this a good way to proceed, me uploading the file to build a single table in database?

Thanks!

Renzo

For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit <u>coronavirus.dc.gov</u>.

From: Nicole

To: Massari, Renzo (EOM)
Subject: Re: Veraset Home Data Access

Date: Friday, December 11, 2020 4:09:22 PM

Attachments: image.png

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#### Hi Renzo,

I'm glad to hear everything is working okay for you! I had a nice week and I hope you're doing well too:)

stay safe and looking forward to talking soon!

-Nicole

**Nicole** 

**Veraset** | Customer Success

@veraset.com

On Fri, Dec 11, 2020 at 11:52 AM Massari, Renzo (EOM) < renzo.massari@dc.gov > wrote:

Sorry! I got confused with the dates of the email. Please ignore.

ps. Hope you're having a good week and will have a great weekend!

From: Massari, Renzo (EOM) < renzo.massari@dc.gov>

**Sent:** Friday, December 11, 2020 11:50 AM

**To:** Nicole <u>@veraset.com</u>> **Subject:** Re: Veraset Home Data Access



From: Nicole <u>@veraset.com</u>>
Sent: Thursday, October 29, 2020 8:10 AM

To: Massari, Renzo (EOM) < renzo.massari@dc.gov>

Subject: Veraset Home Data Access

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Nicole has sent you an email via Gmail confidential mode:



# Veraset Home Data Access

This message was sent on Oct 29, 2020 at 5:10:44 AM PDT You can open it by clicking the link below. This link will only work for renzo.massari@dc.gov.

View the email

Gmail confidential mode gives you more control over the messages you send. The sender may have chosen to set an expiration time, disable printing or forwarding, or track access to this message. <u>Learn more</u>

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Google LLC, 1600 Amphitheatre Parkway, Mountain View, CA 94043, USA You have received this message because someone sent you an email via Gmail confidential mode.



For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit <u>coronavirus.dc.gov</u>.

From: Massari, Renzo (EOM)

To: Krucoff, Barney (OCTO); Phillips, Joy (OP)

Cc: Bukowiecki, Tomash (OCTO); Bess, Alex (OCTO); Quinney, Sam (EOM)

**Subject:** Re: Request from DC Health: Number of cellphones in DC

**Date:** Thursday, October 22, 2020 9:10:18 AM

Hi! So neither the Veraset data nor the Replica data is good for this. But I believe the Census' American Community Survey (ACS) has the info. I'll look into it when I get a break at the conference.

Hope that helps,

Renzo

**From:** Krucoff, Barney (OCTO) <Barney.Krucoff@dc.gov>

Sent: Wednesday, October 21, 2020 6:07 PM

To: Phillips, Joy (OP) <joy.phillips@dc.gov>; Massari, Renzo (EOM) <renzo.massari@dc.gov>

Cc: Bukowiecki, Tomash (OCTO) <tomash.bukowiecki1@dc.gov>; Bess, Alex (OCTO)

<Alex.Bess@dc.gov>; Quinney, Sam (EOM) <sam.quinney@dc.gov>
Subject: Request from DC Health: Number of cellphones in DC

Joy, Renzo,

OCTO got an interesting question from DC Health. As you probably know DC Health has rolled out a cell phone app called DC COVID Alert Notice (DC CAN), <a href="https://coronavirus.dc.gov/dccan">https://coronavirus.dc.gov/dccan</a>. They want to understand how much market penetration the app is getting. From Apple and Google they know how many times the app has been activated. Think of those activations as the numerator. DC Health also wants to estimate the denominator which would be how many cellphones are active in DC on a typical day. I'm hoping Renzo might have a way to estimate that number with mobility data and or Joy might have a way to estimate that number with Census data? Let's think about it, not tonight, tomorrow.

Feel free to respond on this tread. Alex Bess coordinates OCTO support for DC Health and he may reach out.

Thanks, Barney

Barney Krucoff
Chief Data Officer | District of Columbia
Office of the Chief Technology Officer (OCTO)
Office: 202-478-5835 | Cell: 202-412-9408

Website: octo.dc.gov | opendata.dc.gov

For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit <u>coronavirus.dc.gov</u>.

From: Gan, Katie (EOM)

To: Sokol, Matthew (OCTO); Krucoff, Barney (OCTO)
Cc: Quinney, Sam (EOM); Mammo, Nat (EOM)
Subject: RE: Q3 updates for OCTO/OCA strategic initiative
Date: Tuesday, October 27, 2020 11:00:55 AM

Thanks, Matt! I'll revise our submission so it's consistent.

Katie

Katie Gan

katie.gan@dc.gov | (202) 341-5910

From: Sokol, Matthew (OCTO) <matthew.sokol@dc.gov>

Sent: Tuesday, October 27, 2020 11:00 AM

**To:** Gan, Katie (EOM) <katie.gan@dc.gov>; Krucoff, Barney (OCTO) <Barney.Krucoff@dc.gov> **Cc:** Quinney, Sam (EOM) <sam.quinney@dc.gov>; Mammo, Nat (EOM) <Nat.Mammo@dc.gov>

**Subject:** RE: Q3 updates for OCTO/OCA strategic initiative

Hi Katie,

Here's what I put in as the OCTO submission:

- A. Full encryption, with Multi-Factor Authentication using OCTO SecureAuth tool, for both Jupyter Hub and Hue tools has been implemented. The Data Lake is being upgraded to a newer version of the base software for enhanced security, easier authentication for end-users, and better processing tools.
- 2. The addition of new datasets for The Lab is on-going. DCPS Student Attendance project data, Veraset, SafeGraph and Replica mobile device movement data for COVID-19 support and agency call center records are now available in the Data Lake. This amounts to over 13 billion records.
- 3. A draft of a universal data sharing agreement that aims to create a multilateral agreement among agencies and organizations has been drafted and has been provided to EOM OGC for feedback. In addition, a Privacy Impact Assessment (PIA) on the Data Lake was completed and awaiting final legal review.

-Matt

#### **Matt Sokol**

Program Manager

Big Data & Data Integration
Office of the Chief Technology Officer (OCTO)
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matthew.sokol@dc.gov

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octo.dc.gov | Follow @OCTODC

From: Gan, Katie (EOM) < katie.gan@dc.gov > Sent: Tuesday, October 27, 2020 10:58 AM

**To:** Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u>>; Krucoff, Barney (OCTO) < <u>Barney.Krucoff@dc.gov</u>>

Cc: Quinney, Sam (EOM) < sam.quinney@dc.gov >; Mammo, Nat (EOM) < Nat.Mammo@dc.gov >

**Subject:** RE: Q3 updates for OCTO/OCA strategic initiative

Hi Matt and Barney,

Performance time again! Can you confirm that the following reflects our joint work on the data governance strategic initiative through the end of FY20? I've highlighted a couple areas that may have been updated since we last reported.

Thanks,

Katie

Q4:

a)		
b)		
c)		

Katie Gan

katie.gan@dc.gov | (202) 341-5910

From: Sokol, Matthew (OCTO) < matthew.sokol@dc.gov>

**Sent:** Wednesday, July 15, 2020 3:10 PM

**To:** Gan, Katie (EOM) < <u>katie.gan@dc.gov</u>>; Krucoff, Barney (OCTO) < <u>Barney.Krucoff@dc.gov</u>> **Cc:** Quinney, Sam (EOM) < <u>sam.quinney@dc.gov</u>>; Mammo, Nat (EOM) < <u>Nat.Mammo@dc.gov</u>>

**Subject:** RE: Q3 updates for OCTO/OCA strategic initiative

12 billion is good

From: Sokol, Matthew (OCTO)

**Sent:** Tuesday, July 14, 2020 2:37 PM

**To:** Gan, Katie (EOM) < <a href="mailto:katie.gan@dc.gov">katie.gan@dc.gov">krucoff, Barney (OCTO) < <a href="mailto:Barney.Krucoff@dc.gov">Barney.Krucoff@dc.gov</a> **Cc:** Quinney, Sam (EOM) < <a href="mailto:katie.gan@dc.gov">katie.gan@dc.gov</a> 

How the same of the same of

**Subject:** RE: Q3 updates for OCTO/OCA strategic initiative

I'll get the exact number but I'm pretty sure its over 12 billion

**From:** Gan, Katie (EOM) < <u>katie.gan@dc.gov</u>>

**Sent:** Tuesday, July 14, 2020 2:25 PM

**To:** Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u>>; Krucoff, Barney (OCTO)

<<u>Barney.Krucoff@dc.gov</u>>

**Cc:** Quinney, Sam (EOM) < sam.quinney@dc.gov >; Mammo, Nat (EOM) < Nat.Mammo@dc.gov >

**Subject:** RE: Q3 updates for OCTO/OCA strategic initiative

Thanks! What's the number of records?

Katie

Katie Gan

katie.gan@dc.gov | (202) 341-5910

From: Sokol, Matthew (OCTO) < matthew.sokol@dc.gov>

**Sent:** Tuesday, July 14, 2020 2:25 PM

**To:** Gan, Katie (EOM) < <u>katie.gan@dc.gov</u>>; Krucoff, Barney (OCTO) < <u>Barney.Krucoff@dc.gov</u>> **Cc:** Quinney, Sam (EOM) < <u>sam.quinney@dc.gov</u>>; Mammo, Nat (EOM) < <u>Nat.Mammo@dc.gov</u>>

Subject: RE: Q3 updates for OCTO/OCA strategic initiative

Hi Katie,

The total size of DCPS+Replica+Veraset data is 1.75 TB. I think the record count is more impressive to report on. In general the bytes of data are small but the volume of records is high.

-Matt

From: Sokol, Matthew (OCTO)

**Sent:** Tuesday, July 14, 2020 12:21 PM

**To:** Gan, Katie (EOM) < <a href="mailto:katie.gan@dc.gov">katie.gan@dc.gov">krucoff, Barney (OCTO) < <a href="mailto:Barney.Krucoff@dc.gov">Barney.Krucoff@dc.gov</a> > Cc: Quinney, Sam (EOM) < <a href="mailto:katie.gan@dc.gov">kat.Mammo@dc.gov</a> > Mat.Mammo@dc.gov > At.Mammo@dc.gov > Cc: Quinney, Sam (EOM) < <a href="mailto:katie.gan@dc.gov">kat.Mammo@dc.gov</a> > Cc: Quinney, Sam (EOM) < <a href="ma

**Subject:** RE: Q3 updates for OCTO/OCA strategic initiative

Hi Katie,

I think that's OK – but will let Barney confirm.

Let me see if I can get the size of the storage for you.

Thanks,

Matt

From: Gan, Katie (EOM) < <a href="mailto:katie.gan@dc.gov">katie.gan@dc.gov</a>>

**Sent:** Tuesday, July 14, 2020 12:19 PM

**To:** Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u>>; Krucoff, Barney (OCTO)

## <<u>Barney.Krucoff@dc.gov</u>>

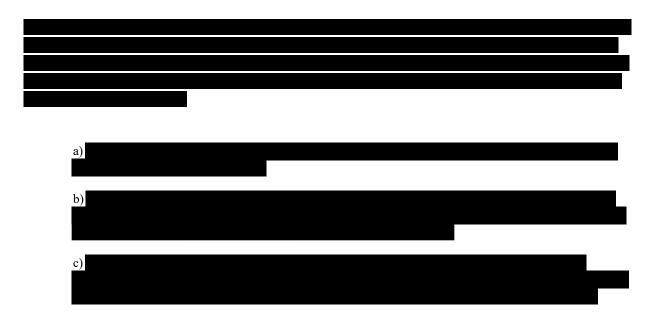
**Cc:** Quinney, Sam (EOM) < sam.quinney@dc.gov >; Mammo, Nat (EOM) < Nat.Mammo@dc.gov >

**Subject:** Q3 updates for OCTO/OCA strategic initiative

Hi Matt and Barney,

We're reporting on 2020 Q3 performance report for the joint OCTO/OCA Data Governance strategic initiative based on what we submitted last round. Seems like Q2 wasn't that long ago...

Can you please revise/confirm today that the following is fine to submit?



Thanks, Katie

Katie Gan (she/her/hers)
Deputy Director, The Lab @ DC
Office of the City Administrator
Executive Office of the Mayor
<a href="mailto:katie.gan@dc.gov">katie.gan@dc.gov</a> | 202-341-5910
<a href="mailto:thelab.dc.gov">thelab.dc.gov</a> | @TheLab\_DC

For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit <u>coronavirus.dc.gov</u>.

From: Sokol Matthew (OCTO)

To: Massari Renzo (EOM); Patil Venkatesh (OCTO-Contractor)

Cc: Quinney Sam (EOM); Mei Vicky (EOM); Mammo Nat (EOM); Gan Katie (EOM); Bukowiecki Tomash (OCTO); Krucoff Barney (OCTO)

Subject: RE: Fw: movement data from phones for Covid-19 planning

**Date:** Thursday, October 29, 2020 1:46:25 PM

--Veraset team

Hi Renzo,

Sorry, wanted to loop back on this. What file were we supposed to grab from them and put into the Data Lake?

Thanks,

Matt

#### **Matt Sokol**

Program Manager

Big Data & Data Integration
Office of the Chief Technology Officer (OCTO)
Government of the District of Columbia
matthew.sokol@dc.gov

Office: 202-478-2439 | Mobile: 202-306-5150

octo.dc.gov | Follow @OCTODC

From: Nicole @veraset.com>
Sent: Thursday, October 29, 2020 8:21 AM

To: Massari, Renzo (EOM) < renzo.massari@dc.gov>

Subject: Re: Fw: movement data from phones for Covid-19 planning

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Hi Renzo,

No worries at all, getting emails caught in drafts happens to all of us.

I've shared the credentials with you separately and please let me know if you have any issues pulling the data.

We look forward to speaking with you again on the 4th and we hope all of your voting lines are as small as possible in the meantime:)

Best,

Nicole

Nicole

**Veraset | Customer Success** 

@veraset.com

On Wed, Oct 28, 2020 at 11:06 PM Massari, Renzo (EOM) < renzo.massari@dc.gov > wrote:

Hi Nicole,

Alas, the story of my life: the email I wrote last week to thank all of you at Veraset for your time... was still in my Drafts folder, as I realized only when your email came in and pulled it out from its hiding place. If I had a penny for every time...

So first of all: thank YOU all, Nicole, Vai, Steve, for your time and your willingness to share your data to help the District.

Oh, and thanks for sending the Home Location Schema!

me know how	asked the datalake team about the file you offered to share, but I haven't heard back from them. So please lo you prefer to share it directly with me, as per our conversation. I'll retrieve it and upload it to the datalake. endly.com, I just sent a meeting for Dec 4th at 2pm (EST). Hope to have lots to share by then!
Have a great m Renzo	onth (and insert dark joke about the elections next week here),
From: Nicole	@veraset.com>
The state of the s	ay, October 28, 2020 6:48 PM
To: Vai	@veraset.com>
	tesh (OCTO-Contractor) < <u>venkatesh.patil@dc.gov</u> >; Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u> >; Massari, Ren hassari@dc.gov>; Parker Ence <u>@veraset.com</u> >; Quinney, Sam (EOM) < <u>sam.quinney@dc.gov</u> >; Mei, Vicky (EOI
	gov>; Mammo, Nat (EOM) < <u>Nat.Mammo@dc.gov</u> >; Gan, Katie (EOM) < <u>katie.gan@dc.gov</u> >; Bukowiecki, Tomash (OC
<tomash.bukow< th=""><th><pre>_@veraset.com&gt;; Krucoff, Barney (OCTO) <barney.krucoff@dc.gov></barney.krucoff@dc.gov></pre></th></tomash.bukow<>	<pre>_@veraset.com&gt;; Krucoff, Barney (OCTO) <barney.krucoff@dc.gov></barney.krucoff@dc.gov></pre>
Subject: Re: Fw	movement data from phones for Covid-19 planning
	nail originated from outside of the DC Government. Do not click on links or open attachments unless you recognize the sender and knoss safe. If you believe that this email is suspicious, please forward to <a href="mailto:phishing@dc.gov">phishing@dc.gov</a> for additional analysis by OCTO Security Operation
Hi Renzo,	
Thank you for y	our time meeting with us last week.
We are hopeful	that the Home Panel data will help cut down on some of the processing and compute time that made the initial
movement data	difficult to analyze. I've attached the schema here, and I'll follow up separately to share access/secret keys for a
September data	sample.
	e'd be happy to regroup in a month to get your feedback on how this data, combined with the movement data, is ab
align with the d	ata you're also receiving from Replica. Do you have any availability November 24th or December 2nd? You can see
availability here	: https://calendly.com/c/DCAQRIHK3PJOFC3Y
Looking forward	to reconnecting soon,
Nicole	
Nicole	
Veraset   Custo	
@veraset	.com
On Thu, Oct 22,	2020 at 3:09 PM Vai
Hi Venkatesh	and Team,
Thanks a lot f	or your help in identifying the access issues and ingesting the required movement dataset.
Veraset has c	hanged the Visits data delivery format from format and, for now, doesn't have an easier way to rewr
the data in	. Based on Renzo's earlier comment, if Visits data is not required for the analysis, can we ignore it for now and expes to solve the file formats if required.
Thanks,	
Vai	
On Thu, Oct 2	22, 2020 at 8:38 AM Patil, Venkatesh (OCTO-Contractor) < <u>venkatesh.patil@dc.gov</u> > wrote:
Thanks V	aibhav, I can connect now with new key.
All,	
The state of the s	are in costs of the healt-filled Marrowsent Data into our detail.
	ave ingested the backfilled Movement Data into our data-lake.
	overnent Data (

Earlier Record Count =

Current Record Count=

Hi Vaibhav,

The Visits data format that we received earlier was format, however the recent backfilled data that you have uploaded has format. Could you please upload the csv.gz format data.

Regards,

Venkatesh R Patil

System Integration Analyst

Enterprise Data Integration | Data APIs & Systems

Office of the Chief Technology Officer (OCTO),

Government of the District of Columbia

200 I St. SE, 5th Floor, #5419-P, Washington, DC 20003

Work: 202-654-6488 | Mobile: 202-430-4690 | Email: Venkatesh Patil@dc gov

Website: http://www.octo.dc.gov | opendata.dc.gov

Follow @OCTODC | @OpenDataDC



From: Vai <u>@veraset.com</u>>
Sent: Friday, October 16, 2020 4:32 PM

To: Patil, Venkatesh (OCTO-Contractor) < venkatesh.patil@dc.gov>

Cc: Sokol, Matthew (OCTO) <<u>matthew.sokol@dc.gov</u>>; Massari, Renzo (EOM) <<u>renzo.massari@dc.gov</u>>; Parker Ence @veraset.com>; Quinney, Sam (EOM) <<u>sam.quinney@dc.gov</u>>; Nicole @veraset.com>; Mei, Vicky (EOM) <<u>Vicky.Mei@dc.gov</u>>; Mammo, Nat (EOM) <<u>Nat.Mammo@dc.gov</u>>; Gan, Katie (EOM) <<u>katie.gan@dc.gov</u>>; Bukowiecki, Tomash (OCTO) <<u>tomash.bukowiecki1@dc.gov</u>>; Steve (OCTO) <<u>Barney.Krucoff@dc.gov</u>>

Subject: Re: Fw: movement data from phones for Covid-19 planning

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@Venkatesh - Thanks for clarifying that. I have configured a new key and emailed it to you directly as a secured email. Please give it a try and let me know if that works.

@Renzo - What dataset was more helpful to your team? Raw Movement of Visits?

Visits - We have backfilled all the Visits data from July 27 - September 28 in the shared folder. Movement - We have data from Aug 17 - September 30 in the shared folder. If you need data from July 27-Aug 17, we can do a backfill of this data. Please confirm.

Thanks, Vai
On Wed, Oct 14, 2020 at 7:01 AM Patil, Venkatesh (OCTO-Contractor) < venkatesh.patil@dc.gov > wrote:
Hi Vaibhav,
We are using AWS Access Key , which currently does not have access to the bucket since July 27 <sup>th</sup> . Could you please give access to above key.
The key was used earlier during ProofOfConcept phase for a brief period of time, then we saw connectivity issue, to overcome which you had provided a new Key =
Regards,
Venkatesh R Patil
System Integration Analyst
Enterprise Data Integration   Data APIs & Systems
Office of the Chief Technology Officer (OCTO),
Government of the District of Columbia
200 I St. SE, 5 <sup>th</sup> Floor, #5419-P, Washington, DC 20003
Work: 202-654-6488   Mobile: 202-430-4690   Email: Venkatesh Patil@dc gov
Webs te: http://www.octo.dc.gov   opendata.dc.gov  Follow @OCTODC   @OpenDataDC
octo arca or to construction concas
From: Sokol, Matthew (OCTO) < matthew.sokol@dc.gov > Sent: Wednesday, October 14, 2020 9:45 AM  To: Massari, Renzo (EOM) < massari@dc.gov >; Vai
Hi Vai,
It looks like our current Key isn't working for this new bucket.

I've added Venkatesh from my team who will develop the pipeline.

Thanks, Matt **Matt Sokol** Program Manager Big Data & Data Integration Office of the Chief Technology Officer (OCTO) Government of the District of Columbia matthew.sokol@dc.gov Office: 202-478-2439 | Mobile: 202-306-5150 octo.dc.gov | Follow @OCTODC From: Massari, Renzo (EOM) < renzo massari@dc.gov> Sent: Tuesday, October 13, 2020 11:38 PM @veraset.com>; Parker Ence pence@veraset.com> Cc: Quinney, Sam (EOM) < sam.quinney@dc.gov>; Nicole @veraset.com>; Mei, Vicky (EOM) < <u>Vicky.Mei@dc.gov</u>>; Mammo, Nat (EOM) < <u>Nat.Mammo@dc.gov</u>>; Sokol, Matthew (OCTO) <a href="mailto:swiecki.gov">mailto:swiecki.gov">mailto:swiecki.gov</a>; Gan, Katie (EOM) <a href="mailto:swiecki.gov">katie.gan@dc.gov</a>; Bukowiecki, Tomash (OCTO) <a href="mailto:swiecki.gov">tomash.bukowiecki.gov</a>; Steve <Barney.Krucoff@dc.gov> Subject: Re: Fw: movement data from phones for Covid-19 planning Vai, Thank you so much! Greatly appreciated. I reached out to our datalake team to ingest this data asap. Best, Renzo From: Vai @veraset.com> Sent: Tuesday, October 13, 2020 6:51 PM **To:** Parker Ence < pence@veraset.com> Cc: Massari, Renzo (EOM) < renzo massari@dc.gov >; Quinney, Sam (EOM) < sam.quinney@dc.gov >; Nicole @veraset.com>; Mei, Vicky (EOM) < Vicky.Mei@dc.gov>; Mammo, Nat (EOM) < Nat.Mammo@dc.gov> Sokol, Matthew (OCTO) < matthew.sokol@dc.gov>; Gan, Katie (EOM) < katie.gan@dc.gov>; Bukowiecki, Tomash @veraset.com>; Krucoff, Barney (OCTO) (OCTO) < tomash.bukowiecki1@dc.gov >; Steve <Barney.Krucoff@dc.gov> Subject: Re: Fw: movement data from phones for Covid-19 planning CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to phishing@dc gov for additional analysis by OCTO

Security Operations Center (SOC)

Hi Renzo,

This bucket already has data between August 14 and September 30. I highly recommend you copy this data asap as this bucket has a lifecycle policy to delete 60 days older data.

For data between July 27th and August 14 - We are internally discussing the possibility of reprocessing that data. As the config was deleted and data has already been deleted by lifecycle policy, rerunning the data would almost mean onboarding a new customer and processing days of data. We will get back to you once we identify a potential solution for that.

Thanks, Vai

On Mon, Oct 12, 2020 at 4:07 PM Parker Ence

Hi Renzo, Nicole is OOO today but will respond tomorrow.

We can renew your access so that you can get the data up through September 30th.

As for your goals, can we set up a phone call to discuss your normalization efforts with synthetic data? May be able to connect you with some resources but need a deeper understanding of the problem

On Sun, Oct 11, 2020 at 10:20 PM Massari, Renzo (EOM) < renzo massari@dc.gov > wrote:

Hi Parker, Nicole,

First of all, I apologize for the delay in replying. I was out of office last week and was trying to truly be out of office. So please, if you can send us some options for later in this week or next, I'll make it happen.

As to our access to the data stopping on July 27, I had our datalake team check and what they found is that the AWS Access Key given to us expired that day.

Now, I naively assumed that meant the data sharing agreement had come to an end and I should have confirmed with you.

If it is at all possible to renew a key so we can update our data between July 27th and September 30th, we would greatly appreciate it.

Now, you might wonder why we are interested in updating the data. That has to do with the conversation I owe you about the challenges that we found.

At its most basic, we come from a statistical background, so our first effort was to understand data quality. And because of the needs of the DC Dept of Health, we had a priority of trying to pin mobility to demographic characteristics. Unfortunately,

made this exceedingly

complicated.

In the meantime, we gained access to a data source that may provide use with something approximating ground truth (mobility data based on synthetic populations and calibrated with ground truth).

However, in the last few weeks, we have begun to think that we can use that data in combination with yours, so that we can assign weights, calibrated continuously, to answer questions that are "averaged out" by the modeled nature of the synthetic population.

So in the next few months, as we get access to the API to query the synthetic data, we were hoping to run some tests with the data you had already shared with us (ideally, up to September 30th, not just July 27th) to find out if can finally unlock its value.

Hope to talk to you sometime this week or next,

Renzo

Subject: Re: Fw: movement data from phones for Covid-19 planning

Hi Parker and Nicole,

Absolutely, its the least we could do to thank you for your generosity -- it's the close of the fiscal year today so our schedules are a bit rough right now. Renzo led the data science team that worked with the data and will be out next, and I'd like them to be able to join. Would it be possible to schedule some time the week of 10/12? If there are particular days/times that work for you, I'm sure we can find one that will work on our end.

Best,

Sam

Sam Quinney (he/him/his)

Director of The Lab @ DC

Executive Office of the Mayor

Office of the City Administrator

Sam.Quinney@dc.gov | (202) 394-4468

thelab.dc.gov | @TheLab DC

From: Parker Ence Sent: Wednesday, September 30, 2020 3:58 PM To: Nicole  Cc: Quinney, Sam (EOM) <sam.quinney@dc.gov. vicky.mei@dc.gov="">; Mammo, Nat (EOM) <nat. <a="" href="mailto:matthew.sokol@dc.gov">matthew.sokol@dc.gov&gt;; Massari, Renzo (EOM) <a href="mailto:katie.gam@dc.gov">matthew.sokol@dc.gov&gt;; Bukowiecki, Tomash (OCTO) @veraset.com&gt;; Krucoff, Barney (OCTO) Subject: Re: Fw: movement data from phones for</a></nat.></sam.quinney@dc.gov.>	.Mammo@dc.gov>; Sokol, Matthew (OCTO) ) <renzo massari@dc.gov="">; Gan, Katie (EOM) D) <tomash.bukowiecki1@dc.gov>; Steve <barney.krucoff@dc.gov></barney.krucoff@dc.gov></tomash.bukowiecki1@dc.gov></renzo>
	overnment Do not click on links or open attachments unless you recognize the is email is suspicious, please forward to <a href="mailto:phishing@dc gov">phishing@dc gov</a> for additional
A call would be great, or even just an email responsifrom the data - this will help us improve the data p	se describing why you weren't able to generate actionable insights roduct over time
Parker	
On Wed, Sep 30, 2020 at 12:57 PM Nicole  Hi Everyone,	@veraset.com> wrote:
	not receive data tomorrow. Please let me know if we can set up a sally appreciate your feedback on using the data so that we can
Thank you,	
Nicole	
Nicole	
Veraset   Customer Success  @veraset.com	
On Tue, Sep 29, 2020 at 12:12 PM Nicole	@veraset.com> wrote:
Hi Sam,	
Chiming in here. Thank you for providing thi There are many difficult priorities to balance a	s update. We hope that your toddler is starting to feel better. at this time, but family is the most important.
We would really appreciate setting up a call to priorities that lead to this decision. We're ava	b learn more about some of the challenges and alternative ilable at the following times to discuss:
- Tomorrow, September 30 at 2:00 or 2:30pm	EST

- Thursday, October 1st at 4:00 or 4:30pm EST
- Monday, October 5th at 3:00 or 3:30pm EST
Please let me know if any of these work for you and I'll send out an invite.
Based on this discussion we will also move to turn off your data feed. I will follow up to confirm the timeline for this update.
Thank you,
Nicole
Best,
Nicole
Nicole
Veraset   Customer Success
@veraset.com
On Sat, Sep 26, 2020 at 2:42 PM Quinney, Sam (EOM) < sam.quinney@dc.gov > wrote:
Hi, Parker
Sorry for the delay, I've had a sick toddler in back-to-back weeks that's thrown a wrench in my schedule and my inbox. If I recall, you're a parent too, so I imagine you can empathize.
Thanks so much for reaching back out, and for the opportunity to work with this data. Using Veraset data prove to be an excellent baptism by fire for our big data lake in that having such massive, massive regularly updating tables forced us to make leaps forward in both how the data lake is setup and how our data scientists use it. It was also a great opportunity for us to learn about the strengths and weaknesses of using mobility data for DC's COVID response. In the end, although it was an invaluable developmental experience, we didn't find a use case for it, due in equal parts to the limitations of app-based data and competing priorities within DC government.
That said, we'd be happy to talk through what we learned and some of the types of analyses we did. Let us know what would be best for you.
Thanks again,
Sam
Sam Quinney (he/him/his)

Director of The Lab @ DC Executive Office of the Mayor Office of the City Administrator Sam.Quinney@dc.gov | (202) 394-4468 thelab.dc.gov | @TheLab\_DC From: Parker Ence @veraset.com> Sent: Wednesday, September 16, 2020 12:46 PM @veraset.com> To: Vai Cc: Quinney, Sam (EOM) <sam.quinney@dc.gov>; Mei, Vicky (EOM) <Vicky.Mei@dc.gov>; Mammo, Nat (EOM) <<u>Nat.Mammo@dc.gov</u>>; Sokol, Matthew (OCTO) <<u>matthew.sokol@dc.gov</u>>; Massari, Renzo (EOM) <re>renzo massari@dc.gov</r>; Moore, Ryan (EOM) <<u>Ryan.Moore2@dc.gov</u></r>; Gan, Katie (EOM) <a href="mailto:sukowiecki.gov"><a href="mailto:sukowiecki1@dc.gov"><a href="mailto:sukowiecki1@dc.gov @veraset.com>; Nicole @veraset.com> Subject: Re: Fw: movement data from phones for Covid-19 planning CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe. If you believe that this email is suspicious, please forward to phishing@dc gov for additional analysis by OCTO Security Operations Center (SOC) Hi Sam, Noticed that daily data deliveries under our data sharing agreement expires Sept 30. Should we set up a call to review progress (we are super interested in learning more about what you've built with the data!) and explore potential next steps? Parker On Fri, Apr 10, 2020 at 7:38 PM Vai @veraset.com > wrote: Hi Sam, latitudes/longitudes and could be challenging in processing. Can we use a The WKTs file has over less precise WKT or target certain DMAs Thanks, Vai Example - POLYGON((-76.94421451091527 39.71567449589378,-77.17492740154027 39.71989984436753,-77.89453189372777 39.412891592535225,-78.5000484141552 38.86273638838894,-78.77265853249891 38.15919457475098,-78.28926009499891 38.24552857295554,-77.84980696999891 38.271408804684974,-77.06977767312391 38.15055554491995,-76.68525618874891 38.202374371201024,-76.27876204812391

38.18510552346187,-76.53144759499891 38.62418048144598,-76.888503259061 39.12453442470524,-77.06467431467584 39.35280222901882,-76.944214510915	
39.71567449589378))	

----- Forwarded message -----

From: Quinney, Sam (EOM) < sam.quinney@dc.gov>

Date: Fri, Apr 10, 2020 at 11:39 AM

Subject: Re: Fw: movement data from phones for Covid-19 planning

To: Parker Ence

@veraset.com> Cc: Mei, Vicky (EOM) < Vicky.Mei@dc.gov >, Mammo, Nat (EOM) < Nat.Mammo@dc.gov >, Sokol, Matthew (OCTO) < matthew.sokol@dc.gov >, Massari, Renzo (EOM) < matthew.sokol@dc.gov >, Moore, Ryan (EOM) < Ryan. Moore 2@dc.gov >, Gan, Katie (EOM) < katie.gan@dc.gov >, Bukowiecki, Tomash (OCTO) < tomash.bukowiecki1@dc.gov>

Hi, Parker

Attached please find the signed agreement -- once you sign, would you be able to send back the final copy?

We've also attached a wkt string for the DC Metropolitan Statistical Area. Let us know if this works on your end.

If everything looks good on your end, we're ready to work on getting the data flowing either today or early next week. Just let us know what next steps we can help with. Matt, Tomash and the rest of their team will be doing the primary work to connect the systems and have been investigating an s3 solution.

Thanks again!!

Sam

#### Sam Quinney

Director of The Lab @ DC

Executive Office of the Mayor

Office of the City Administrator

Sam.Quinney@dc.gov | (202) 394-4468

From: Quinney, Sam (EOM) < sam.quinney@dc.gov>

Sent: Thursday, April 9, 2020 2:37 PM To: Parker Ence @veraset.com>

Cc: Mei, Vicky (EOM) < Vicky.Mei@dc.gov>; Mammo, Nat (EOM) < Nat.Mammo@dc.gov>; Sokol, Matthew (OCTO) < matthew.sokol@dc.gov >; Massari, Renzo (EOM) < matthew.sokol@dc.gov >; Moore, Ryan (EOM) < Ryan.Moore2@dc.gov>; Gan, Katie (EOM) < katie.gan@dc.gov>; Bukowiecki, Tomash

(OCTO) < tomash.bukowiecki1@dc.gov>

Subject: Re: Fw: movement data from phones for Covid-19 planning

Okay, great, we'll sign it and send it your way.
Best,
Sam
Sam Quinney
Director of The Lab @ DC
Executive Office of the Mayor
Office of the City Administrator
Sam.Quinney@dc.gov   (202) 394-4468
From: Parker Ence  @veraset.com> Sent: Thursday, April 9, 2020 2:31 PM To: Quinney, Sam (EOM) <sam.quinney@dc.gov> Cc: Mei, Vicky (EOM) <vicky.mei@dc.gov>; Mammo, Nat (EOM) <nat.mammo@dc.gov>; Sokol, Matthew (OCTO) <matthew.sokol@dc.gov>; Massari, Renzo (EOM) <mathem.moore2@dc.gov>; Moore, Ryan (EOM) <ryan.moore2@dc.gov>; Gan, Katie (EOM) <katie.gan@dc.gov>; Bukowiecki Tomash (OCTO) <tomash.bukowiecki1@dc.gov> Subject: Re: Fw: movement data from phones for Covid-19 planning</tomash.bukowiecki1@dc.gov></katie.gan@dc.gov></ryan.moore2@dc.gov></mathem.moore2@dc.gov></matthew.sokol@dc.gov></nat.mammo@dc.gov></vicky.mei@dc.gov></sam.quinney@dc.gov>
CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to <a href="mailto:phishing@de gov">phishing@de gov</a> for additional analysis by OCTO Security Operations Center (SOC)
A hard signature on a PDF is fine - looks good!
Parker
On Thu, Apr 9, 2020 at 12:29 PM Quinney, Sam (EOM) < sam.quinney@dc.gov> wrote:
Hi, Parker
Thanks again for turning this around so quickly. We just filled in an end date of September 30 and the information for the City Administrator and me as signatories. If this looks good on your end, we are all set to sign. For weird reasons, it's actually fastest on our end to just a hard signature for the City Administrator, would it work for us to just send you a signed PDF of the final version? No worries if you'd prefer DocuSign, just let us know.
Best,

Sam Sam Quinney Director of The Lab @ DC Executive Office of the Mayor Office of the City Administrator Sam.Quinney@dc.gov | (202) 394-4468 From: Parker Ence <u>@veraset.com</u>>
Sent: Wednesday, April 8, 2020 7:01 PM To: Quinney, Sam (EOM) < sam.quinney@dc.gov> Cc: Mei, Vicky (EOM) < Vicky.Mei@dc.gov >; Mammo, Nat (EOM) < Nat.Mammo@dc.gov >; Sokol, Matthew (OCTO) < matthew.sokol@dc.gov >; Massari, Renzo (EOM) < massari@dc.gov >; Moore, Ryan (EOM) < Ryan.Moore2@dc.gov >; Gan, Katie (EOM) < katie.gan@dc.gov > Subject: Re: Fw: movement data from phones for Covid-19 planning CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to phishing@dc gov for additional analysis by OCTO Security Operations Center (SOC) Hi Sam, great meeting with you all today. I attached a new redline version for you to review (minor edits) and a clean version as well. If you are ready to sign, I can resend in DocuSign. Parker On Wed, Apr 8, 2020 at 9:38 AM Quinney, Sam (EOM) < sam.quinney@dc.gov > wrote: Hi, Parker Thanks again for joining the call -- apologies for the technical difficulties. I'm attaching our draft version of the license agreement. We are happy to jump on the phone with any one on your team to clarify anything, please also feel free to make the Data Exhibit more accurate. Best, Sam Sam Quinney Director of The Lab @ DC Executive Office of the Mayor

Office of the City Administrator

Sam.Quinney@dc.gov | (202) 394-4468 From: Parker Ence < <u>@veraset.com</u>> **Sent:** Tuesday, April 7, 2020 4:41 PM To: Quinney, Sam (EOM) < sam.quinney@dc.gov> Cc: Mei, Vicky (EOM) < Vicky.Mei@dc.gov >; Mammo, Nat (EOM) < Nat.Mammo@dc.gov >; Sokol, Matthew (OCTO) < matthew.sokol@dc.gov >; Massari, Renzo (EOM) <<u>renzo massari@dc.gov</u>>; Moore, Ryan (EOM) <<u>Ryan.Moore2@dc.gov</u>>; Gan, Katie (EOM) < katie.gan@dc.gov> Subject: Re: Fw: movement data from phones for Covid-19 planning CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to phishing@dc gov for additional analysis by OCTO Security Operations Center (SOC) I accepted your invite - talk to you then! Parker On Tue, Apr 7, 2020 at 1:03 PM Quinney, Sam (EOM) < sam.quinney@dc.gov > wrote: From: Parker Ence @veraset.com> **Sent:** Tuesday, April 7, 2020 5:41:48 PM To: Quinney, Sam (EOM) < sam.quinney@dc.gov> Cc: Jachimowicz, Adam (HSEMA) <a href="mailto:adam.jachimowicz@dc.gov">adam.jachimowicz@dc.gov">adam.jachimowicz@dc.gov</a>; Sokol, Matthew (OCTO) <matthew.sokol@dc.gov>; Ashley, Patrick (DOH) < Patrick.Ashley@dc.gov>; Gan, Katie (EOM) <a href="mailto:katie.gan@dc.gov">
https://www.gov.atie.gan@dc.gov">
https://www.gov.atie.gov <renzo massari@dc.gov>; Mei, Vicky (EOM) <<u>Vicky.Mei@dc.gov</u>>; Moore, Ryan (EOM) < Ryan. Moore 2@dc.gov> Subject: Re: Fw: movement data from phones for Covid-19 planning CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to <a href="mailto:phishing@dc gov">phishing@dc gov</a> for additional analysis by OCTO Security Operations Center (SOC) Hi Sam, it's great to meet you. Excited to work with you and hopefully do some good together for the city of DC. direct to your . We don't currently have We deliver in delivery mechanism available. We typically deliver the data daily and could provide some historical data to give you a baseline - is this all ok? 2. Depends on what geographies you want. Can you draw us a WKT for the area you want? 3. Limitations: - We only see , so the data is not comprehensive. However, prior

testing shows that it is representative to the population, so you can rely upon it to infer population movement. - The longitude/latitude observation for each data point is precise only to the "horizontal accuracy" indicated (given as a radius in meters) - We deliver the data 24-72 hours after the recorded observation, so this is not real time data 4. This is fine I have attached the data schema. I could do a call with you tomorrow at 10:30 or 2:30 ET? Good luck juggling childcare and everything. We have so very familiar. Parker On Tue, Apr 7, 2020 at 11:22 AM Quinney, Sam (EOM) < sam.quinney@dc.gov > wrote: Dear Parker, I'm am the Director of The Lab @ DC, DC Government's applied scientific team. Our colleagues at HSEMA reached out to us about your offer to provide anonymized data to support Washington, DC's coronavirus prevention activities; we really appreciate the opportunity. We think that we can make use of the data and have the data science and social science capacity to analyze it. We've had our general council review your standard research license and we're currently drafting the the Research Program for the agreement. Would you or one of your colleagues be willing to jump on the phone/video conference to discuss the data in more detail? We're gotten a summary from our colleagues but have a few more technical questions. For example; 1. What format is the data in and is their an API we can connect to or some other SFTP? 2. What is the typical size/dimendions of the data set? 3. What are the known limitations of the sample? 4. In the license agreement, could we remove the indemnification clause in Section 7.2? The Antideficiency Act prevents the Federal and DC Governments from granting indemnification, so we always ask that this be removed. Let us know if there are times this afternoon or tomorrow morning that would work for you. I, like many folks, am juggling childcare and work right now, so if I'm not able to join our Deputy Director, Katie, will be able to. Thanks again for your assistance, Sam Sam Quinney Director of The Lab @ DC

Executive Office of the Mayor
Office of the City Administrator
Sam.Quinney@dc.gov   (202) 394-4468
From: Parker Ence
CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to <a href="mailto:phishing@dc gov">phishing@dc gov</a> for additional analysis by OCTO Security Operations Center (SOC)
Hi Adam, great to meet you, Tim, and Barney. I've attached our non-commercial research data license which would be limited to the COVID-19 response use case. Here is some additional documentation about the two available datasets:
I also reached out to our partner to find out about their COVID-19 offering in case it could
be a faster path to what you are looking for and I will reach out once I have more info.  Parker
On Thu, Apr 2, 2020 at 8:00 PM Jachimowicz, Adam (HSEMA) <adam.jachimowicz@dc.gov> wrote:  Parker: apologies for dropping off call. Please send me the the agreement we would sign if you have that available.</adam.jachimowicz@dc.gov>
Thanks Sent from my iPhone
On Apr 2, 2020, at 15:29, Parker Ence <a href="@veraset.com">@veraset.com</a> wrote:  CAUTION: This email originated from outside of the DC Government Do not click on links or

open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to <a href="mailto:phishing@dc gov">phishing@dc gov</a> for additional analysis by OCTO Security Operations Center (SOC) Great, I will call you then Parker On Thu, Apr 2, 2020 at 1:22 PM Hutchison, Timothy (OCTO) <<u>Timothy.Hutchison@dc.gov</u>> wrote: Thanks. I will be joining at 5pm **Tim Hutchison** Public Safety GIS Analyst Data Visualization and Analysis Office of the Chief Technology Officer (OCTO) Government of the District of Columbia Desk: 202-727-9633 Mobile: 202-579-1123 timothy hutchison@dc.gov octo.dc.gov Follow: @OCTODC From: Jachimowicz, Adam (HSEMA) < adam.jachimowicz@dc.gov> **Sent:** Thursday, April 2, 2020 3:20 PM To: Parker Ence <a href="@veraset.com"> @veraset.com</a>
Cc: Krucoff, Barney (OCTO) <a href="mailto:Sarney.Krucoff@dc.gov"> Hutchison,</a> Timothy (OCTO) < <u>Timothy.Hutchison@dc.gov</u>> Subject: RE: FW: movement data from phones for Covid-19 planning 5 works for me today. We can use this # Barney/Tim: Pls join if you are available. -Adam J @veraset.com> From: Parker Ence Sent: Thursday, April 2, 2020 3:14 PM To: Jachimowicz, Adam (HSEMA) <a href="mailto:adam.jachimowicz@dc.gov">adam.jachimowicz@dc.gov</a>> Cc: Krucoff, Barney (OCTO) < Barney.Krucoff@dc.gov> Subject: Re: FW: movement data from phones for Covid-19 planning

CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe. If you believe that this email is suspicious, please forward to <a href="mailto:phishing@dc\_gov">phishing@dc\_gov</a> for additional analysis by OCTO Security Operations Center (SOC) Hi Adam, great to meet you. I'm free today at 5 pm ET or tomorrow after 2 pm ET? Parker On Thu, Apr 2, 2020 at 11:51 AM Jachimowicz, Adam (HSEMA) <adam.jachimowicz@dc.gov> wrote: Greetings Parker: I would be interested is speaking with you regarding your offer of services. I am thinking this can be a valuable tool for our Dept of Health and others to determine whether social distancing and stay-at-home orders are effective. You can all me antitime at 202-341-4214 or let me know when I can call you. Thank you. -AdamJ Adam Jachimowicz PhD SITUATIONAL AWARENESS PROGRAM MANAGER / **UAS COORDINATOR** Operations Division DC Homeland Security and Emergency <image001.png> Management Agency 2720 Martin Luther King, Jr. Avenue, SE, Washington, DC 20032 202-339-7250 (primary) 202-341-4214 (secondary) Adam.Jachimowicz@dc.gov hsema.dc.gov

From: Parker Ence @veraset.com> Sent: Thursday, April 2, 2020 11:31 AM To: Krucoff, Barney (OCTO) < Barney.Krucoff@dc.gov> Subject: movement data from phones for Covid-19 planning CAUTION: This email originated from outside of the DC Government Do not click on links or open attachments unless you recognize the sender and know that the content is safe If you believe that this email is suspicious, please forward to phishing@dc gov for additional analysis by OCTO Security Operations Center (SOC) Wanted to make sure you saw this: Barney --Veraset (spun out of SafeGraph) is making population movement data temporarily available for free to help combat the spread of COVID-19. In this emergency we are giving away the data (at no cost). We are working with a few different agencies already, including we believe your organization could do additional good with access to the data. Veraset "Movement" data description: GPS pings from mobile phones + see roughly % of U.S. phones every hour + see roughly % of worldwide phones every + raw data: anonymized phone ID, lat-long, timestamp, and other data. We also have "Visits" data that matches individual devices to retail and other points of interest to track Visits over time. (note this is compliant but highly sensitive data and must be treated with extreme care). If one of your colleagues wants access to the population movement data (for the specific use of combatting the spread of Covid-19) let me know and we can work on getting data access set up.

	Parker
	On Mon, Mar 30, 2020 at 3:49 PM Parker Ence wrote:
	Barney
	Veraset (spun out of SafeGraph) is making population movement data temporarily available for free to help combat the spread of COVID-19.
	In this emergency we are giving away the data (at no cost). We are working with a few different agencies already, including but we believe your organization could do additional good with access to the data.
	Veraset "Movement" data description:  + GPS pings from mobile phones  + see roughly % of U.S. phones every hour  + see roughly % of worldwide phones every  + raw data: anonymized phone ID, lat-long, timestamp, and other data.
	We also have "Visits" data that matches individual devices to retail and other points of interest to track Visits over time.
	(note this is compliant but highly sensitive data and must be treated with extreme care).
	If one of your colleagues wants access to the population movement data (for the specific use of combatting the spread of Covid-19) let me know and we can work on getting data access set up.
	Parker
	For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit coronavirus.dc.gov.
-	-

	Parker Ence   CEO, Veraset
	@veraset.com
	m. (801) 657-
	(001) 007
	-
]	Parker Ence   CEO, Veraset
	@veraset.com
	m. (801) 657-
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From: Lloyd, Patricia (DOH)

To: Massari, Renzo (EOM); Quinney, Sam (EOM); Fowler-Finn, MeghanMarie (OCTO)

Cc: Otgonsuren, Munkhzul (DOH)

Subject: RE: Estimate of foot traffic around the city?

Date: Friday, October 16, 2020 12:42:35 PM

Thank you, Sam and Renzo, for your responses.

This is helpful, and – yes, we appreciate all of the work that you do to provide the mobility data to the modeling team.

Have a nice weekend! Best.

#### Patricia Lloyd, PhD, ScM

Supervisory Statistician
Data Management and Analysis Division (DMAD)
Center for Policy, Planning and Evaluation (CPPE)

patricia.lloyd2@dc.gov Direct: 202-365-9099

899 North Capitol Street NE, 6<sup>th</sup> Fl, Washington, DC 20002 dchealth.dc.gov





From: Massari, Renzo (EOM) <renzo.massari@dc.gov>

**Sent:** Thursday, October 15, 2020 12:50 PM

To: Lloyd, Patricia (DOH) <Patricia.Lloyd2@dc.gov>; Quinney, Sam (EOM) <sam.quinney@dc.gov>;

Fowler-Finn, MeghanMarie (OCTO) < meghanmarie.fowler-finn@dc.gov> **Cc:** Otgonsuren, Munkhzul (DOH) < Munkhzul.Otgonsuren@dc.gov>

**Subject:** Re: Estimate of foot traffic around the city?

#### Hi Patricia,

Unfortunately, the Replica data that we're relying upon will not be good for this. However, there is a possibility with the Veraset data, which is a raw feed of app location data which we had worked with some months ago and moved away from as we lacked ground truth to verify it against (which combined with the nature of the data, made it too variable and uncertain to use). We are beginning to think, however, that it could prove useful in combination with the newer data that we have (from Replica) and are having a conversation with them next week. So in summary: we don't have what you need at this point, but we may in the next couple of months.

Sorry I can't be more helpful at this point, but do let me know if you'd like to discuss further. Best,

Renzo

## Renzo Massari

Senior Data Science Manager, The Lab @ DC

Office of the City Administrator

Executive Office of the Mayor

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thelab.dc.gov | @TheLab\_DC

Pronouns: they / them / theirs (why pronouns matter)

From: Lloyd, Patricia (DOH) < <a href="mailto:Patricia.Lloyd2@dc.gov">Patricia.Lloyd2@dc.gov</a>>

Sent: Thursday, October 15, 2020 12:04 PM

**To:** Quinney, Sam (EOM) < <u>sam.quinney@dc.gov</u>>; Fowler-Finn, MeghanMarie (OCTO)

<meghanmarie.fowler-finn@dc.gov>

**Cc:** Otgonsuren, Munkhzul (DOH) < <u>Munkhzul.Otgonsuren@dc.gov</u>>; Massari, Renzo (EOM)

<renzo.massari@dc.gov>

**Subject:** Re: Estimate of foot traffic around the city?

Thank you, Sam, for your quick response.

Yes, great question. By point level we're hoping to identify intersections and locations around the city that would be ideal for monitoring mask compliance.

We recognize that time of day will impact these numbers as well as special events, weather, etc., but we're hoping to identify some high foot traffic locations for the purpose of monitoring mask compliance around the city.

Thank you, again!

best,

Patricia Lloyd, PhD

Supervisory Statistician, Data Management and Analysis Division (DMAD)

Center for Policy, Planning and Evaluation (CPPE)

O: <u>202-442-9003</u>

# District of Columbia Department of Health



From: Quinney, Sam (EOM) < sam.quinney@dc.gov>

Sent: Thursday, October 15, 2020 9:58 AM

To: Lloyd, Patricia (DOH) < Patricia.Lloyd2@dc.gov >; Fowler-Finn, MeghanMarie (OCTO)

<meghanmarie.fowler-finn@dc.gov>

**Cc:** Otgonsuren, Munkhzul (DOH) < <a href="mailto:Munkhzul.Otgonsuren@dc.gov">Munkhzul.Otgonsuren@dc.gov</a>>; Massari, Renzo (EOM)

<renzo.massari@dc.gov>

**Subject:** Re: Estimate of foot traffic around the city?

Hi Patsy,

Hope you're doing well too! I'm adding Renzo who leads our mobility work. One quick question: by point-level data, do you mean point of interest (e.g. school, starbucks, post office etc.)? Or something different.

MeghanMarie, let us know if any of the Safegraph or other sources you know of have something like this for pedestrians. Renzo, do you know if/when the replica data might have pedestrian trips as a mode of transit? Correct me if I'm wrong, but I think those data will eventually have the trip purpose, but not a specific destination point (instead they have an orgin and destination census tract).

Best,

Sam

Sam Quinney (he/him/his)
Director of The Lab @ DC
Executive Office of the Mayor
Office of the City Administrator
Sam.Quinney@dc.gov | (202) 394-4468
thelab.dc.gov | @TheLab\_DC

From: Lloyd, Patricia (DOH) < Patricia.Lloyd2@dc.gov>

Sent: Wednesday, October 14, 2020 5:59 PM

To: Quinney, Sam (EOM) < sam.quinney@dc.gov >; Fowler-Finn, MeghanMarie (OCTO)

<meghanmarie.fowler-finn@dc.gov>

Cc: Otgonsuren, Munkhzul (DOH) < Munkhzul. Otgonsuren@dc.gov>

**Subject:** Estimate of foot traffic around the city?

Hi Sam and MeghanMarie,

I hope that you are both doing well, and that you and your families are safe and healthy. I am reaching out to see if you might know where I could find point-level data on pedestrian traffic within the District?

Thank you,

Best,

#### Patricia Lloyd, PhD, ScM

Supervisory Statistician Data Management and Analysis Division (DMAD) Center for Policy, Planning and Evaluation (CPPE) patricia.lloyd2@dc.gov

Direct: 202-365-9099

899 North Capitol Street NE, 6<sup>th</sup> Fl, Washington, DC 20002 dchealth.dc.gov





For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit coronavirus.dc.gov.

From: Sokol, Matthew (OCTO)

To: Gan, Katie (EOM)

Cc: Quinney, Sam (EOM); Mammo, Nat (EOM)

Subject: RE: Data Lake FY21 Q1 KPI

**Date:** Thursday, January 14, 2021 9:09:54 AM

Hi Katie,

Thanks for the update! I will definitely keep Nat posted on the quarterly updates.

Looking forward to continuing using the Data Lake to assist you with your projects. Feel free to keep sending agencies our way

Thanks,

Matt

#### **Matt Sokol**

Program Manager

Big Data & Data Integration
Office of the Chief Technology Officer (OCTO)
Government of the District of Columbia

matthew.sokol@dc.gov

Office: 202-478-2439 | Mobile: 202-306-5150

octo.dc.gov | Follow @OCTODC

From: Gan, Katie (EOM) <katie.gan@dc.gov> Sent: Wednesday, January 13, 2021 4:48 PM

To: Sokol, Matthew (OCTO) <matthew.sokol@dc.gov>

Cc: Quinney, Sam (EOM) <sam.quinney@dc.gov>; Mammo, Nat (EOM) <Nat.Mammo@dc.gov>

Subject: RE: Data Lake FY21 Q1 KPI

#### Thanks, Matt!

Last year was huge for the Data Lake. Getting it prepared for Level 3 data set storage, sharing, and analysis was a big accomplishment and we enjoyed pushing that part of the initiative forward with you all!

For FY21, we're continuing to expand our use of the Data Lake, and focusing on a separate set of strategic initiatives. As a result, there's probably no need to actively coordinate our performance reporting this year. As you update quarterly reporting on OCTO's FY21 goals, however please reach out to Nat Mammo (cc'ed here) if you have any questions about how The Lab is using the Data Lake.

Happy Q2!

Katie

Katie Gan

katie.gan@dc.gov | (202) 341-5910

From: Sokol, Matthew (OCTO) < <u>matthew.sokol@dc.gov</u>>

**Sent:** Wednesday, January 13, 2021 4:39 PM **To:** Gan, Katie (EOM) < <u>katie.gan@dc.gov</u>>

**Subject:** Data Lake FY21 Q1 KPI

Hi Katie,

Happy new year!

We are submitting our KPIs for Q1 – here's what I put in for the Data Lake

- A. Full encryption, with Multi-Factor Authentication using OCTO SecureAuth tool, for both Jupyter Hub and Hue tools has been implemented. The Data Lake is being upgraded to a newer version of the base software for enhanced security, easier authentication for end-users, and faster data processing tools. We are continuing to connect new data visualization tools to the Data Lake.
- 2. The addition of new datasets for The Lab is on-going. DCPS Student Attendance project data, Veraset, SafeGraph and Replica mobile device movement data for COVID-19 support and agency call center records are now available in the Data Lake. This amounts to over 13 billion records.
- 3. A draft of a universal data sharing agreement that aims to create a multilateral agreement among agencies and organizations has been drafted and is under further review by OCTO General Counsel. In addition, a Privacy Impact Assessment (PIA) on the Data Lake was completed and awaiting final legal review.

Let me know if you have any questions.

Thanks, Matt

#### **Matt Sokol**

Program Manager

Big Data & Data Integration
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Get important updates on the 59th Presidential Inauguration from DC Government. Text INAUG2021 to 888-777 for updates on public safety, street closures, weather alerts, and more.

From: Massari, Renzo (EOM)

To: Quinney, Sam (EOM); Sokol, Matthew (OCTO); Bukowiecki, Tomash (OCTO); Mammo, Nat (EOM); Krucoff,

Barney (OCTO)

**Subject:** New data from Veraset

**Date:** Friday, October 23, 2020 3:34:35 PM

Hi all,

Just to inform you that we had a really constructive conversation with Veraset.

On the data side, they've updated all the data they sent us. AND they're sharing with us their home panels. So yes, they build home panels using longer series, so we don't have to reinvent things.

On our side, we think that we can combine this data with Replica's to look at the kind of smaller scale movement that we can't from Replica's outside of the representative, Regional model week. Before, we lacked "ground truth" for Veraset data, but I believe that now, with Replica, we have a ground truth to weigh Replica's data to then track finer movement inside DC.

And I've been learning from the unacast people how they clean some data artifacts that we did see in Veraset data and led us to not use it. It's an interesting process that eliminates some of those weird shifts we saw.

So all in all, yes, we're getting even more data.

That's a "yay" in my book.

Renzo

For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit <u>coronavirus.dc.gov</u>.

From: Nicole

To: renzo.massari@dc.gov

Subject: Automatic Reply Re: Fw: movement data from phones for Covid-19 planning

**Date:** Monday, October 12, 2020 12:20:13 AM

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Hi,

Thank you for your email. I will be out of the office on Monday October 12th. I will respond to your email as quickly as possible once I am back in the office. For urgent question, please email Parker Ence at @veraset.com.

Thank you, Nicole

--

\*Nicole

\*Veraset \*\* | Customer Success\*

@veraset.com

From: Massari, Renzo (EOM) @veraset.com Accepted: Veraset/DC Gov Regroup To:

Subject:

For the latest information on the District Government's response to COVID-19 (Coronavirus), please visit coronavirus.dc.gov <https://coronavirus.dc.gov/> .