



Audi Urban Future Initiative 2015 – Assembly Row

Main expertise: Strategic Advisory on Transport & Accessibility

Other expertise: Innovative Mobility, Masterplan Mobility Consultancy, Parking Consultancy

Sectors: Digital Mobility

Location: Somerville

Year: 2015

Client: AUDI

As part of the Audi Urban Partnership with the City of Somerville, the Assembly Row project focuses on the implementation of smart and futuristic parking solutions through the application of Advanced Arrival. Strategically located only ten minutes from Downtown Boston, Assembly Row is a Mixed Use Transit Oriented Development that will contain residences, offices, retail spaces, leisure amenities and a hotel for over 5 million square feet. With its first phase already in place it has established in the latest years as one of the most attractive places in the Boston area.

Now that the second phase is in planning MIC is working to implement and test here the first driverless parking facility.

Based on the concept of piloted parking and of shared fleets, Advanced Arrival has the target of strongly reducing the parking footprint of the development by compacting garages and lowering the level of car ownership of the residents.

For second tier developments, like Assembly Row, the investments related to parking are generally sunk costs given their very low profitability and their very high construction costs. MIC has been working in very close contact with the developer Federal Realty (FRT) to test and understand the improvements and the efficiency that can derive from Advanced Arrival.

Our contribution:

Thanks to the precision driving features and to the absence of the human factor within the parking facility, the application of the technology produces an increase in space efficiency, allowing for higher parking capacities or smaller footprints of the garages. MIC calculated the spatial benefits that developers will gain implementing such technologies.

Additionally the innovative unbundling of the car's agenda from the driver's agenda will open countless improvements in terms of time efficiency and comfort, providing the customer a totally different drop-off experience and sense of arrival.

Moreover the introduction of a fleet of electric cars shared by the different users of the development could lead to a further reduction of the parking provision by lowering the car ownership of the residents and discouraging car commuting of workers. The benefits of implementing a shared mobility solution are maximized if applied to mixed use developments, where different functions and therefore different agendas make room for multi-user car services.



ADVANCED ARRIVAL

URBANIZING PARKING



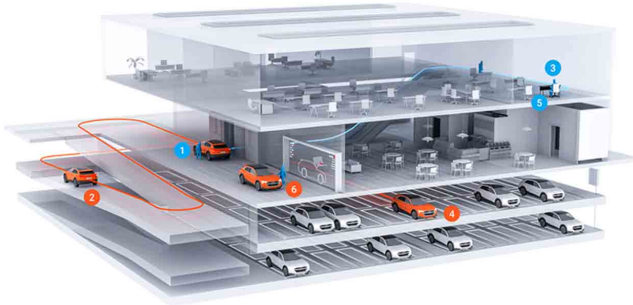
1 DROP-OFF SERVICE
 Instant access to urban life without any detours



3 GAINING TIME
 More time – less hassle circling. Piloted parking frees up valuable leisure time



5 CAR ON DEMAND
 Providing individualized premium mobility via service app



2 CAR PARKS ITSELF
 Efficient parking - Courtesy of piloted car technology



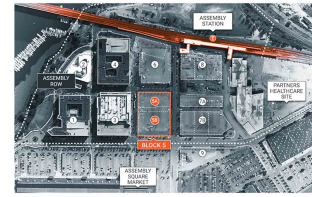
4 INDUCTIVE CHARGING
 Charging the car while parking and always ready to go



6 PICK-UP SERVICE
 Meet your car in a stress-free lounge atmosphere



ASSEMBLY ROW | OVERVIEW



BLOCK 1A (planned)
 RESIDENTIAL 150 units
 HOTEL 150 keys
 RETAIL 25K SF

BLOCK 1B (planned)
 OFFICE 25K SF
 RETAIL 15K SF

REDUCE PARKING SPACE

THE NEW METRICS OF PARKING

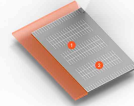
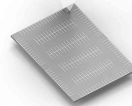
1 NARROWER AISLES
 Reduce aisle width and increase parking density



2 STALL STACKS
 Reduce the number of parking stalls - tight parking arrangements are common



3 SMALLER STALLS
 Reduce parking footprint per car and increase the number



Without Piloted Parking Technology

With Piloted Parking Technology