



JTAG

Who we are?



JTAG

Project Benson

*Use MTA data to avoid
commuter congestion*



Problem: packed subway





Why congestion is a problem?





Why congestion is a problem?

Late for work, appointments, etc.

Commuter Anxiety & Stress

Stressed MTA employees

Commuter dissatisfaction & using alternative transport

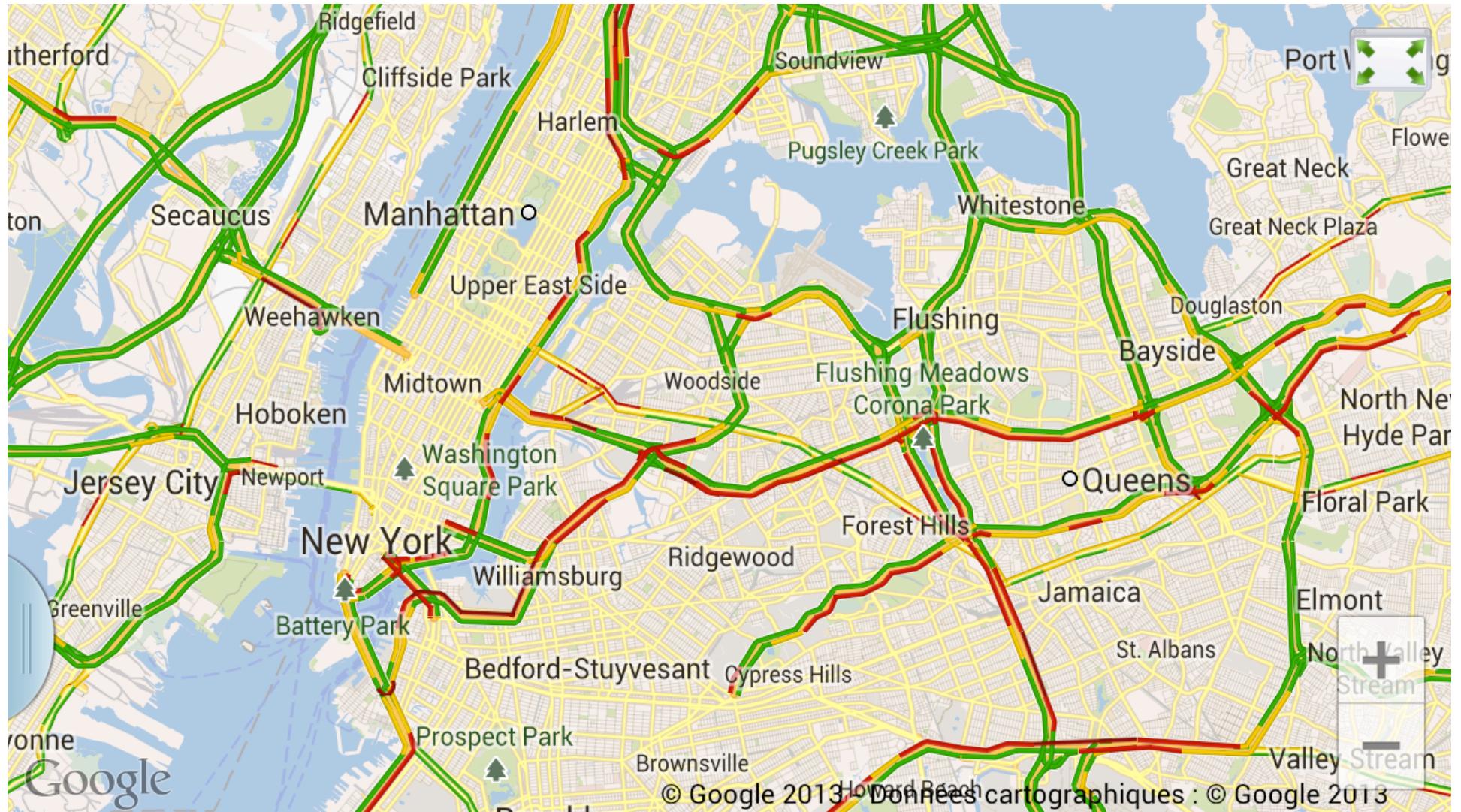
Safety risks

Stress on physical infrastructures





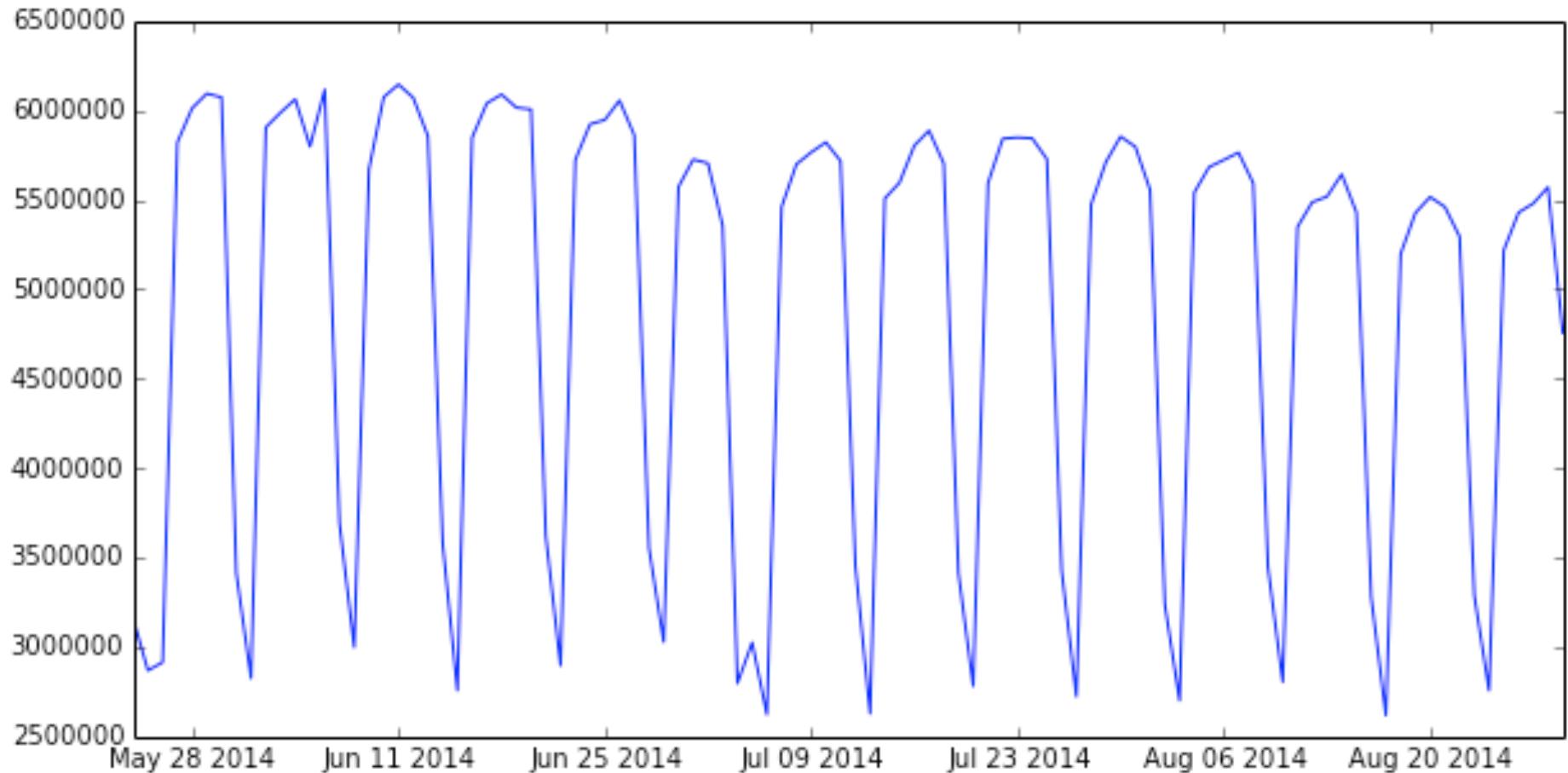
Existing Ways to Look at Congestion



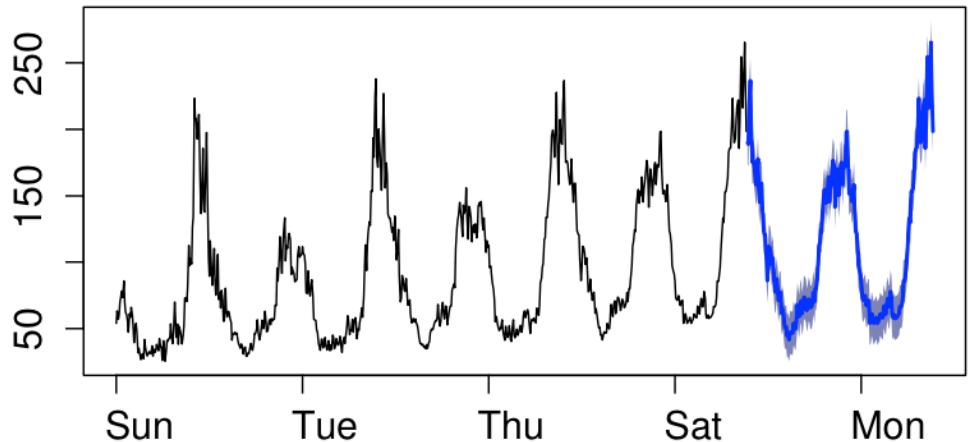
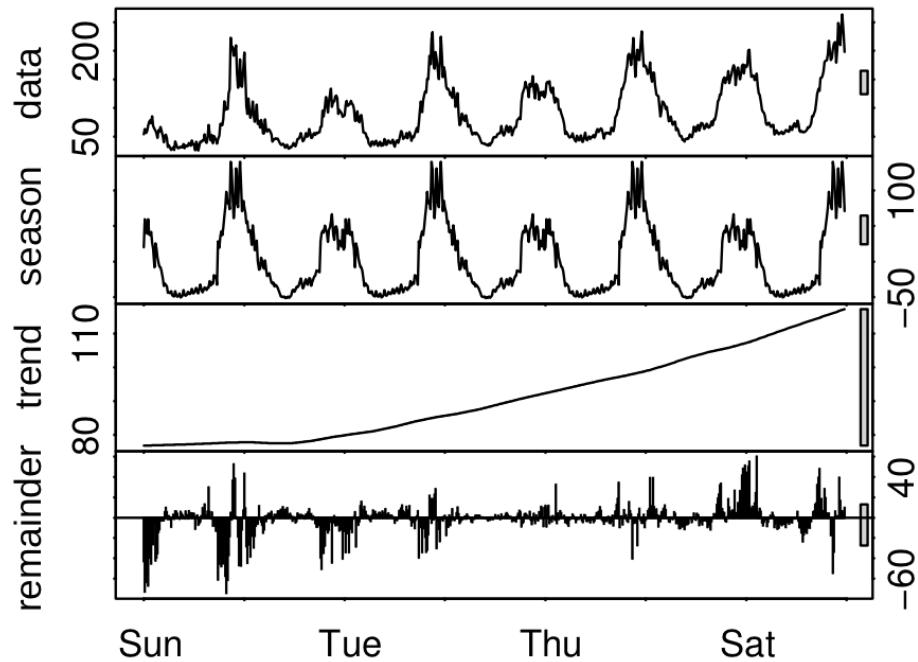
Insights from MTA turnstile data



Ridership rates over time



Insights from MTA turnstile data



Project proposal



Milestones

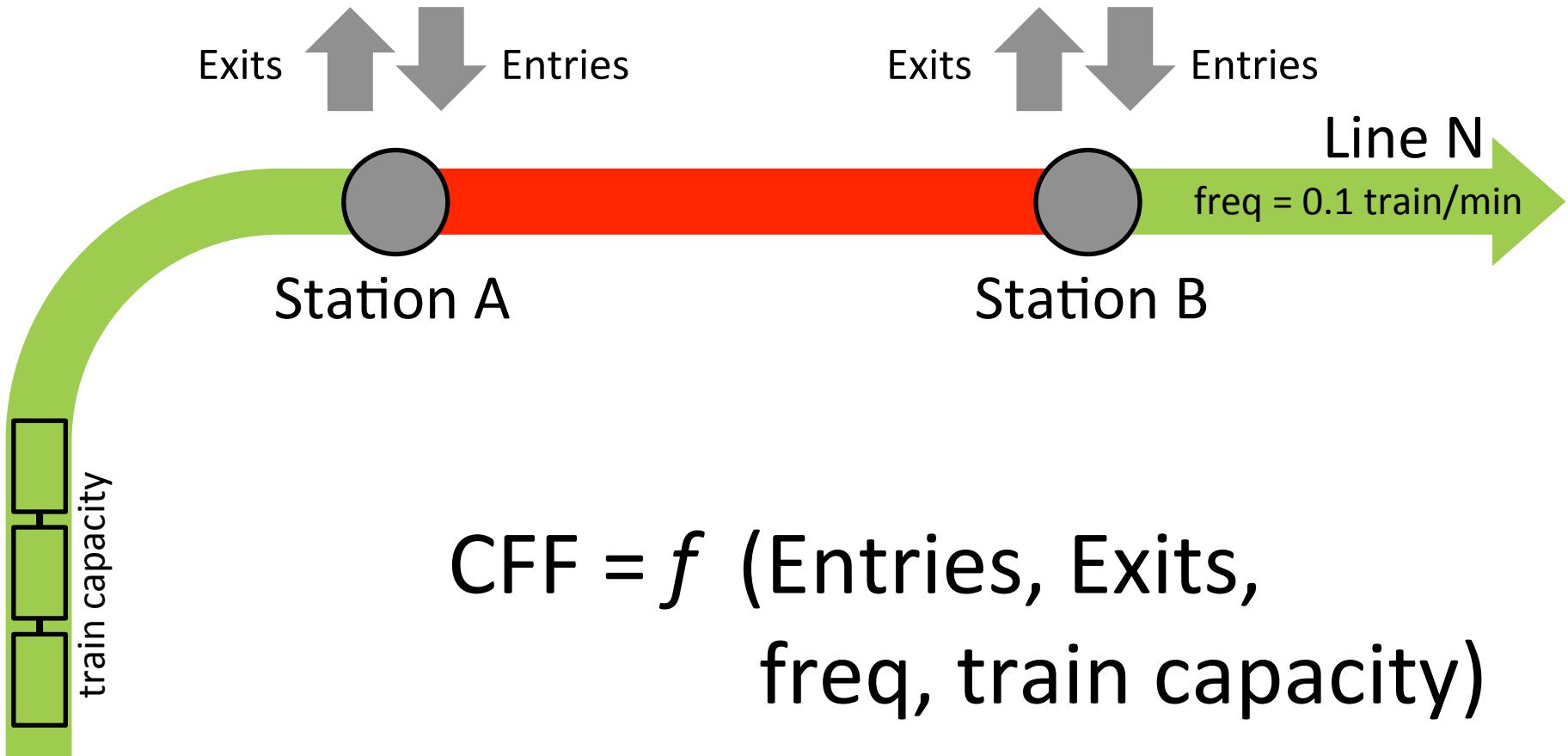
Pilot

1

Model of the expected congestion rate



Commuter Congestion Function (CFF)



Project proposal



Milestones

Pilot

1

Model of the expected congestion rate

2

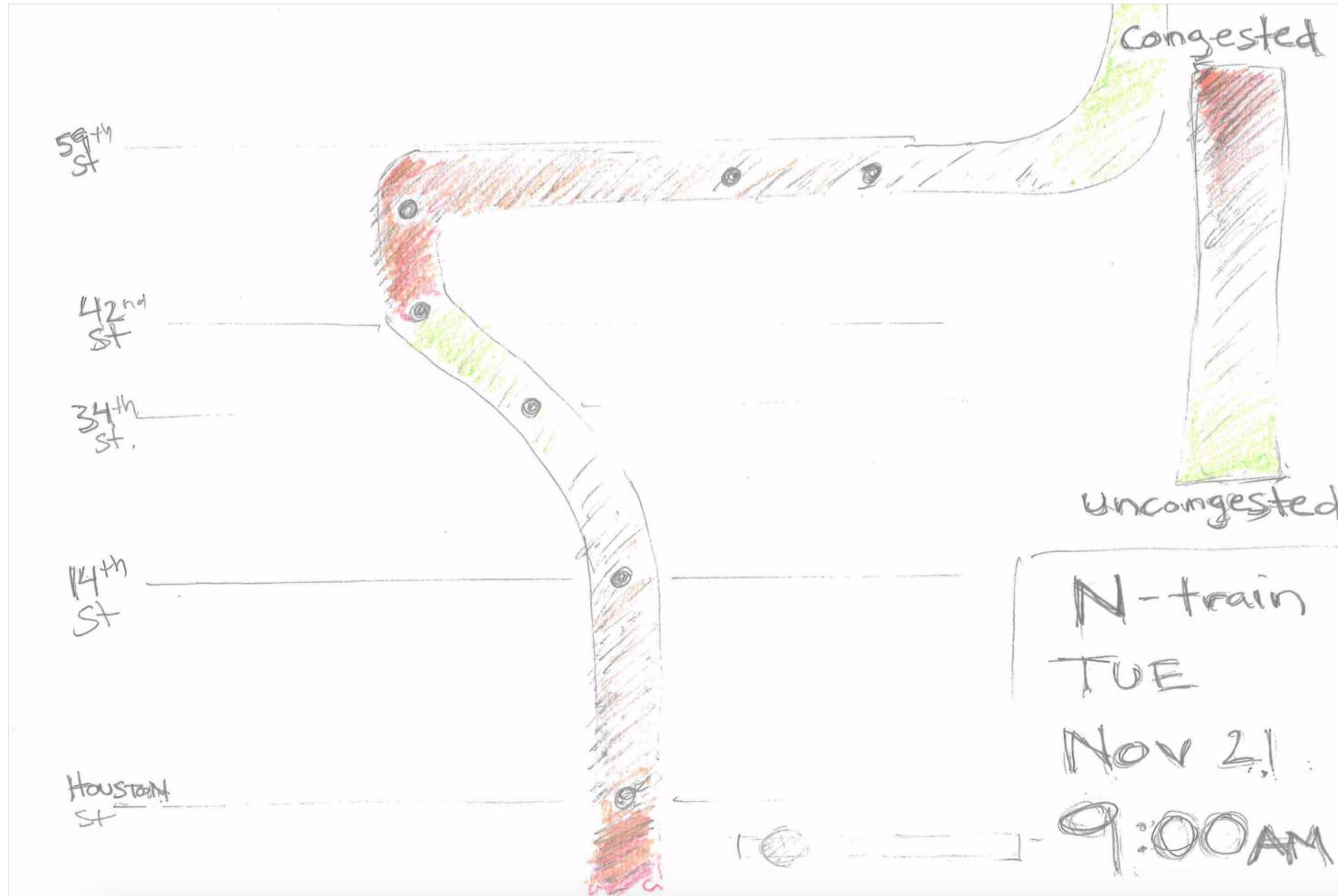
Prototype to display forecast of expected congestion



Prototype



First stage: display line congestion over time



Project proposal



Milestones

Pilot

1

Model of the expected congestion rate

2

Prototype to display forecast of expected congestion

Extension

3

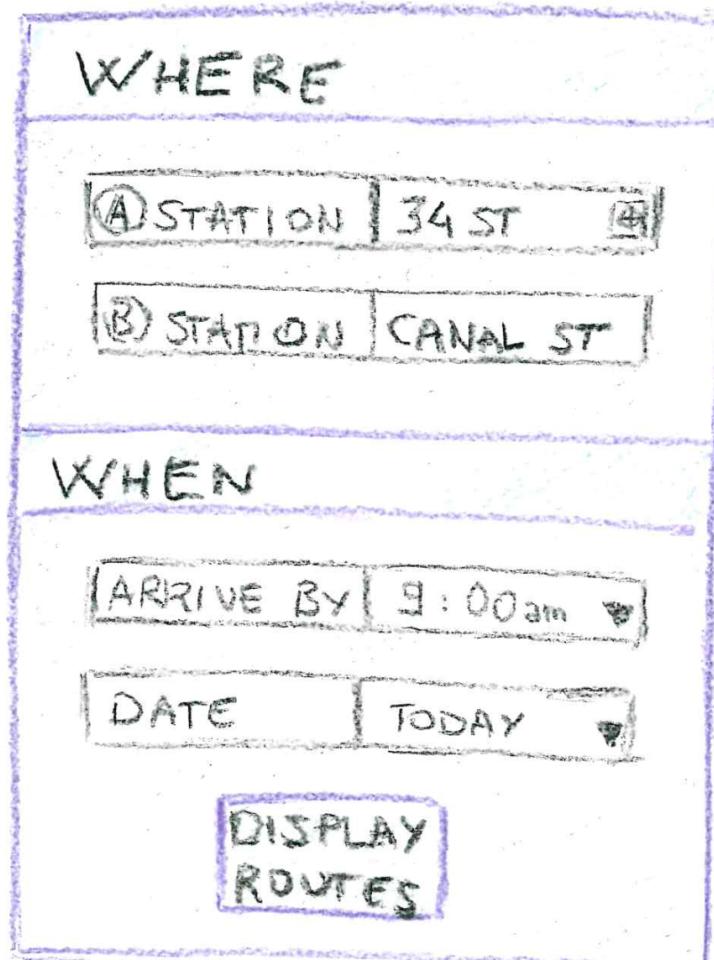
Display **alternative route options**



Prototype



Second stage: display congestion on routes



Prototype



Second stage: display congestion on routes

FROM	34 ST
TO	CANAL ST
TODAY	9:00 am

ROUTES			
RISK	LINES	COMMUTE CONGESTION	LEAVE BY
⚠	(A) + (B)	★★★	7:30
✓	(C) + (D) + (E)	★★	7:15
✓	(F) + (G) + (H)	★	7:10
⚠	(M) + (N)	★★★	7:25



Project proposal



Milestones

Pilot

1

Model of the expected congestion rate

2

Prototype to display forecast of expected congestion

Extension

3

Display **alternative route options**

4

Increase forecasts **accuracy**



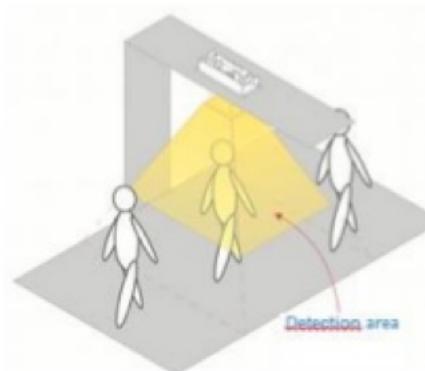
Project proposal



Increase forecasts accuracy



Include **weather** and
special circumstances with
alert system



Install **new devices**





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Thank you