



Hopthru

Proposal for Augusta Transit

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Background

Executive Summary:

Hopthru is a data management and analysis platform for transit. Utilizing passenger counting hardware already installed on your fleet, Hopthru automates the extraction, processing, and importing of data so that you can easily derive the insights you need.

The platform consists of two modules: Hopthru Cleanse and Hopthru Analyze.

Hopthru Cleanse builds trust in the quality of your data by maintaining the accuracy thresholds required for NTD certification.

Hopthru Analyze allows you to instantaneously identify and diagnose operational inefficiencies across your service area.

You're in good company:



Project Goals

1. Use APCs as Augusta Transit's Source of Truth for Ridership Data

Regain confidence in your APC data with Hopthru Cleanse. By discarding data at the event level and not the trip or block level, Augusta Transit can rely on more *actual* counts and fewer estimates.

With APC data as your Source of Truth, Augusta Transit will be able to track ridership patterns, identify peak travel times, efficiently plan services accordingly, identify areas for improvement, and optimize transit system resources.

2. Certify APCs for NTD reporting

Complete the NTD certification process using Hopthru Cleanse's data processing.

3. Democratize Access to Ridership Data

Improve the organization's access to ridership data, giving each department the ability to analyze ridership trends across all levels of Augusta Transit's system.

Create a detailed, yet simple, analysis process to better inform schedule changes and service updates.

4. Launch with an evolving system

Hopthru is constantly being improved based on customer feedback. Augusta Transit will have a direct hand in shaping our product roadmap through feedback and requests.

Hopthru Cleanse

Data analysis is only as valuable as the underlying data is accurate. As Hopthru has launched Analyze with dozens of agencies and talked with hundreds about their data, we've seen that ~70% of transit systems with APCs have data cleanliness issues.

Hopthru Cleanse, an intelligent data cleaning platform specifically tailored for APCs, solves these problems. Cleanse consists of three main components described below:

1. Correlation

Once raw data is collected, it must be enriched with schedule information through a process called data correlation. This is how raw counts (ons/off, time stamp and bus ID) are assigned to routes, trips and stops. Agencies are often missing 10-60% of their data due to failed correlation.

Strong correlation is the foundation of good APC data.

2. Expansion

No data set is perfect. Whether it's due to hardware malfunction, network loss, or other unforeseen errors, it is possible to lose events that actually occurred. Data expansion fills in these gaps using historical averages.

3. Diagnostic Reporting

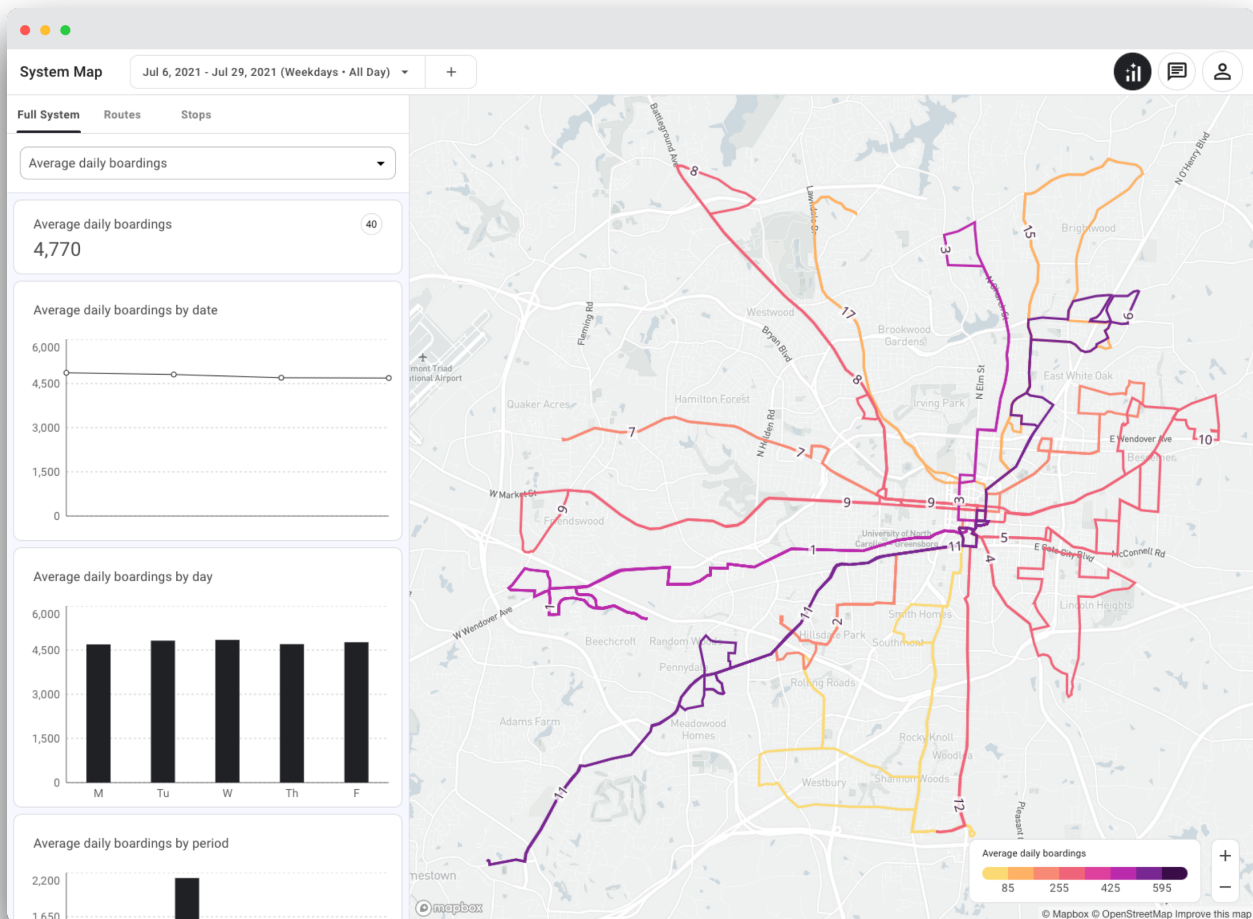
Quickly identify the health of your hardware. Be notified to vehicles that have either not been reporting, or have been reporting anomalies.

Hopthru Analyze

Once an agency has confidence in their APC counts, the logical next step is to use that knowledge to improve service. Hopthru Analyze is the web-application through which Augusta Transit will discover insights in every nook and cranny throughout the system.

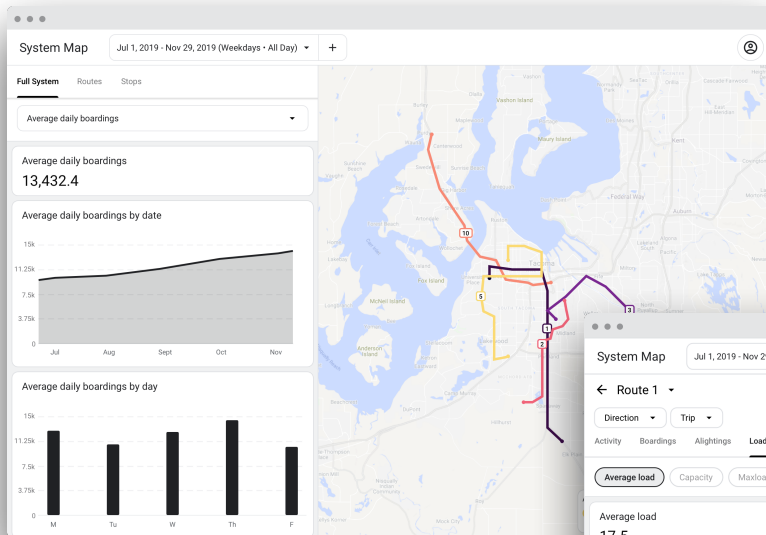
Detailed analysis at every level of your agency

- Gain a birds-eye view of your system by measuring KPIs aggregated across the entire agency
- Dive into the details by viewing individual routes, trips, or stops.
- Tag routes or stops to track amenities, projects, and more.
- Identify trends by comparing any view to its historical performance

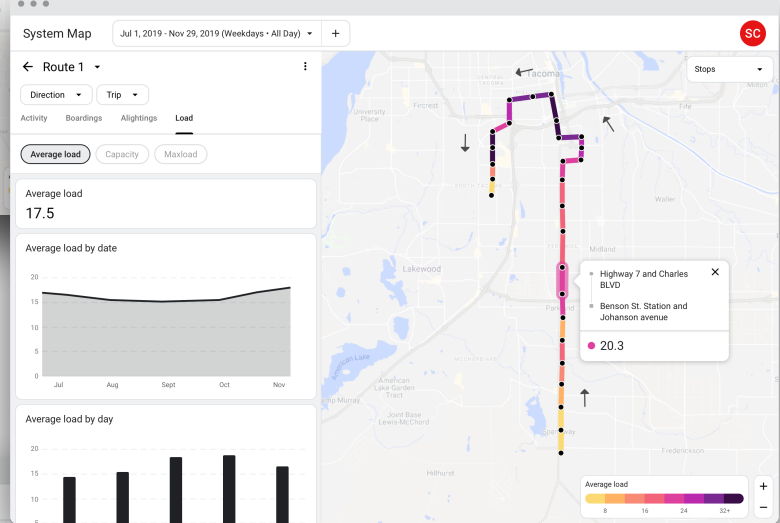


Measure performance across...

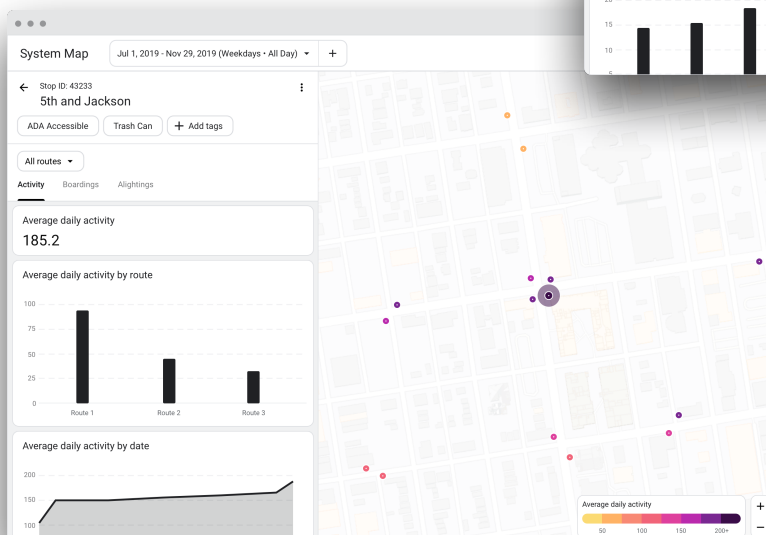
The entire system



Each route

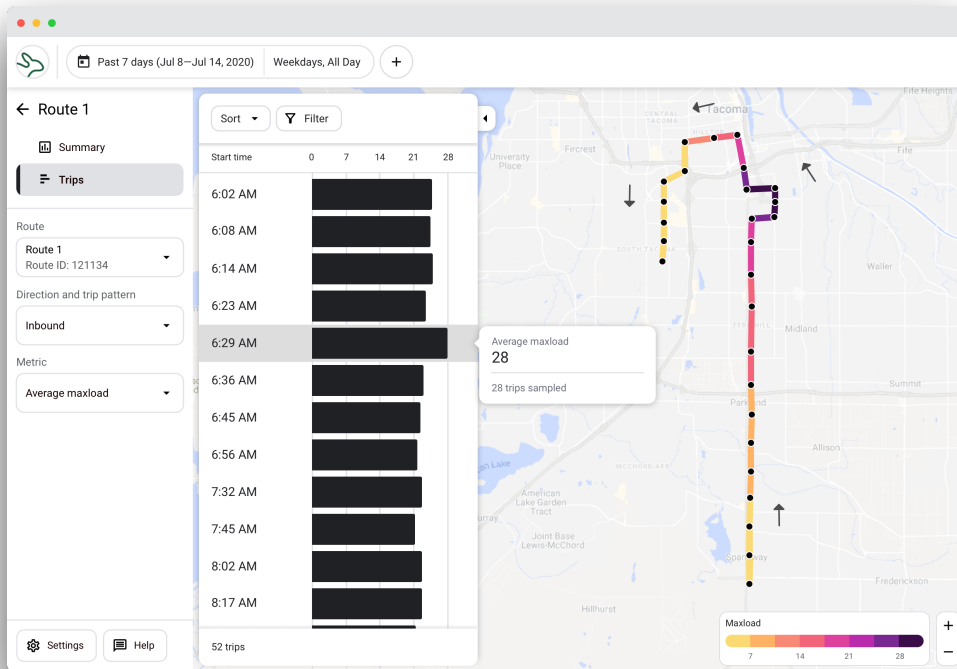


Each stop



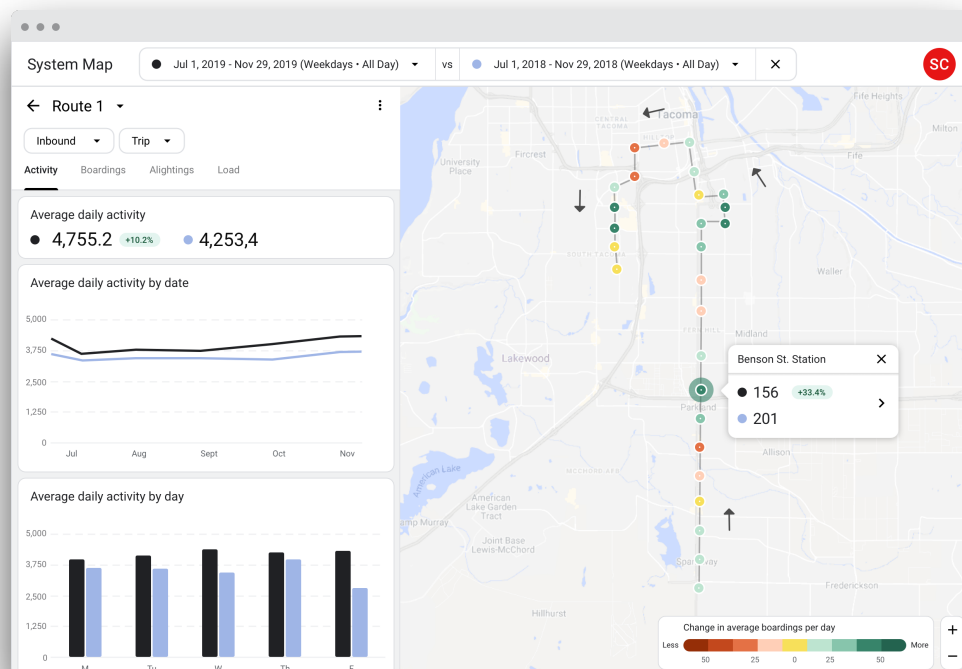
Trips Analysis

Visualize and map out trip level trends for each route

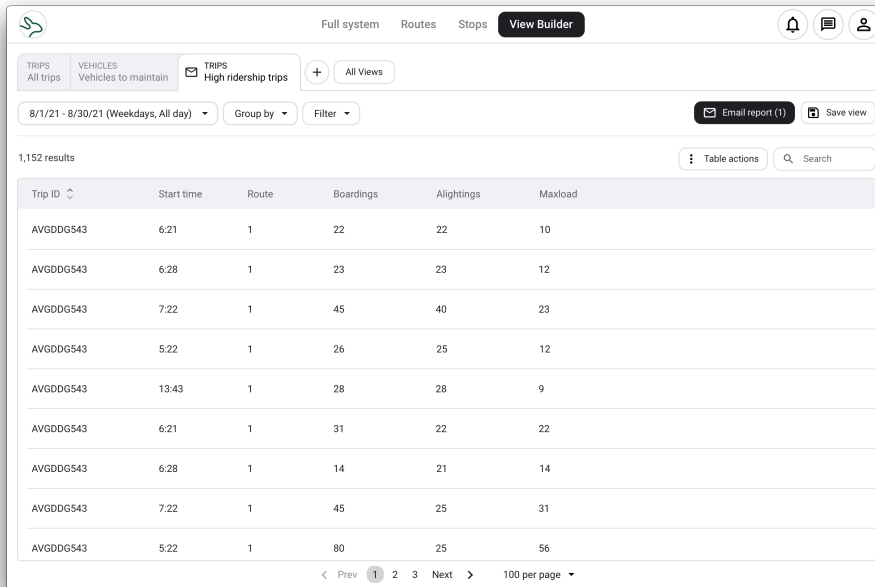


Understand changes over time

“Show me how ridership this year compares to last year.”



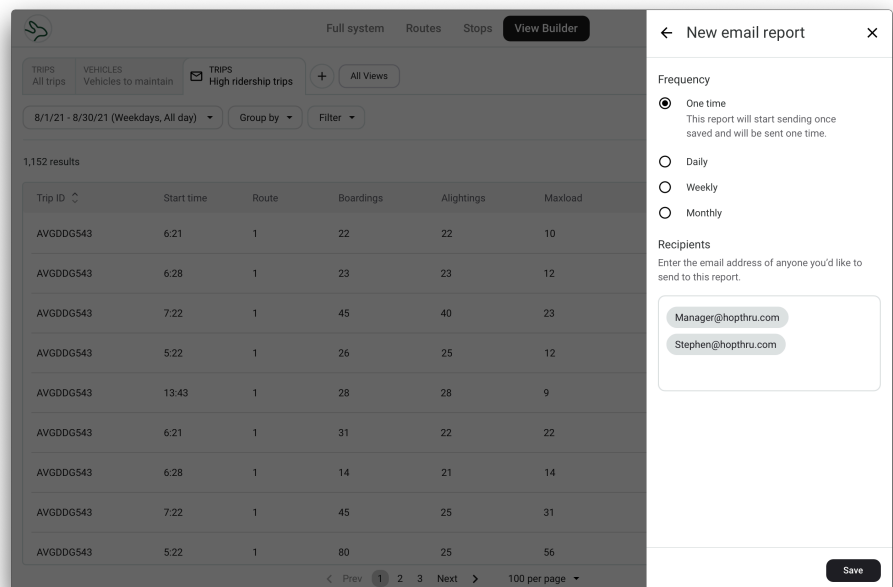
Build your own custom insights



The screenshot shows the 'View Builder' interface with a table of trip data. The table has columns for Trip ID, Start time, Route, Boardings, Alightings, and Maxload. The data is filtered for the period 8/1/21 - 8/30/21 (Weekdays, All day). The table shows 1,152 results.

Trip ID	Start time	Route	Boardings	Alightings	Maxload
AVGDDG543	6:21	1	22	22	10
AVGDDG543	6:28	1	23	23	12
AVGDDG543	7:22	1	45	40	23
AVGDDG543	5:22	1	26	25	12
AVGDDG543	13:43	1	28	28	9
AVGDDG543	6:21	1	31	22	22
AVGDDG543	6:28	1	14	21	14
AVGDDG543	7:22	1	45	25	31
AVGDDG543	5:22	1	80	25	56

Be alerted to pre-made and user-defined events



The screenshot shows the 'View Builder' interface with a 'New email report' modal open. The modal allows users to configure the frequency of the report (One time, Daily, Weekly, Monthly) and the recipients (Manager@hopthru.com, Stephen@hopthru.com). The background table is dimmed.

New email report

Frequency

- ☒ One time
This report will start sending once saved and will be sent one time.
- ☐ Daily
- ☐ Weekly
- ☐ Monthly

Recipients

Enter the email address of anyone you'd like to send to this report.

Manager@hopthru.com

Stephen@hopthru.com

Save

Implementation timeline (tentative)

Event	Month 1	Month 2	Month 3	Month 4
Hopthru Cleanse Integration	x			
Data QA / Trip Sampling via Security camera counting	x			
NTD Thresholds Met			x	
Hopthru Analyze External QA				x
Go-live				x

Price Proposal

3-Year Term - (Proposal Expires August 31st, 2023)

Product / Service	QTY	Total Cost
Hopthru Cleanse	Up to 15 VOMS (fixed route vehicles operated at maximum service)	\$15,600
Hopthru Analyze	Up to 15 VOMS (fixed route vehicles operated at maximum service)	\$10,400
NTD Certification Package: <ul style="list-style-type: none"> - Manual Sampling for Validation - NTD Submission Package - Expansion approved by qualified statistician (if needed) 	1	\$9,450
Integration Fee	1	\$3,000
TOTAL COST		Year 1: \$38,450 Year 2: \$26,000 Year 3: \$26,000

References

NCTD (North County Transit District) (Oceanside, CA):

- Name: Damon Blythe
- Title: COO
- Email: dblythe@nctd.org
- Phone: 760.966.6708

TOAKS (Thousand Oaks Transit) (Thousand Oaks, CA):

- Name: Tyler Nestved
- Title: Transit Planner
- Email: TNestved@toaks.org
- Phone: 805.449.2492

Palm Tran (West Palm Beach, FL)

- Name: Christian Londono
- Title: Manager of Performance Management
- Email: clondono@pbcgov.org
- Phone: 561.841.4312

Kitsap Transit (Bremerton, WA)

- Name: Steffani Lillie
- Title: Director of Service and Capital Development
- Email: steffanil@kitsaptransit.com
- Phone: 360.478.6931

Things to note:

General Terms

- We use a Software as a Service (SaaS) model with annual subscriptions per product. There are no hosting or maintenance fees.
- Subscriptions include unlimited users within your agency.
- We believe in data access and availability. As long as your agency is a paying customer, you will have easy access to download any data from Hopthru's system.
- For Cleanse customers, Hopthru will attain a minimum precision level of 95% for Unlinked Passenger Trips and Passenger Miles Traveled as defined by the [NTD](#).

Technical Requirements (Hopthru Cleanse)

In order to power Hopthru Cleanse, Hopthru requires the three data sets listed below:

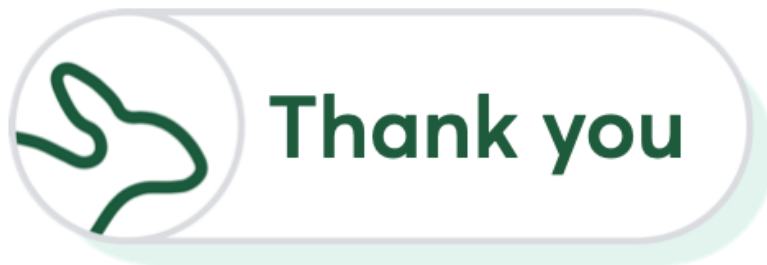
1. Up-to-date static GTFS
2. Vehicle Assignments (likely from your AVL system)
 - Vehicle -> block assignments for a given day
3. Raw APC Event Data
 - We'll need these required fields [as listed here](#):
 - Vehicle_ID
 - Lat/Lng
 - Timestamp
 - Ons
 - Offs

Data Validation (Hopthru Cleanse)

- In order to successfully test and validate Hopthru's algorithms on Augusta Transit's data, we will need the following:
 - A random sampling of manually validated counts, at the stop level, by trip (gathered by video camera footage, hand counts, or another approved counting method)
 - GTFS, Vehicle Assignments, and Raw APC data from the same dates as the validated counts

Support Plan

- You will be assigned a dedicated Customer Success Manager.
- Your Customer Success Manager will create a success roadmap for your team, including a comprehensive on-boarding process.
- We pride ourselves on having the best support team in the industry and we'll never charge you for our time. Always feel free to reach out with questions, comments, or suggestions on how we can better serve you. We respond to requests in one business day.



Account Manager:

David Hunt (david@hophthru.com, 206-278-8855)