

BE SEEN, BE HEARD , BE NOTICED



# WE'RE HERE!

ENABLING SIMPLE AND  
MORE EFFECTIVE  
TRANSPORTATION CHOICES



**CITY OF TOMORROW  
CHALLENGE -  
PITTSBURGH**

## **THE TEAM**

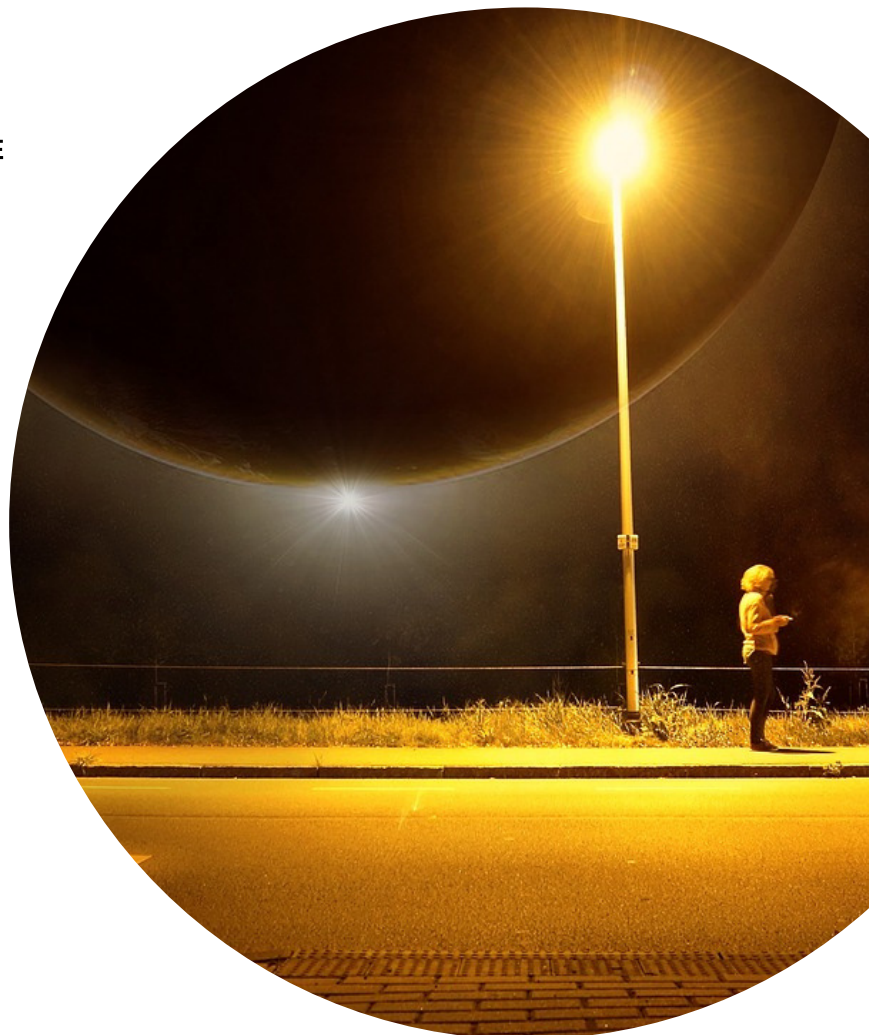
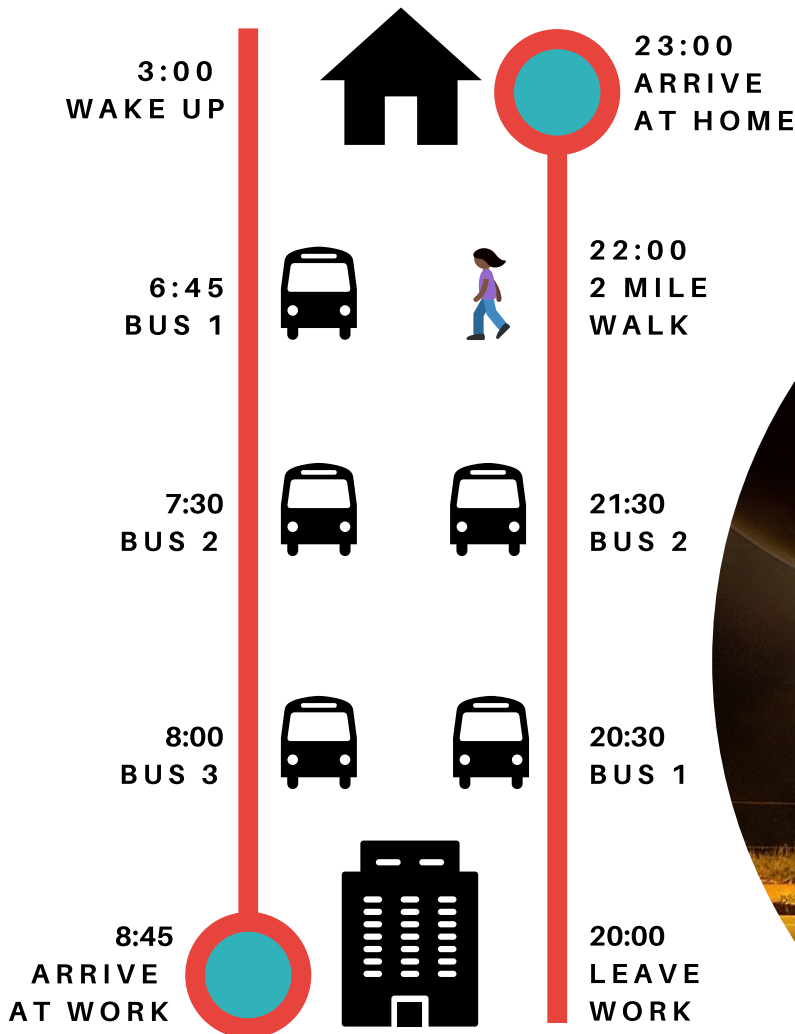
Lama Alfulaij, Jamie Boudreax, Jim Gibbs,  
Ayman Alalao, Amy Smallman

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# MARIA'S REALITY

Maria relies on the Port Authority bus system to get where she needs to go. Unfortunately she can't rely on the unreliable. So often, Maria's commute involved three buses to drop off her kids at day care and school and then often make it to work late. The bus often passes her by, is late and thus misses her next bus, or doesn't show up at all.



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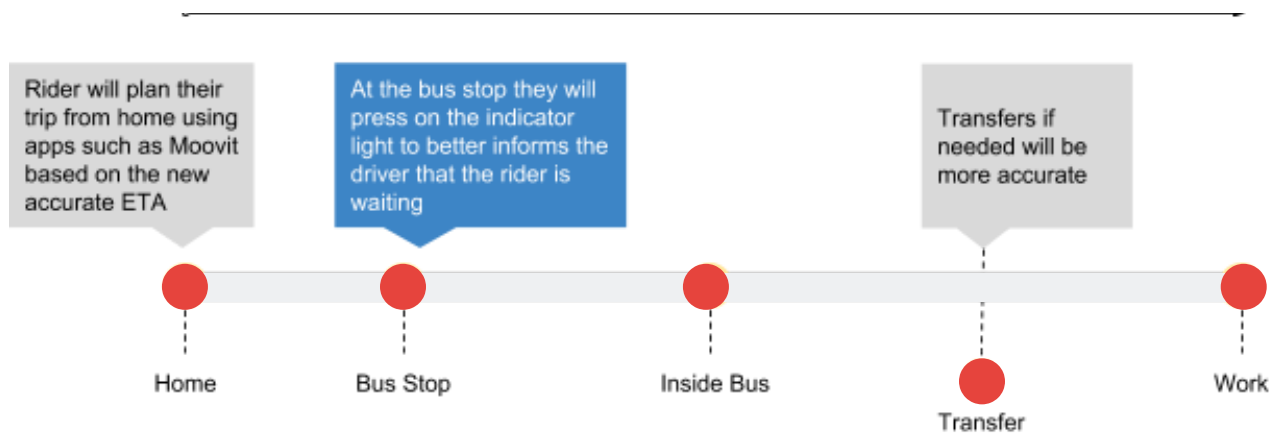


## THE IDEA

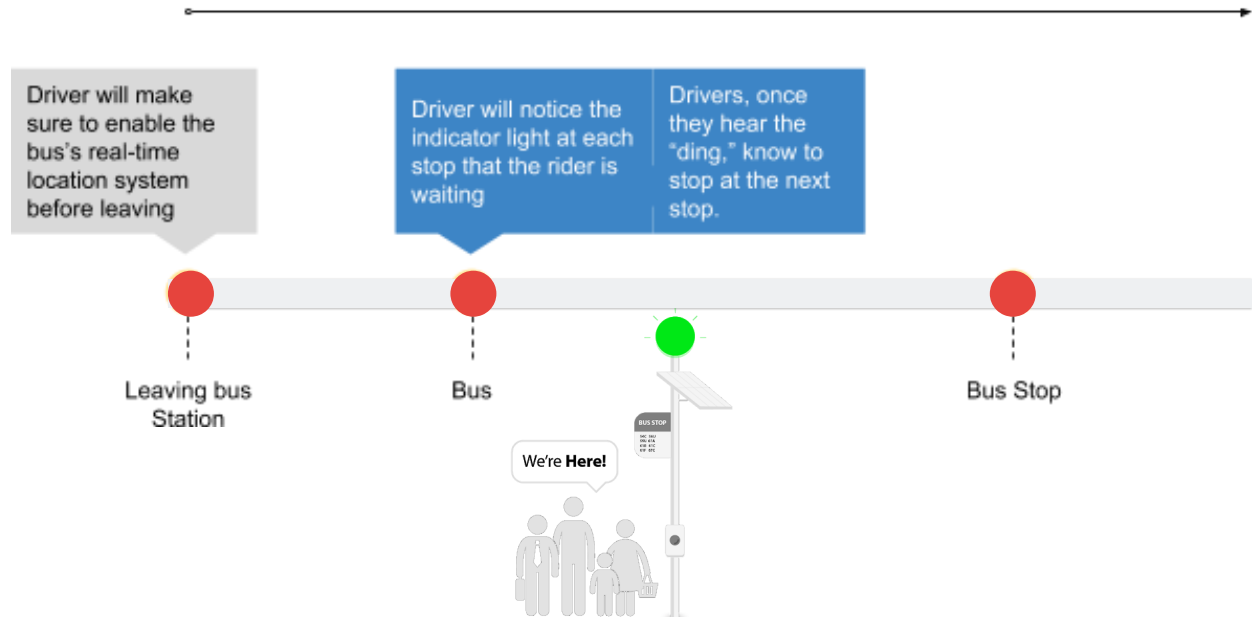
We are looking for new solutions that make it simple for travelers to understand their transportation options and how to use them. Knowing when the bus will arrive, where the bike paths are, where the safe sidewalks are, how traffic or weather will impact driving time, and even what side of the street to stand on while waiting for the bus are key for planning one's commute. Information, no matter if it is displayed digitally on a smartphone, written on a physical sign, or shared between neighbors, is fundamental to moving around the city.

## THE JOURNEY

### RIDER'S JOURNEY

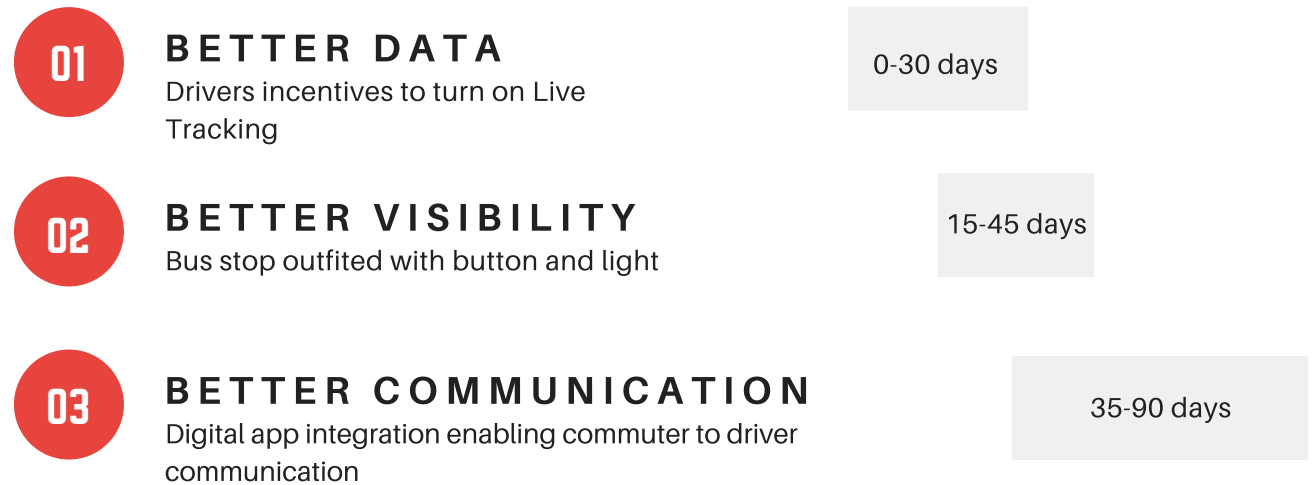


### DRIVER'S JOURNEY

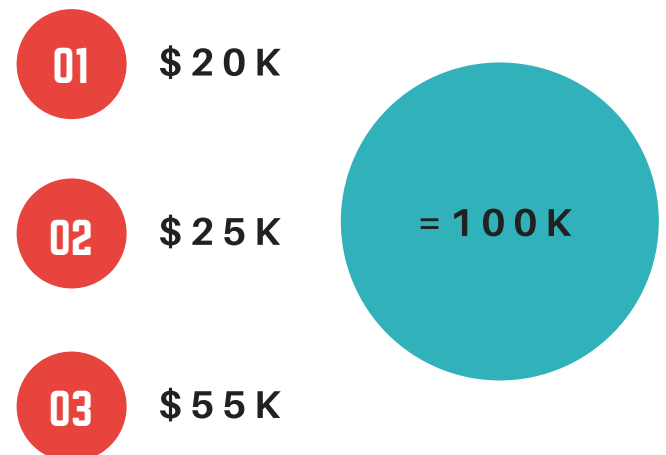


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## THE PILOT STAGES



## PILOT STAGE COSTS



### GET IN TOUCH!

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# APPENDIX 1: FINANCIAL MODEL

<b>Phase 1</b>		<b>Assumptions:</b>
Driver Hours/Day		1200 16 hours run time on average
Aim for 75% GPS Adoption		75% Union is okay with this incentive system
\$0.25 bonus/hour	\$ 0.25	Drivers feel \$0.25 is enough
<b>Total Cost/Day</b>	<b>\$ 225</b>	
<b>Total Cost of Pilot -- Phase 1</b>	<b>\$ 20,250</b>	
<b>Phase 2</b>		<b>Assumptions:</b>
Identified 1 Route for Pilot		1 Lights and button require maintenance
50 Stops per route		50 Select routes based on need and feasibility
<b>Total Stops in Pilot (A9*A10)</b>	<b>50</b>	50 Lights are solar-powered
*Cost of Light/Button per stop	\$500	
+90-Day Maintenance Costs	\$1,250	
<b>Total Cost of Pilot -- Phase 2</b>	<b>\$26,250</b>	
<b>Phase 3</b>		<b>Assumptions:</b>
Identified 2 Routes for Pilot	2	Tech to retrofit bus and stop isn't productionalized ("hacked together" for purpose of pilot")
5 Buses per route	5	Raspberry Pi, Simple cellular hotspots, etc.
<b>Total Buses in Pilot (A9*A10)</b>	<b>10</b>	3rd Party such as Moveit or Transit willing to partner for reduced cost
<b>Cost of Bus Integration per bus</b>	<b>\$2,500</b>	
Total Cost of Bus Integration based on 5 buses		\$25,000
<b>Cost of Stop Integration</b>	<b>\$500</b>	
Total Cost of Stop Integration based on 50 stops		\$25,000
Cost of App Integration		
+90-Day Maintenance Costs		\$1,250
<b>Total Cost of Pilot -- Phase 3</b>		<b>\$51,250</b>
<b>Total Cost of Pilot</b>		<b>\$97,750</b>