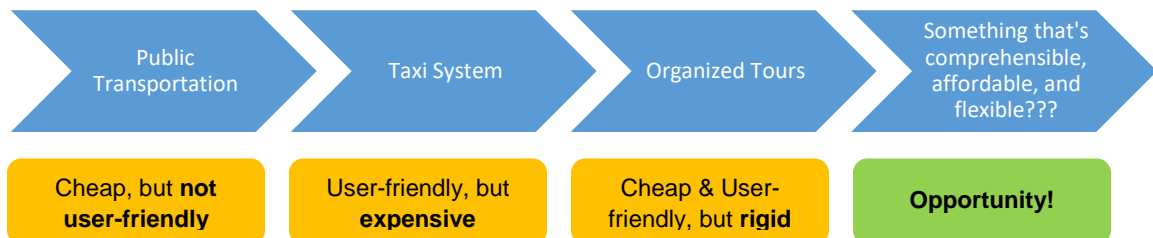# UberEXPLORE Product Spec
A Look Into Disrupting the Organized Tourism Industry

Intro: Problem, Opportunity, and Goals

<u>Problem</u>

Travelers to new cities overestimate their degree of preparation in regards to 1) what they want to see/do and 2) how they will transport themselves between these places. This leads to a confusing journey of navigating the public transportation systems, which ends up resulting in calling a taxi. However, individual taxi journeys can be very expensive after a few trips. Thus, travelers often purchase slightly cheaper bus tour packages in hopes of seeing all the good sites at a reasonable price. But organized tours, although comprehensive in terms of sites visited, are subject to time-constraints and don't take into account an individual's desire to explore a new area in depth. Most organized tours are mechanical in this sense: hop on the bus, go to the place, take a picture – but "be back in 15 minutes", says the tour guide. And this rigid, superficial process repeats until the end of the tour.

Evolution of Tourist Transportation Needs

Public Transportation	Taxi System	Organized Tours	Something that's comprehensible, affordable, and flexible???
Cheap, but **not user-friendly**	User-friendly, but **expensive**	Cheap & User-friendly, but **rigid**	**Opportunity!**

<u>Opportunity</u>

An opportunity to disrupt the organized travel industry exists for Uber because it has the "transportation infrastructure" and software platform in place to provide a superior travel experience for this new generation of mobile-first tourists. This solution must be:

1. Curated – reduce user planning by finding authentic sites to visit
2. Easy to use – Reduce decision-making, find places to visit, auto-map routes
3. Affordable – cheaper than other organized travel tours and taxis
   a. UberX and UberPool offer this advantage but surge pricing can strain a budget, especially in a city like NYC, where surge pricing is very common
4. Flexible – no time limit; users can choose to explore an area for however long they want

Top Ideas	Business/Economics Impact	Rider Impact	Driver Impact	Implementation Timeline
Idea 1. Allow organized tour busses to "drive" on Uber platform	- Tour Bus: provide a fast, mobile-booking experience for going on tours. - Uber: profit share on bookings (costs: potential cannibalization)	- Increase ease of access to organized tours, and streamline booking process - Does not solve issue of flexibility	- Tour bus company provides drivers and transportation assets (bus, vans, etc.)	- Sales: sales team would need to pitch to companies to sign up - Product/Eng: Adding new type of trip option to app – building interface for choosing tours
Idea 2. Provide travelers with short, Uber-curated tours of sites to visit	- Capture market share from organized tourism industry - Partner with businesses near Uber's selected sites (targeted ads) - Potential cannibalization of regular Uber rides - Stressing driver supply	- Go on Uber tours of sites - In-app narration guide - Pay for all rides in the tour upfront (avoid potential surge pricing later on) - Untimed exploration; call back Uber anytime to go to next site	- No impact on driver experience; driver receives inbound rider requests from Uber tours as normal rider requests - Site-to-site travel is not provided by the same driver	- Sales: selling ad packages to local businesses in the area - Product/Eng: Potentially a standalone app, huge development costs

Goal

Our competitors in this space have too singular value propositions that are negated by unchecked flaws in their service (e.g. metro is cheap, but takes longer and is hard to understand). Our goal is to make Uber the most logical transportation partner for travelers looking to explore new destinations: curated, easy, affordable, and flexible.

Top Feature:

With our goal in mind, Idea #2 is the top feature to solve this problem: provide travelers with short, Uber-curated tours of sites to visit: UberEXPLORE. This idea seems to have been tested in Chichen Itza, Jaipur, and Rome as UberTOUR. However, UberEXPLORE will have some notable differences, especially when it comes to driver experience, business partnerships, and UI.

Who is UberEXPLORE for?

1. **Young, Wanderlust-filled Budget Explorers** – millennial travelers (college-age and older) comfortable with ambiguity in their travel plans and looking for cheap ways to have the most fun. These people love to post on Instagram with caption #inspired and are often willing to try new things just so they can say they did so. Uber can help them plan their travels by 1) not being too expensive and 2) providing pre-planned, curated tours to go on.
2. **Gen X, Last-Minute-Planning Wealthy Travelers** – these travelers are the kind to book a plane ticket without booking the hotel they're going to stay at until they arrive at their destination. Tours bore them and public transportation feels too confusing. Uber's tours offer them the 1) flexibility of exploring a site as long as they want, 2) a roadmap of sites to go to, 3) eliminate the thinking needed to coordinate how to get to these places.
3. **People on Business Trips** – Businesswomen and men often go to new places but have to leave by the next day since they're still on a business trip. Uber can help these people satisfy their inner tourist tendencies by providing them a quick, curated list of places to go. They leave satisfied, knowing they at least saw some of the notable sites in the area.

Mockups for UberEXPLORE MVP ([InVision Prototype](#))

Glossary

1. **Site** – a destination on the Uber tour (e.g. restaurant, landmark, scenery, activity)
2. **Tour** – a curated selection of Sites around a city; tours are themed (Foodie, Scenic, etc.)
3. **Friend Group** – group of people traveling together; important for advertising pricing
4. **Start/Finish Location** – users set this location as the starting point and ending point of the tour. This is the only time users can set their location (rest of the Tour is between pre-determined locations around sites)

Onboarding Guide for UberEXPLORE
Onboarding Guide displays on screen upon opening UberEXPLORE for the first time:
1. Benefits of UberEXPLORE
2. Tour options available
3. How to set Start/Finish Location
4. How to call back an Uber while on tour

1. Home Page

From the Uber app homepage, Users click on the "compass" icon to the right of the "Eats" icon on the top nav. This action opens the UberEXPLORE homepage (rather than taking the user to a separate app, like how UberEATS does).
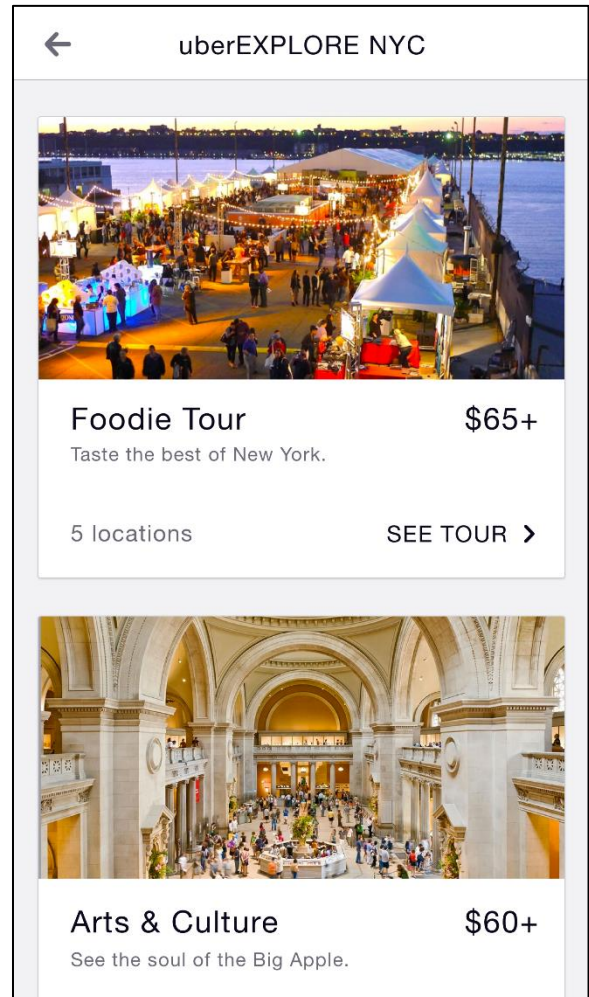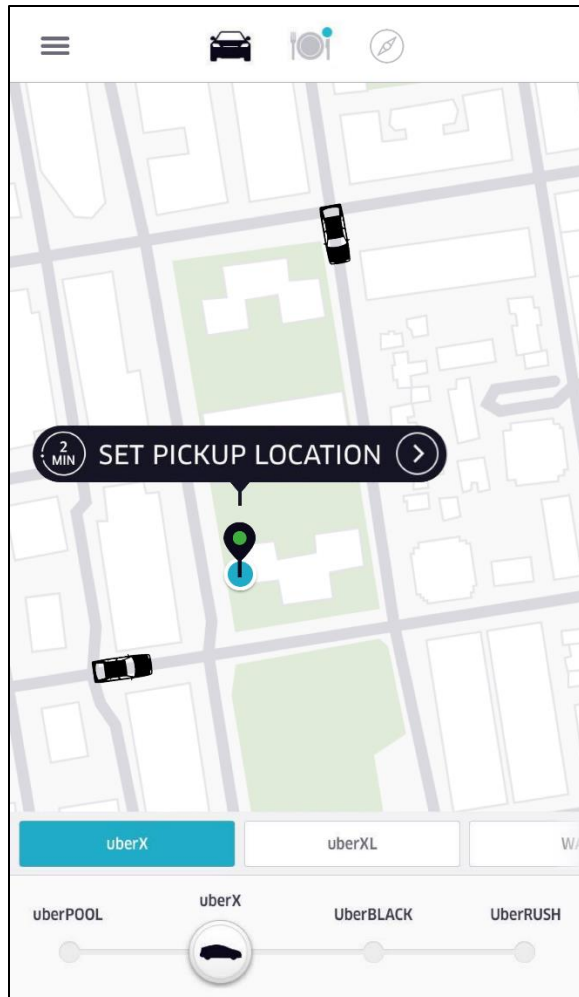

On the UberEXPLORE homepage, Tours are laid out in tiles with information such as Tour Name, Description, # of Locations, Base Price (price of using UberPOOL the whole tour), and "See Tour". Clicking See Tours leads to Tour Page. Tours will be A/B tested with various sites during Beta Launch to optimize for the most enjoyable sites.

2. Tour Page

   After clicking on "See Tour" on the Home Page, the user is taken to the Tour Page.

   The top half of the page displays a map with pins marking the Sites on the tour, as well as the user's current location (marked by the standard blue dot).
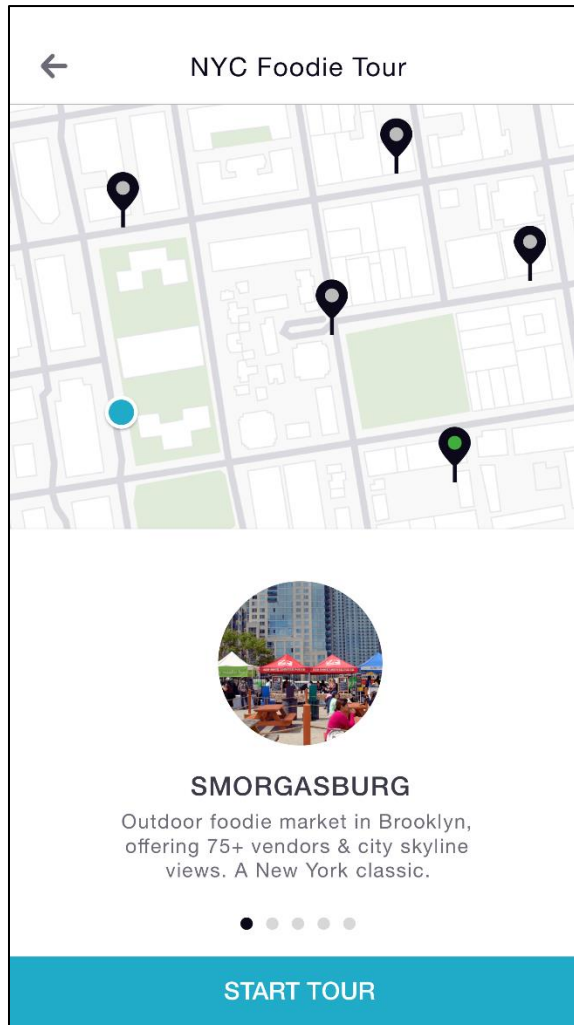

   The bottom half shows a description of the sites with pagination dots for navigating between site descriptions. As the user slides between site descriptions, the map pins' circles switch from grey to green to indicate where that site is located.

   The footer on this page is a "Start Tour" option, which leads to the Selection Page.

3. Selection Page

The Selection Page is the same as the main Uber homepage, where users set their pickup location and type of Uber car.
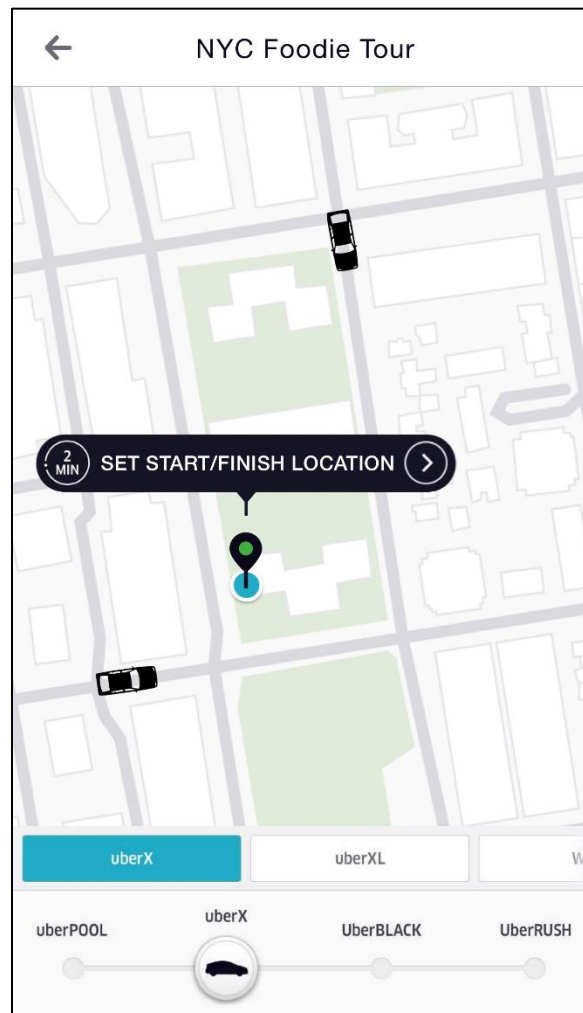
This page only appears at the beginning of the tour because users can only "Set Start/Finish Location", once. The Start/Finish Location is where the tour will pick up/drop off users at the beginning/end of the tour. Thus, users can only set their pickup location at the beginning of their trip, when they go from their Start/Finish Location to Site 1. From then on, the Pickup Location is a pre-determined spot near the site and the user must go to this spot to meet the driver. The last trip on the tour (Site N to Start/Finish Location) follows the same functionality.

Users can double-click on an Uber type to activate the Selection-Detailed View (same as regular Uber app).

After setting the Start/Finish Location, users are led to the Confirmation Page.

4. Selection-Detailed View

Activated by double-clicking a car type (same as main Uber app). Here, information such as the price of the Tour (based on Tour selected, type of car, and Start/Finish Location), max number of people in car, and pricing breakdown are listed.

5. Confirmation Page

Compared to main Uber app's Confirmation Page, UberEXPLORE's differs by swapping the "Fare Estimate" feature with "Tour Fare". Fare Estimate is not needed because the price of a tour is already pre-determined (sum of the regular car type price of the trips taken between destinations in the tour + Start/Finish Location to Site 1 price + Site N to Start/Finish Location price). Tour Fare would better serve the users since some may not have activated the Selection-Detailed View before going to the Confirmation Page.

The Destination Box cannot be changed, as the sites in the tour cannot change.
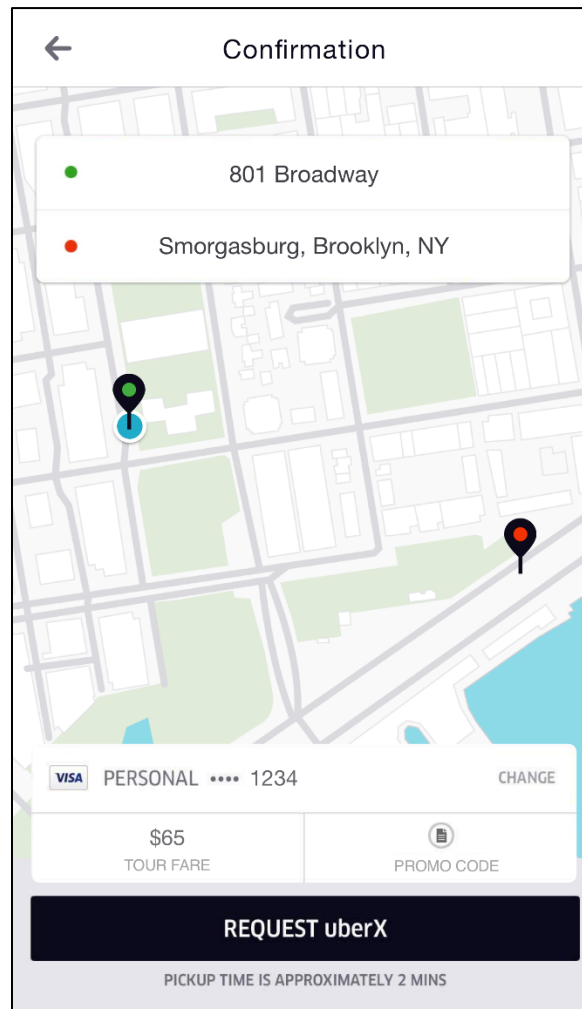
6. Waiting Page

Same as regular Uber app waiting page – waiting for car to come pick user up.

7. Trip Page

Compared to the main Uber app's Trip Page, UberEXPLORE's differs by swapping "Send ETA" with "Audio Guide". Clicking Audio Guide will allow users to listen to pre-recorded, 1 minute clips of the site's history or city's history. This feature will help round out a tourist's UberEXPLORE experience – not only can they get from place to place, but they can also learn more about where they're going or about the city itself. Future features to Audio Guide will allow users to select which clips to listen to, as well as provide on-screen subtitle text for users who are hearing disabled or just simply want to read instead of listen.

The Fare Split feature is important here because most Uber users will not want to bear the entire cost of the tour. This is also important because now Uber can track all the users on the tour together, or the Friend Group.
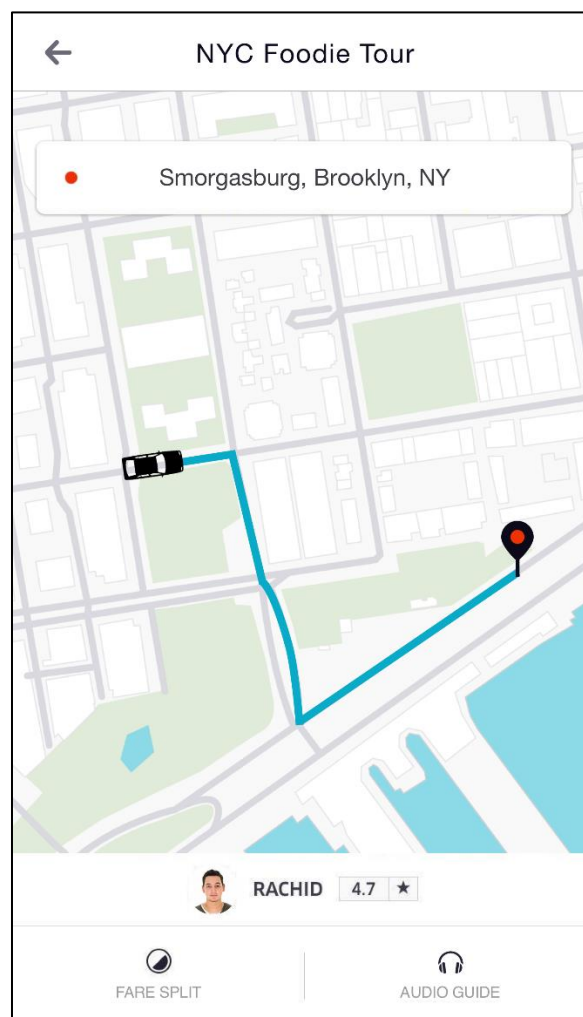
8. Active Tour – Home Page

When the user reopens the app to go to the next Site, the Active Tour Home Page will appear. An itinerary is listed below the fold, with the current Site indicated by a green circle, next Site indicated by a blue circle, and subsequent Sites indicated by grey circles. Below the itinerary is a map of the Sites.

Users can also exit the UberEXPLORE anytime by clicking on the top nav icons for Uber and Eats. This way, they can call another Uber in case they want to check out another location before returning to their tour (See *Rider Story* below for cancellation and refund policies).

Once a user hits "Go To Next Location", the entire Friend Group must go, too.
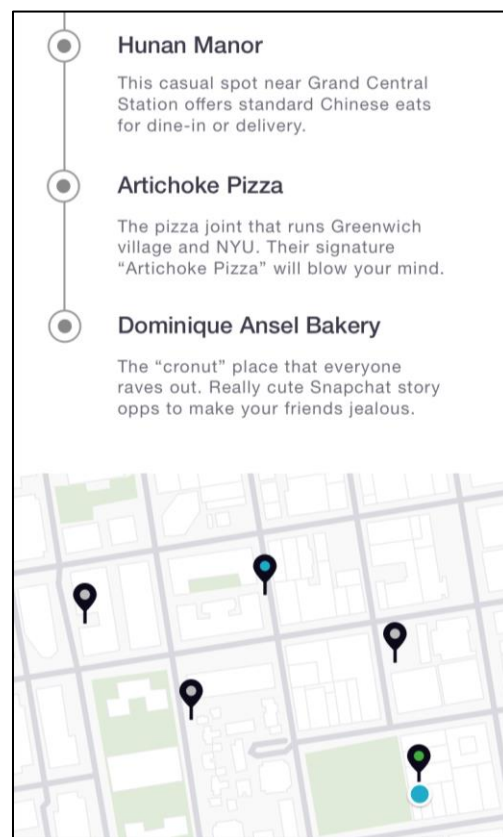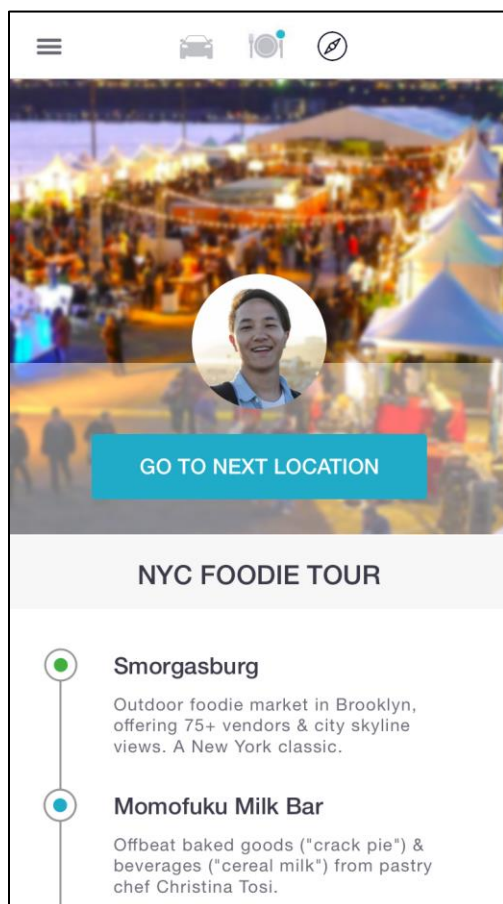
9. Active Tour – Selection Page

After hitting "Go To Next Location", the user is brought to the Active Tour Selection Page. Users can select the type of Uber they want for this leg of the journey, but they cannot select their pick up location (avoid people gaming the system and setting pick up locations far away from a site, which would result in a more expensive Uber ride but no extra costs for the user). Thus, users must meet the driver at the designated Pickup Location (exact details on Active Tour Confirmation Page, below).

Their destination Site is marked by the red pin on the map. Users press "Pickup Location" to go to Active Tour Confirmation Page.
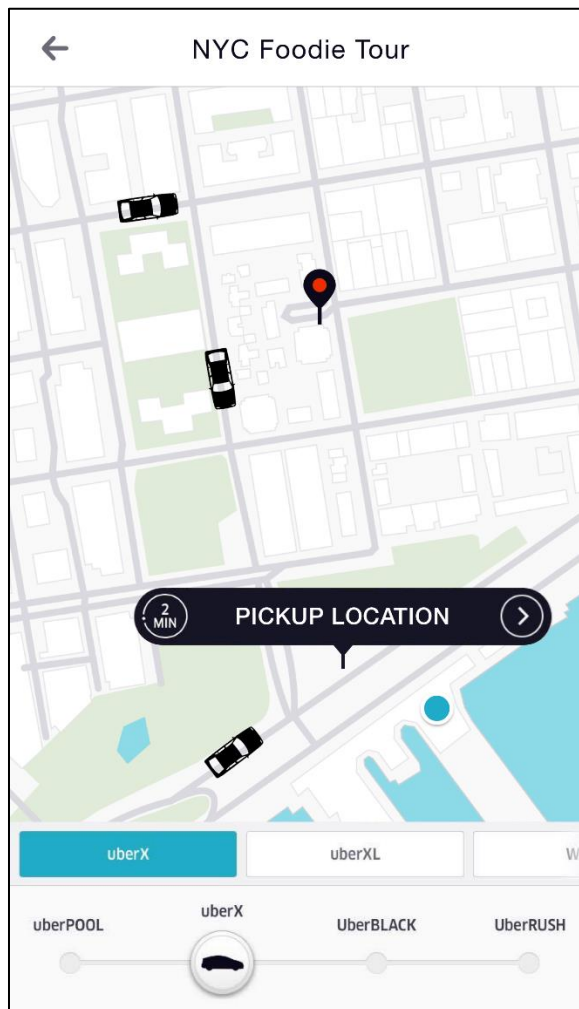
10. Active Tour – Confirmation Page

Once on the Active Tour Confirmation Page, the user will see where to meet their driver (in this case, near the GW statue), and where their next Site is. Users cannot change either of these fields.

After the user presses "Request UberX", the app repeats from mockups 8-10 until the end of the tour.
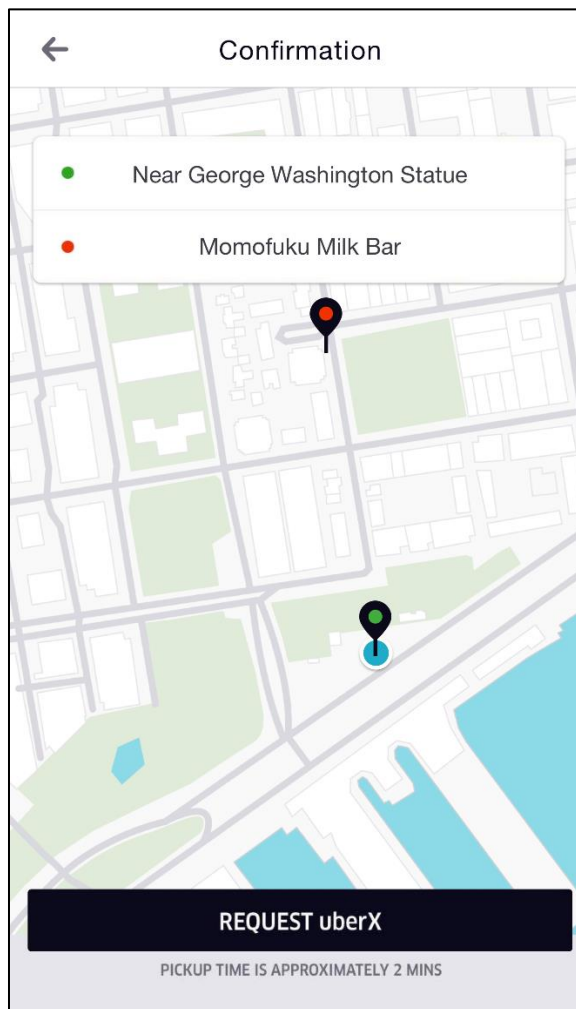
11. Reviews Page

After the user completes their last trip on the tour (Site N to Start/Finish Location), the user will be asked to review their tour. The price the user pays will also display (Tour Price divided by # of Friends asked to Fare Split). Standard functionality such as "Leave Feedback" and "Need Help?" from the main Uber app will also exist.

Other Stakeholders in UberEXPLORE Ecosystem

1. **Riders** – Uber users who book tours
2. **Drivers** – Uber drivers
3. **Uber** – Product/engineering teams, editorial team (for tour site curation)
4. **Local Businesses** – advertising partners

Rider Story
- See Mockups Above
- Pricing Structure: based on car type and distance between each site
  - Base Price of Trip < Car Type UberEXPLORE Price < Surge Price
  - More expensive than total base price, but less than if expected value of Surge was priced into routes (based on time of day)
- Cancellation Policies/Edge Cases:
  - Users can exit/return to UberEXPLORE, anytime (i.e. User wants to go to random new site not in travel package)
  - User must complete tour in 24 hours, or else tour expires
    - Avoids creating a bloated "Deferred Revenue" account for income collected on trips not yet taken by users
  - If user phone dies, user can continue the trip with their Friend Group
    - If traveling solo, user will need to visit "Need Help" to get refunded
  - Users can cancel their tour for a cancellation fee – exact fee amount is TBD
- Benefits of UberEXPLORER to Riders:
  - Avoid paying surge-priced rides later in the day
    - Lost surge revenue covered by *business deals* (see below)
  - Leave the planning with Uber
  - Visit sites without time constraints

Driver Story
- Inbound UberEXPLORE requests display as regular rider requests
- Paid the current market rate, NOT the amount paid by the user for the tour
  - Thus, in case of surge pricing, Uber would be losing money on these trips since the amount they pay the driver includes surge, but the amount they collect from the user does not include surge (since the user paid for the trips upfront via the tour package)
  - Lost surge revenue covered by *ad deals* (see Local Business Workflow below)
- Benefits of UberEXPLORER to Drivers:
  - Increased rider demand = more business = more compensation

Uber Story
- Uber Eats: Users can order Uber Eats to their site → cross-selling Uber products
- Editorial: Curating sites and tours; must provide authentic tours
- Sales: Landing ad deals with Local Businesses
- Product/Engineering: designing, building, and shipping the product

- Benefits to Uber, itself:
    - Cross-selling potential
    - More riders and drivers
    - Capture market share from organized tourism industry = increased revenue

<u>Local Business Story</u>
- "Local" is defined by: within 10 minutes walking of a Site
- How Advertising Works on UberEXPLORE:
    - Local Business signs up on an Uber advertising portal (similar to Facebook's)
    - Restaurant chooses what size friend group to target, and how many people within a friend group to target (See **Ad Pricing Structure** for rationale, below)
    - Ads show up in notifications from Uber app
        - Example 1: Local Gondola Business located near Eiffel Tower
            - Notification sent to users >> users click message >> Google Maps opens
                - *"Boats? You are near Jacque's Gondolas, 5 min walk away. Click this message to visit."*
        - Example 2: Local Ratatouille Business located near Eiffel Tower
            - Notification sent to users >> users click message >> Google Maps opens
                - *"Hungry? You are near Jacque's Ratatouille, 5 min walk away. Click this message to visit."*
        - Essentially, users trade having to pay surge costs for viewing ads

Ad Pricing Structure:

- Hypothesis Test: In a Friend Group, if more friends in that group are targeted with an ad, there a higher chance of converting that whole friend group to customers.
    - Utilizing super-local and intimate word-of-mouth marketing and network effects

From a Local Business perspective, LTV of tourists can be low because tourists are typically one-time spenders (no repeat purchases). Therefore, the CAC may not be worth spending. But to mitigate this, Uber is tracking the **Friend Group**. This way, advertisers can capitalize on the fact that friends in a group have great influence over each other. Targeting specific friends, or multiple friends within the group, can be profitable if those few friends manage to convert the entire group of friends into paying customers. However, we must prove the hypothesis test above: is there a relationship between the number of friends advertised to in a Friend Group and the probability of that entire Friend Group converting to customers? If true, this would allow Local Businesses to choose how many friends within each group to target to optimize their budget and conversion rate.

Therefore:

- $\text{CAC Formula} = \dfrac{\text{Total Ad Spend}}{\text{\# of Customers Acquired}}$
    - Total Ad Spend = \$1,000 for 1,000 notifications

- o # of Customers Acquired = # of Friend Groups Acquired ∗ Average Friend Group Size ∗ # of Friends in Friend Group Targeted
  - # of Friend Groups Acquired = # of Friend Groups Contacted ∗ Conversion Rate
    - # of Friend Groups Contacted = # of Friend Groups where at least one person was contacted = $\frac{\#\ of\ Notifications\ Sent}{\#\ of\ Friends\ in\ Friend\ Group\ Targeted}$
    - Conversion Rate = $2^{\frac{\#\ of\ friends\ targeted\ in\ Friend\ Group}{\#\ of\ friends\ in\ Friend\ Group}} - 1$

- CAC Formula Expanded =

$$\left(\frac{Total\ Ad\ Spend}{\frac{\#\ of\ Notifications\ Sent}{\#\ of\ Friends\ in\ Friend\ Group\ Targeted} * \left(2^{\frac{\#\ of\ Friends\ in\ Friend\ Group\ Targeted}{\#\ of\ Friends\ in\ Friend\ Group}} - 1 \right) * \#\ of\ Friends\ in\ Friend\ Group\ Targeted} \right)$$

Sample local business financials for Ad Spend on a Friend Group of 4:

Ad Spend	$ 1,000					
# of Notifications Sent	1,000					
Friend Group Size	4					
# of Friends Targeted in Friend Group of 4	1	2	3	4		
CAC	$ 5.29	$ 9.66	$ 13.20	=$B$3/(($B$4/E7)*E9)*E7		
Conversion Rate (theoretical)	19%	41%	68%	=(2^(E7/$B$5)-1)		
LTV for a Friend Group of 4 ($15 spend pp)	$ 11.35	$ 24.85	$ 40.91	=E7*15*E9		
Profit per friend group	$ 6.07	$ 15.20	$ 27.71	=E11-E8		

So, Why Build UberEXPLORE?

1. Aligned with Uber's mission of celebrating the sights and experiences that make each city unique and special #CelebrateCities
2. Initial research shows that current transportation solutions don't satisfy user needs, and instead create more user problems
3. Revenue opportunities in capturing organized tourism market share and advertising

Revenue Streams	Cost Streams
Increased Uber Utilization → taking away market share from public transportation and tour bus industry	Surge Price Payouts to Drivers
Local Business Ad Deals	Cannibalization, stretching supply of drivers
	Product/engineering costs

Launch Strategy for UberEXPLORE

Roll out UberEXPLORE to 10 major US cities in first year (SF, LA, San Diego, Las Vegas, Houston, Dallas, Boston, NYC, Philadelphia, DC), and evaluate performance.

Closed Beta

- Month 1: Roll out to closed beta users (Uber employees in SF)
    - Collect dogfood data, create Launch Playbook, and track + prioritize + squash bugs
    - Track bugs as they come in, prioritize and begin tackling them
- Month 2: Product Improvement, Cycle 1
    - Analyze data, squash bugs, finalize Launch Playbook V1.0

Public Beta

- Month 3: Roll out feature to public beta users in small major city (e.g. Houston)
    - Collect data, improve Launch Playbook, and track + prioritize + squash bugs
    - A/B test site combinations for Tours to find the best sites for a tour
    - Contact TechCrunch/VentureBeat/Verge for press initial release
- Month 4: Product Improvement, Cycle 2
    - Analyze data, squash bugs, finalize Launch Playbook V2.0
- Month 5: Roll out feature to beta users in large major city (e.g. NYC)
    - Collect data, improve Launch Playbook, and track + prioritize + squash bugs
    - A/B test site combinations for Tours to find the best sites for a tour
- Month 6: Product Improvement, Cycle 3
    - Finalize data pipelines, make necessary projections of usage and make final driver-supply impact estimations
        - **Abort Public Launch if predicted supply of drivers will be too strained to justly serve regular Uber users (see Metrics, below)**

Public Launch

- Month 7: Roll out UberEXPLORE to all users in all major cities
    - Schedule press releases
    - Reveal video promos on social media
        - Celebrity endorsements?
    - Public talk from Travis himself, explaining the vision of the feature
- Future: Roll out UberEXPLORE to all major cities around the world
    - Continue A/B testing site combinations for Tours to find the best sites for a tour

Metrics/Post-Launch Assessment for UberEXPLORE

All metrics to be tracked during closed/public beta and public launch.
The Definition of Success (DoS) is outlined below each metric category.

Supply & Demand – do we have enough drivers to sustain UberEXPLORE?

- Average # of Available Drivers in a Week, for each city
  - If number decreases drastically, that means there may not be enough Uber drivers serving other Uber customers
  - Ideally this number decreases initially but then as Uber gains revenue from UberEXPLORE, these revenues are used to pay out drivers more, and that encourages more Drivers to sign up, thus increasing this metric
- *DoS: Avg. # of Avail. Drivers in a week does not fall more than 5%*

Financial Stats – are we making enough money to sustain UberEXPLORE?

- Total Revenue from Tours
- Total Revenue Lost from Surge-less Trips
- Total Ad Revenue Made from Local Businesses
- *DoS: Total Ad Revenue >= Total Revenue Lost from "Surge-less" trips*
  - Replacing surge revenue with ad revenue is a more scalable revenue solution since ideally, Uber does not want to over-utilize surge as that results in customer dissatisfaction

Rider Experience – are UberEXPLORE riders happy? Are regular Uber users happy?

- Average Number of Tours Completed in a Week
- Average Rating of Tours Completed in a Week
- Average Number of Tours Cancelled in a Week
- Average Waiting Time per UberEXPLORE user vs Average Waiting Time per Uber user
  - Waiting times between these two groups should be roughly the same, with more preference towards the Uber users since UberEXPLORE users are on vacation (and probably have more time on their hands to wait), while Riders may be running errands/going to work
- *DoS: Avg. Wait Time across all Uber users does not rise more than 1 minute*
- *DoS: Avg. Uber Cancellations in a week does not rise more than 5%*
- *DoS: Avg. Rating of Tours >= 4.5 Stars*

Driver Experience – are drivers being paid more, less, or equal?

- Average Compensation per Hour for Drivers
- *DoS: Avg. Comp/hour Post-Launch >= Avg. Comp/Hour Pre-Launch*

Local Business Ad Partner Performance – are our ads effective in driving business to our partners?

- For Local Business: Standard ad metrics: reach, engagement rate, CTR (see Appendix, "Future Improvements Version 4" for additional metrics)

- For Uber: Average Ad Dollars spent per campaign, Average Campaign Duration
- DoS: See Financial Stats DoS

Risks of UberEXPLORE

High Risk:
- Underestimating driver supply shock, which causes Uber to begin losing regular Uber customers
    - Mitigation Strategy: Thoroughly collect data during Public Beta to estimate effects on driver supply. Be willing to pull the plug if predictions show risky of levels of driver supply.

Medium Risk:
- Inability to win Local Business advertising dollars
    - Mitigation Strategy: In addition to creating an UberEXPLORE advertising portal, Uber offices in our initial launch cities should hire a small sales team to directly source deals from local businesses.

Low Risk:
- Lack of user interest in the sites chosen for each tour
    - Mitigation Strategy: A/B test various site combinations during the first few months of Launch to find the highest rated tours (i.e. site combinations). In the future, Uber can try to create a more personalized recommendation system by analyzing a user's Uber trip history to find out what kinds of places they like to visit.

APPENDIX

Notifications for UberEXPLORE

Ad Notifications
Users receive notifications on their mobile devices from local businesses who purchase UberEXPLORE ad packages. These ads will be sent as banner notifications to the user's mobile device whenever the user enters the ad campaign's geo-spot.

Email Notifications
Users receive the emails containing a receipt and recap of the tour.

Future Version Improvements of UberEXPLORE

Future versions of UberEXPLORE will aim to achieve all of the remaining original product goals: affordable and flexible.

MVP & Version 1 – make UberEXPLORE easy to understand and increase usage
1. Curated
2. Easy to use

Version 2 – as feature increases usage of Uber, the supply of drivers will hopefully increase and economies of scale will decrease prices of tours and thus make it more affordable for users. In addition, UberEXPLORE will easily integrate an autonomous vehicle fleet (if Uber chooses to go in that direction).
3. Affordable

Version 3 – as more users complete trips, we will have more data to understand how to improve the user experience of UberEXPLORE
4. Flexible

Potential features to increase "flexibility":
1. **Custom Tours** – users select from a list of sites and create their own tour (pricing depends on distance between sites selected)
2. **Recommended/Personalized Tours** – based on a user's trip history, Uber can create a personalized Tour package for that user whenever they enter a new city
3. **Multiple pickup locations around each site** – having too many users get picked up in one pickup location can increase confusion around whose Uber is whose. Having multiple pickup locations can offload the traffic caused by waiting Ubers.
4. **Cross-selling Uber Eats** – promote UberEats so users can order to their current site location

Version 4 – Improved advertising metrics and functionality for our partners

We can gain/retain more advertising partners if we can track actual ad conversions to purchases. One potential way to achieve this is to partner with Foursquare or another geo-location ad-serving company. The partnership to get conversion data would look like this:

- Uber would send Partner (e.g. Foursquare) a list of all businesses running ad campaigns on UberEXPLORE
- Every week, Partner would send Uber a list of all customers who they detected on their platform as having "checked-in" to a business
- Uber would map these Partner customer IDs to Uber user IDs to see who received an ad while on UberEXPLORE, and thus was "converted"
- Uber can then map these individual user IDs to their respective Friend Groups, and calculate the total number of customers having gone to the local business, attributed to the Uber ad

Overall Future Vision – Once UberEXPLORE achieves critical mass, the routes between sites on tours will become "virtual" above-ground subway tracks and site pickup locations will be "subway stations". Ubers will flow along routes, seamlessly picking up and dropping off passengers at each site.

Tech Notes for UberEXPLORE

Models

- User
  - user_id
  - name
  - username
  - image
  - email
- FriendGroup
  - Temporary friend_group_id
  - Mapped to multiple user_id's
  - Number_of_friends
- Tour
  - tour_id
  - price
  - site_id
- RequestUber
  - friend_group_id
  - tour_id
- CallbackUber
  - friend_group_id
  - tour_id
- LocalBusiness
  - business_id
  - wifi_id