ADVANCING SEAMLESS MOBILITY IN THE UNITED STATES
Mobility on Demand (MOD)
Travelers use technology to hail mobility services from private sector operators, which have also partnered to expand transit. This includes integrated system management to create more traveler-centric mobility for all.

Mobility as a Service (MaaS)
Travelers use technology to access public and private mobility services by leveraging information and incentives to coordinate multi modal journeys paid with a single transaction in support of a public policy goal.
Treats transportation supply and demand as commodities

**MOD Supply & Demand**

- **CONSUMER-DRIVEN**: Focused on traveler and personal choice
- **MULTI-MODAL**: Mode agnostic and focused on trip satisfaction
- **DATA-DRIVEN**: Depends on connected data rather than on a particular technology
- **MANAGEMENT FRAMEWORK**: Framework for aggregating and managing supply and demand
MOD Platform

Orchestrating Supply & Demand

- Public Transport
- Private MOD Operators
- Start-ups
- Corporations
- Property developers
- Tourism
- Value add

Unified access to transport offerings

- Availability
- Routing
- Booking
- Onboarding
- Analytics

Standardized provision of transport offerings

- Public Transport
- Shared Transport
- Corporate Fleets

Analysis
Public Authorities
Governance
MOD AROUND THE US
BUILDING BLOCKS OF MOD

Mobility Services

- Transit
- Micro Transit
- Ride Sourcing
- Bicycle
- Scooter
- Personal & Shared Vehicle

84 MILLION SHARED MICROMOBILITY TRIPS IN 2018
BUILDING BLOCKS OF MOD

Mobility Services

Freight Delivery | Emerging
Automated/Autonomous
Electrified
BUILDING BLOCKS OF MOD

Infrastructure Services

- Roadway
- Mobility Hubs
- Parking & Curb
- ITS
- Fiber
- Tolling
- CV/AV/Traffic
- Data Platforms
- Electrification
BUILDING BLOCKS OF MOD

Data Services

- High Quality
- Dynamic Shared
- Standardized
- Portable
- Incentivized

The City of Detroit, SharedStreets, and NACTO to Pilot New Data Standard for Dockless Mobility
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Operator Services

- Dynamic System Planning
- Operations Management
- Fleet Management
- Market Growth
BUILDING BLOCKS OF MOD

- Pricing/Payment Services
  - Integrated Trip Payment
  - Parking & Curb Use
  - Electrification

Coord's Curb Explorer map color codes curb access regulations in San Francisco.
BUILDING BLOCKS OF MOD
Pricing/Payment Services

Congestion Pricing | Road Usage Charge | Wi-Fi | Data Services
BUILDING BLOCKS OF MOD

Customer Services

- Seamless Trip Planning
- Incentivized Choice
- Equitable and Accessible Services
- Sustainable Travel

Level 1 – Integration of information
Multi-modal trip planner, price info

Level 2 – Integration of booking & payment
Single trip – find, book, pay

Level 3 – Integration of service offer
Bundling / subscription, contracts, etc.

Level 4 – Integration of societal goals
Policies, incentives, etc.

Source: ICoMaaS 2017 Proceedings
BUILDING BLOCKS OF MOD

Customer Services

Seamless Trip Planning | Incentivized Choice | Equitable and Accessible Services | Sustainable Travel

Level 4 – Integration of societal goals
Policies, incentives, etc.

Level 3 – Integration of service offer
Bundling / subscription, contracts, etc.

Level 2 – Integration of booking & payment
Single trip – find, book, pay

Level 1 – Integration of information
Multi-modal trip planner, price info

Level 0 – No Integration
Single, separate services

Source: ICoMaas 2017 Proceedings
MOD in the time of COVID-19

Source: St. Louis Public Radio

Source: TransAlt; Scott Heins

Source: The Verge

Source: St. Louis Public Radio
Changes to the Previous MOD Status Quo

➢ Temporary suspensions or elimination of some services
  • Shared/pooled rides (Uber, Lyft, Via, etc.)
  • Suspension of some micromobility programs

➢ Changes in demand for services and net ridership
  • Decreased ride-hailing (as much as 70-80%)
  • Micromobility:
    - Many services experienced lower use
    - However, some services (such as bikeshares in NYC, Philly, & Las Vegas) experienced spikes in ridership
In April, the Las Vegas Regional Transportation Commission’s bikeshare program reported a 97% jump in ridership compared to April of last year.

Source: RTC
Essential Mobility During COVID

Direct access to essential transportation

Taking care of frontline healthcare workers & vulnerable communities

Delivering critical supplies, supporting earners, communities and local economy

Source: Uber
MOD Responds: New Services and Initiatives

- **Efforts to make services more affordable**
  - Discounted fees (ex: Capital Bikeshare, Indego)
  - Free rides (ex: Breeze, MoGo, Ride KC)
  - New service options (ex: Lyft’s Wait & Save” initiative)

- **Programs for essential workers** (free or subsidized rides)
  - TNCs: UberHealth, Via partnership, etc.
  - Micromobility: Spin’s Everyday Heroes Program, Lime’s LimeAid program, Gruv, Lyft, etc.

- **Initiatives to encourage specific behavior**
  (ex: targeted in-app notifications)
MOD x Delivery

➢ Delivery services
  • Partnerships for the delivery of food, school supplies, medicine, etc.
  • New programs (ex: Lyft Essential Deliveries)

➢ Opportunities to leverage emerging technology?
  • Automated Vehicles
  • Drones

* (potentially) contactless mobility *

Source: TechCrunch

Source: Forbes
Fleet Management and Safety Protocol

➢ Cleaning/Sanitizing vehicles
  (ex: disinfectant procedures, providing sanitizing supplies, etc.)

➢ PPE-related requirements
  (ex: Lyft and Uber are requiring face masks to be worn during rides)

➢ Additional safety-related considerations
  (ex: ventilation, rear-door entry, etc.)

Source: Spin
➢ Transit partnerships for flexible, demand-responsive mobility
  ▪ Aid in filling transportation gaps
  ▪ Help provide mobility coverage despite variable demand

➢ Potential growth opportunities for “socially distant” mobility options
  ▪ Micromobility: electric scooter and bikeshares
  ▪ Emerging options (automation, drones, etc.)

➢ Rethinking road and curb use
  ▪ Pick-up/Drop-off areas
  ▪ Parking
  ▪ Road space for multimodal road users

Source: GGWash
MOD Policy

- Increase formula-based and non-formula funding for transit
  - COVID-19 Relief and MOD
- Provide flexible funding for partnerships with companies offering shared-use trips, data management, and other technology companies for first mile/last mile services and improved freight delivery, the integration of mobility services and technology, and new fare and integrated payment technologies
- Add MOD and MaaS to definitions for public transportation related to mobility on demand services such as micromobility, ridesourcing, ridesharing, microtransit and shared automated services
- Support a data sharing framework that provides standardization for the transfer of data among transportation operators and providers
- Make permanent and increase funding for the MOD Sandbox
MOD and Regulations

- Rules and Regulations
  - Ridesourcing
  - Microtransit
  - Micromobility

- Infrastructure Definitions and Safety
  - Low-impact transport or light individual transport (LIT) facilities and paths for pedestrians and micromobility devices such as bicycles and electric scooters

- Commuter Benefits to expand to micromobility
- Mobility Wallet
- National Transit Database (what counts)
Focus Areas

- **POLICY | Federal Reauthorization and Recovery**
  - MOD eligibility and amendments in code - Transit, STBG, CMAQ
    - Shared mobility program such as bicycles, micromobility, microtransit, ridesourcing, shared automated services

- **PARTNERSHIPS | MOD/MaaS Alliance Partnership**
  - MOD/MaaS Markets – Bookend events discussing key MOD/MaaS issues
    - Insurance (September 2019/Fall 2020)
    - Infrastructure Services (TBD)

- **PROGRAMS | State of MOD Study**
  - Public and Practitioners annual national surveys to assess awareness of mobility on demand, customer understanding and adoption of MOD and its elements