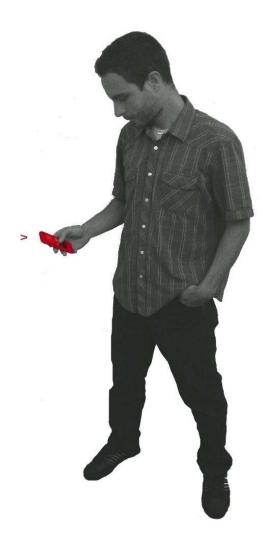


E-Mobility as a Service:

June 26, 2012

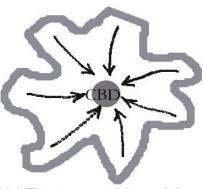


Gerry Tierney: Mobility and the City & Perkins+Will With assistance from : Format Design Studio & 510 Collective

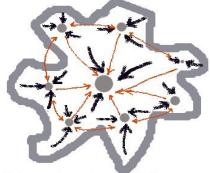


Polycentric urban forms

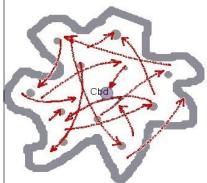




(a) The monocentric model

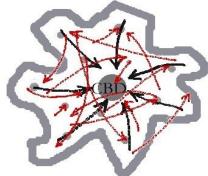


(b) The polycentric model: The urban village version



(c) The polycentric model:
The random movement version





(d) The mono-polycentric model: Simulateous radial and random movements

Urban_models2.psp

Transit = Mobility?

Rush hour crowds

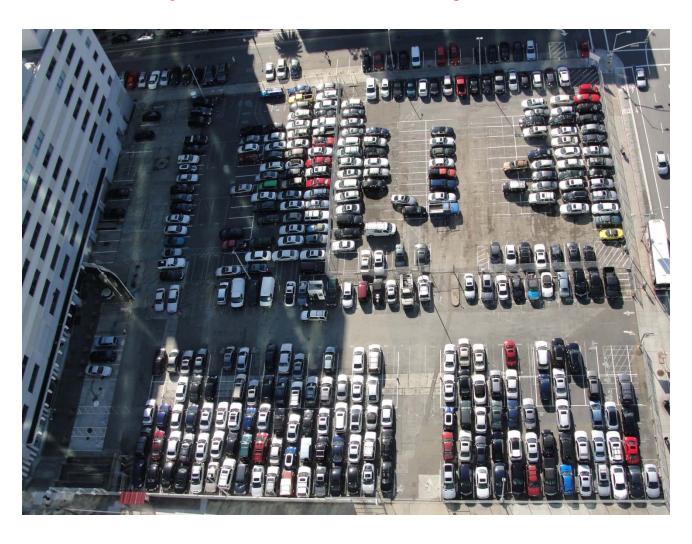
Waiting, waiting, waiting



Excuse me, do you know what bus that is?

Would you wait here at 1:30 am?

Can we really blame them for wanting to drive?



What Dots to connect?



What Dots to connect? "Dot 1": Vehicle technology



The current "average" urban vehicle: 4-doors / 400-miles - why?





Why not something like this? An autonomous urban electric vehicle: 2-doors / 100-miles

What Dots to connect? "Dot 2": Social networking technology





"Dot 1": Vehicle Technology

What Dots to connect? "Dot 3": Demographics





45% of 18 - 34 yr olds make effort to replace driving with alternative means of transportation





"Dot 1": Vehicle Technology

What Dots to connect? "Dot 4": Place & Public Realm







"Dot 3": Demographics

Place & the public realm re-imagined
Shared Public Way: Mission Rock, San Francisco (P+W)





"Dot 1": Vehicle Technology

Connected System

Social networking technology

Software



USING DARPA TECHNOLOGIES
TO AVOID OBSTACLES

Vehicle technology

Hardware

How do we access the system?

App development should be organic and reflect the needs of the user / culture





ADD FRIEND_Add friends to network.



TOUR GUIDE_Takes rider along scenic route passing by places of interest. User feedback loop defines interest locations.



RIDE SHARE_Share rides w/ friends in network. Algorithim calculates which friends to pick up based on user preferences, activity, and path of travel.



DESIGNATED DRIVER_Takes rider to home location and pairs riders w/ other riders who have activated DD, while avoiding riders in professional network.



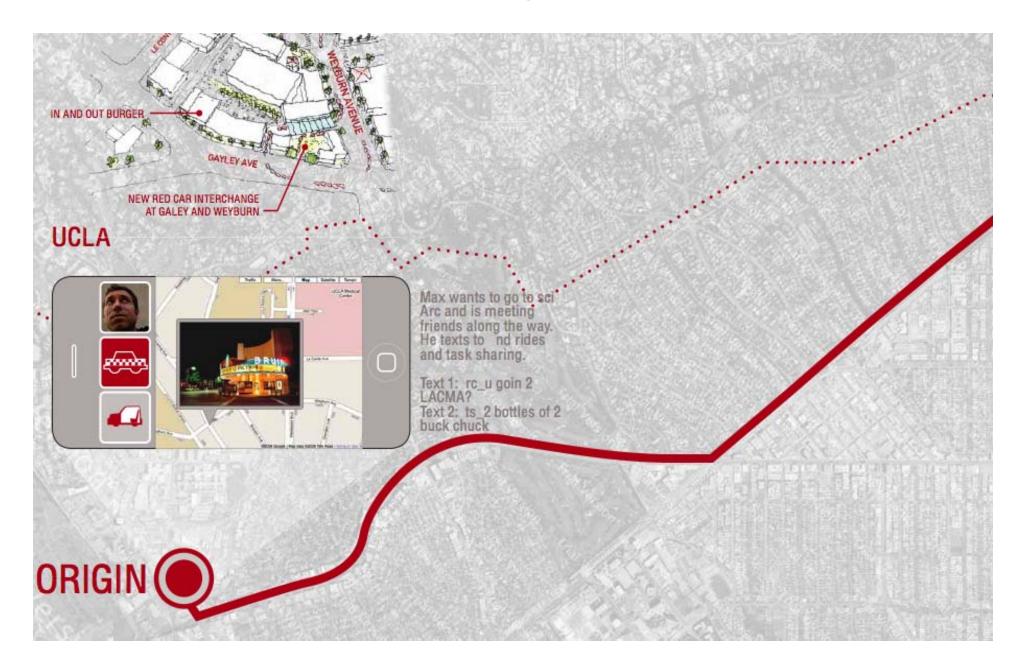
TRANSIT ASSIST_Assists user in arriving and transferring various modes of transit.



TASK SHARE_Share errands w/ network riders. Calculates shortest trip route, riders to share errands with, and meeting locations for item exchange.

What could "E-Mobility as a Service" look like?

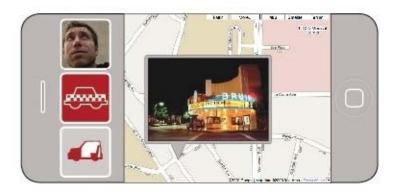
Sample journey across Los Angeles: UCLA/Westwood to SCI-Arc/Arts District



Protagonist 1: Text instructions



Max Median was born in Akron, Ohio. He's a Design | Media Arts undergraduate at UCLA and lives in the Palms District, east of Highway 405.



He texts to find rides and task sharing.

Text 1: Dest SCI-Arch

Text 2: Detour Cantor's Deli

Text 3: TaskShare Trader Joes for 2

bottles of Charles Shaw

Text 4: Ride to SCI-Arch with Cantor's Deli detour confirmed.

Text 5: TaskShare request confirmed. You will be allerted as soon as Task-Share is accepted. Max wants to go to SCI-Arc and is meeting friends along the way.





Protagonist 2: Text instructions



Antonia Alonzo is Max's friend. She's an exchange student from Argentina and doesn't have classes today.



Antonia's first stop is Melrose Ave for sunglasses and then to Canter's Deli for lunch with Max.

Her texts to REDCAR:

Text 1: Dest Melrose & Fairfax

Text 2: REDCAR to Melrose & Fairfax confirmed. Aprox. wait 5 minutes.

A little later...

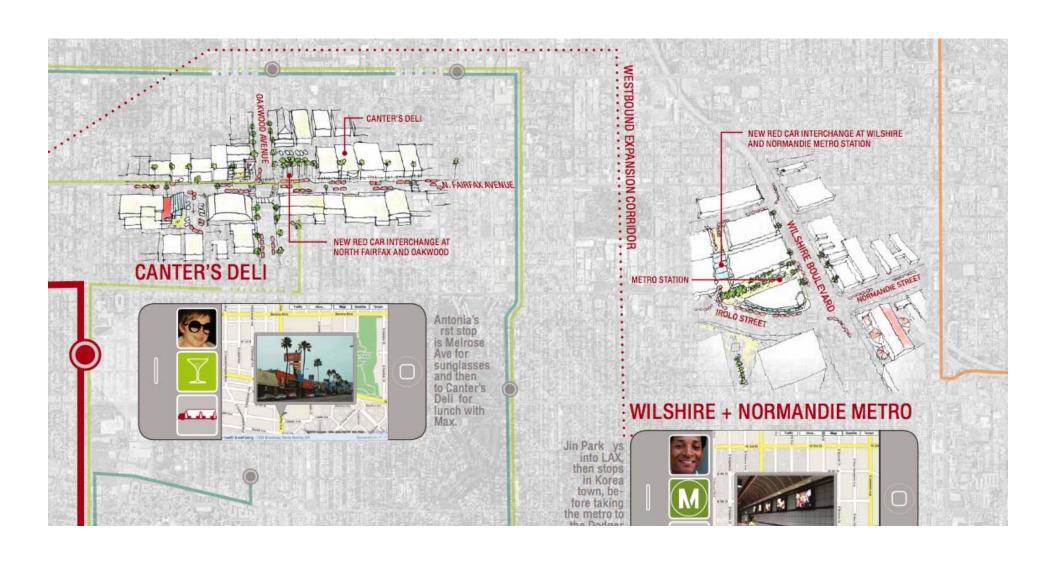
Text 3: Dest Canter's Deli

Text 4: REDCAR to Canter's Deli confirmed. Aprox. wait under 1 minute.

Text 5: REDCAR arriving.



Doing errands along the way - meeting up with friends at Canter's Deli on Fairfax



Protagonist 3: Text instructions



Kirk Underwood is a DJ and works at Trader Joes. Notified by REDCAR TaskShare, he buys a few bottles of wine and hands some of them off to Max.

Max and Antonia rideshare to the A+D Museum to meet Kirk and pick up his bottles of two buck chuck. Max heads off to SCI-Arch, while Antonia and Kirk stay for LACMA's Young Director's Night, and view the Argentinian film, El Ojo Unico by Adrian Castagn.



His texts to REDCAR:

Text 1: Dest LACMA

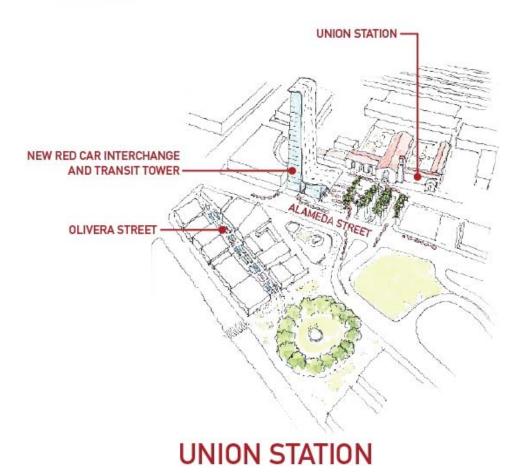
Text 2: REDCAR to LACMA confirmed. Text 3: Potential passenger requests 2 Bottles of Charles Shaw. Meet at LACMA to exchange. Reply "Share" to accept.



Protagonist 4: Text instruction



Trudy Saucerfield is a student at SCI-Arch and lives in Pasadena. She and Max met through friends.



Trudy runs an errand in the morning. She meets Max at Union Station and they go to SCI-Arch together.



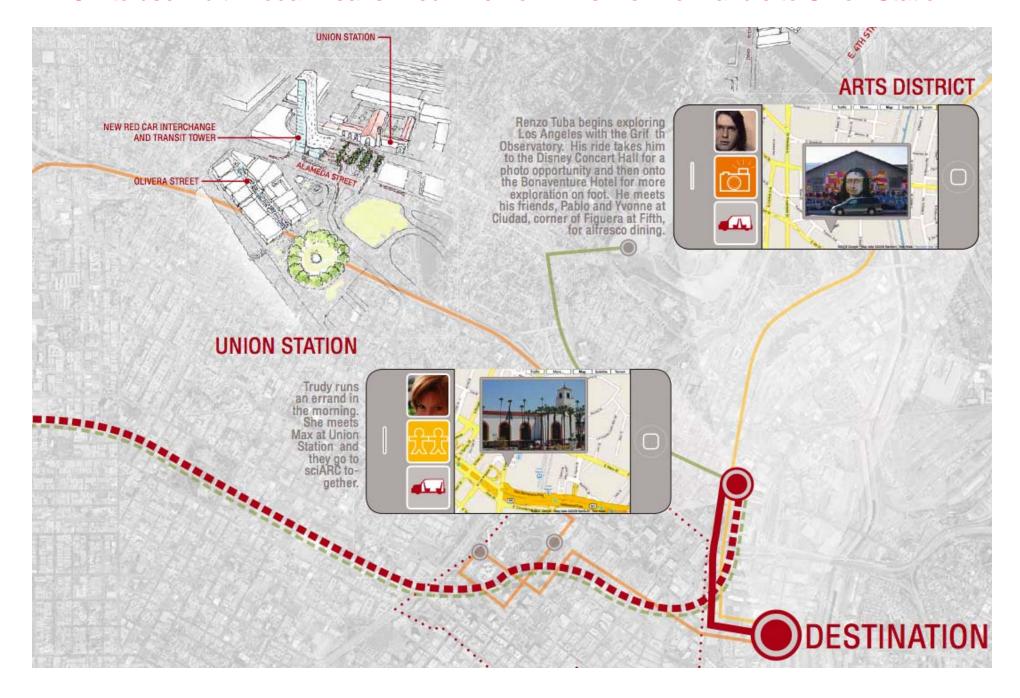
Her texts to REDCAR:

Text 1: Dest SCI-Arch

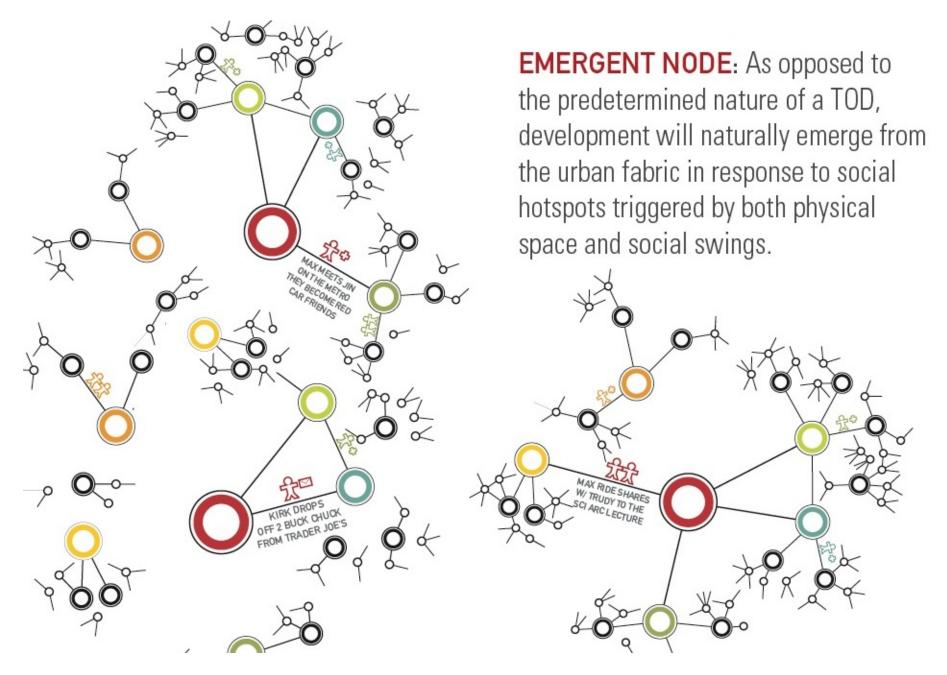
Text 2: RideShare Max Median

Text 3: RideShare with Max Median confirmed. Approximate rendezvous at Union Station at 6:15pm.

OK to use multi-modal means: Red Line from Wilshire+Normandie to Union Station



Organic TOD Development



Social Access How much is your data plan?



Do we need to create a lifeline data plan?









CONNECTING THE DOTS

Gerry Tierney: Mobility and the City & Perkins+Will www.mobilityandthecity.com
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With special thanks to:

Format Design Studio: Katie Handy & Dinesh Perera and the 510 Collective: Tyrone Marshall, Therese Tierney & Ben Feldmann