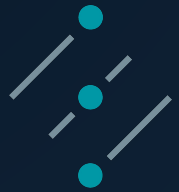


STOCKER

Autonomous freight for cities.

(starting in NYC)

FOUNDERS

Paul Sammut paul@stockerfreight.com

Jason Tsui jason@stockerfreight.com

Meet the Team

15 years of friendship, plus 20 years of combined robotics and product experience.

Paul Sammut // Engineering

Paul has sought after technical challenges all his life, working on underwater rocket technology for the Navy, running a hardware Kickstarter that successfully shipped, and developing autonomous marine robots for academic research.

Jason Tsui // Product

Early career as an NYC utility engineer gave Jason an intimate grasp of how well-designed, critical infrastructure supports cities. Has since turned his focus to software; leading product teams in web video at Blip.tv (now Disney) & small business onboarding at Citi.

Freight movement is critical to thriving cities but new challenges are emerging.

More People

NYC population went up 0.5M in just 10 years.

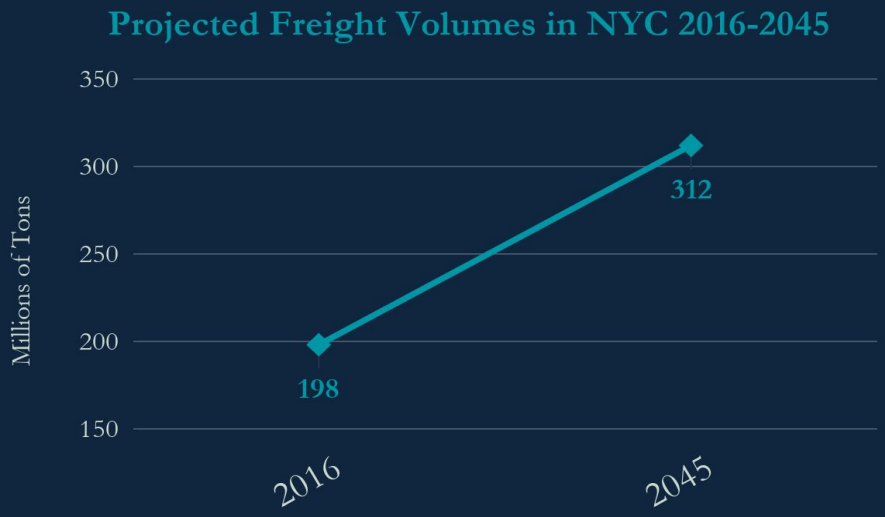
More Congestion

Manhattan travel speeds on a downward trend since 2012.

More Demand

More deliveries, more of the time, at more specific times.

Freight demand is expected to continue growing. A better freight system is needed to keep up.



Source: FreightNYC Plan, NYCEDC

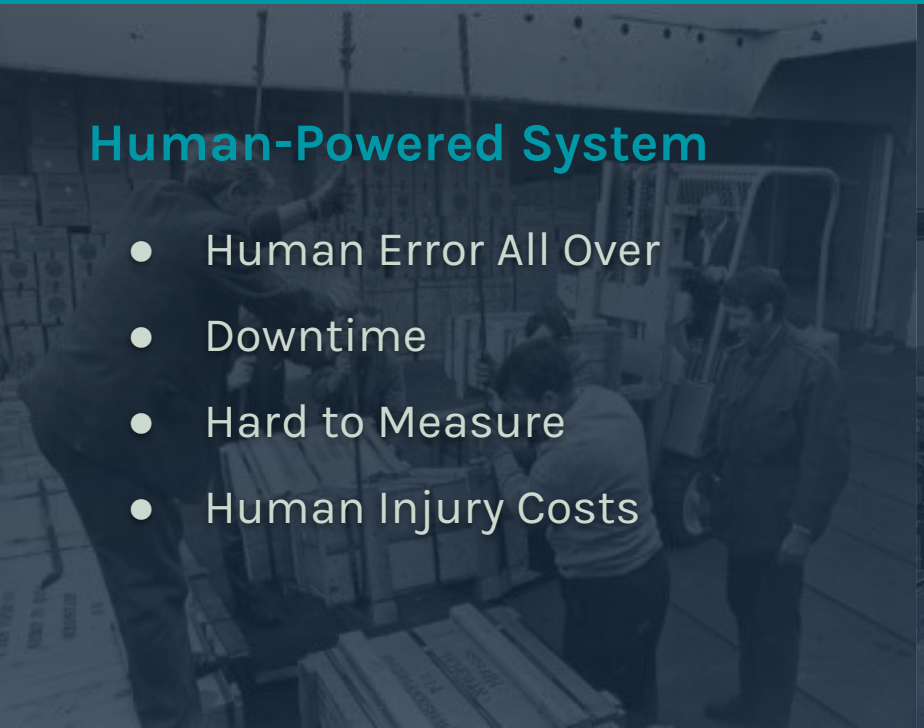
- 90% of freight in NYC is moved on trucks.
- Volume increasing 58% by 2045.
- Truck congestion is expected to cost city $27B in same time.

STOCKER is building an autonomous freight service for NYC.

Our service will transport intra-city freight using autonomous vehicles.

- Distributor to retailer
- Food producer to restaurants
- Commercial supplies to businesses

The current human-powered freight system needs automation.



Human-Powered System

- Human Error All Over
- Downtime
- Hard to Measure
- Human Injury Costs

Autonomous Freight System

- Eliminates Human Error
- Increases Uptime
- Precise Measurement and Control

STOCKER's service benefits everyone in the city.

Businesses
Moving goods across the city

Businesses
Focus on core competency

City
More congestion

City
More efficient road use

Residents
Dangerous, loud, dirty trucks

Residents
Safe, quiet, clean AVs

We are the only company developing autonomous vehicles for city freight.

City Freight	STOCKER	MOTrucking, milea TRUCK, Ryder
Personal Mobility	UBER, WAYMO, cruise, TESLA, TOYOTA, ARGO AI, ZOOX	& more
Highway Trucking	TESLA, EMBARK, VOLVO	
Small Packages	udelv, dispatch, nuro, amazon, STARSHIP, marble	

Developing autonomous vehicles

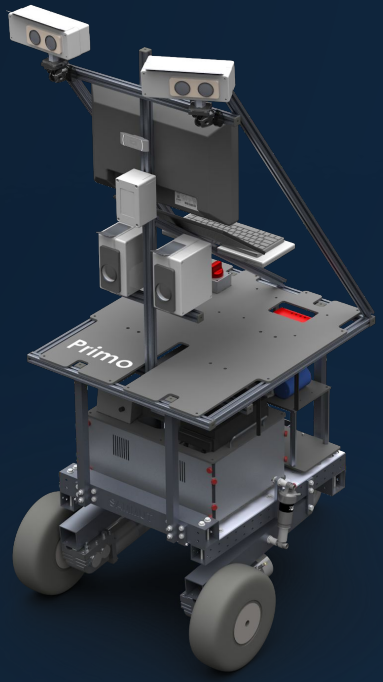
No autonomous vehicle technology

STOCKER's first autonomous vehicle, **Primo**.

PRIMO is an early development platform serving as starting point for further autonomous system development on the VAN.

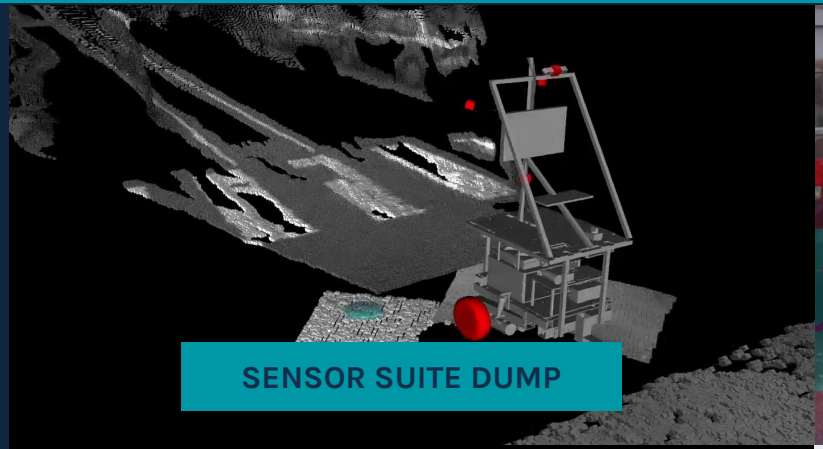
Core Components

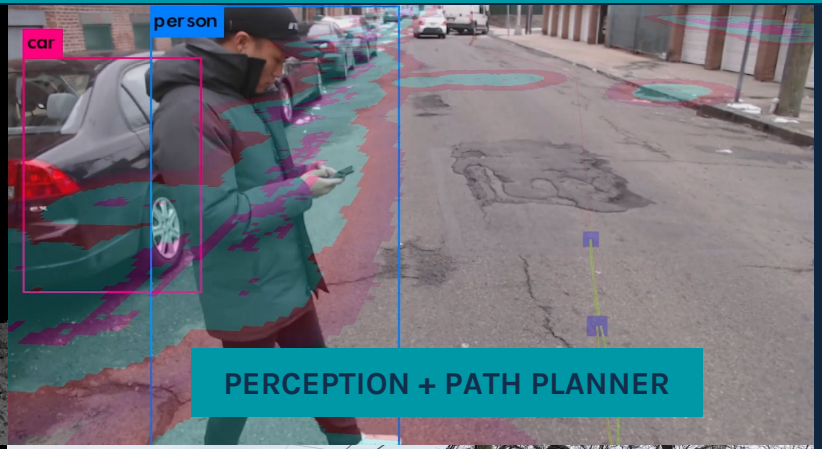
- Sensor Suite
- Mapping + Localization System
- Perception Model
- Path Planner

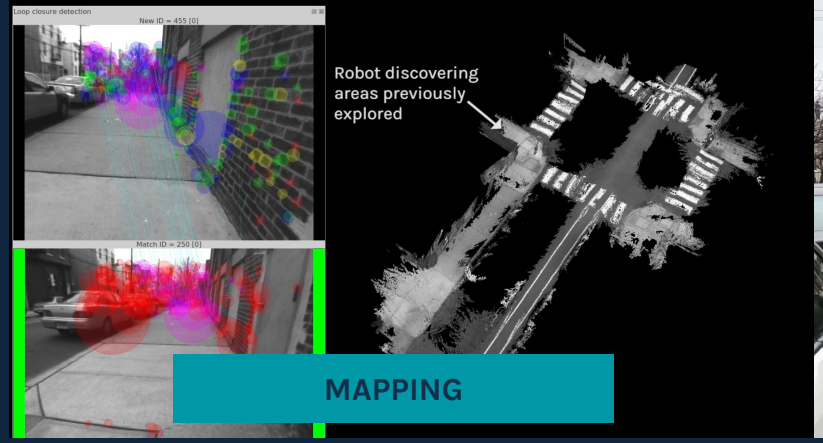


- *$100k build cost*
- *4 Stereo Cameras*
- *RTABmap SLAM*
- *TEB Path Planner*
- *ROS on Linux*
- *Intel i7 CPU*
- *Nvidia GPU*
- *Wheelchair Motors*

Primo in action.



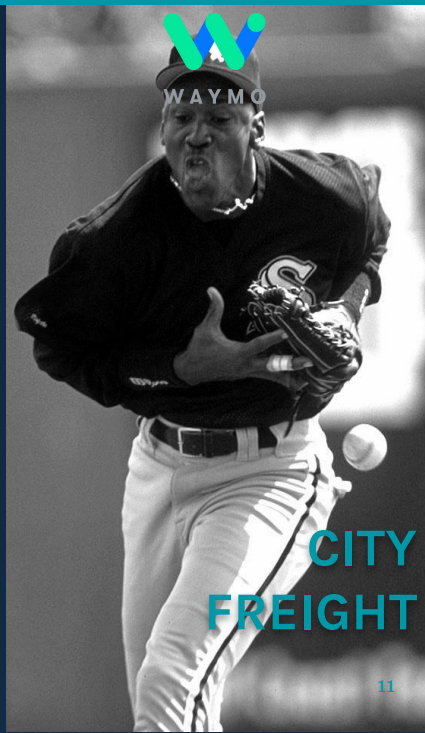




For autonomous trucks to perform, they must be designed for this specific job.

Design Variables

Job Function	Mobility Service	City Freight Service
Road Conditions	Medium Urban (SF, AZ)	Heavy Urban (NYC)
Environment	Streets / Highways	Streets / Lots / Warehouses
Load	People	Freight
Customer	Passengers	Businesses
Hardware	Passenger Vehicle	Freight Truck
Result	**Mobility AV** ≠	**City Freight AV**



We’re raising **$1.5MM** to begin development of the Stocker autonomous truck.

STOCKER Seed Milestones

Truck Prototype

- First prototype of an autonomous goods mover in NYC.
- City calibrated sensor suite.
- Autonomous miles driven in NYC.

Team Growth

- 3 Robotics Team Hires
  - Academic Contributors (2)
  - C++/MISRA developer
- 1 Logistics Team Hire

IP Development

- Heavy Urban Path Planner
- Heavy Urban Obstacle Velocity Estimation
- Automated Goods Storage System
- Automated Sidewalk Unloading
- Automated Dockside Loading

Product Development

- MVP requirements for automated freight software.
  - Customer Facing Apps
  - Backend Services

Pilots

- Run 3 recurring, revenue generating freight routes.
- Small Business (*Dank Banana Bread*)
- Medium Business (*ACME Smoked Fish*)
- Enterprise Business (*Modell's Sporting Goods*)

Strategic Partnerships

- Working relationship with NYC DOT & Office of Freight Mobility

STOCKER Future Freighter Concept

Vision for City Freight

Electric, Zero Emissions

Quiet Operation

Optimally Sized for Cities

City Maneuverability

Improved Visibility & Safety

Rapid Load/Unloading

Containerized Freight

Thanks for your time!

paul@stockerfreight.com