Hybrid Public Transit for Austin

What are the components?

- City-wide on-demand micro transit in multi-passenger EV vans
- In conjunction with Rapid Bus in high-density, high-demand corridors

What is City-wide on-demand micro transit?

- EV vans for shared, door-to-door rides anywhere in town, summoned by app or phone
- Routes dynamically located and optimized for multiple riders with projected travel times
- Integrated with Rapid Bus where a transfer would be faster

Advantages of city-wide on-demand micro transit:

- Ease of use -- Eliminates walking to/from bus stops, eliminates transfers, no schedule-planning, rides arrive within 15 minutes after request
- Equity – Easy transit access for the entire city, not just those who want and can afford to live in transit corridors
- Safe, direct, inexpensive transit for the elderly, those with disabilities, and children
- Faster than conventional fixed-route
  - no first/last mile walks or trips, no waiting for transfers
  - integrates with rapid bus at both ends where useful
  - staying with Rapid Bus is faster than with bus-to-rail transfers
- Cost compared to rail
  - Phase One Project Connect rail: 28500 riders/day, capital cost $7.1 billion
  - On-Demand: 1000 vans + 10 100-port charging stations, 40-50,000 riders/day (as per experience elsewhere), capital cost $140-160 million
  - operations and maintenance cost nearly identical to rail Phase One (~ $200M/yr.)
  - the riders' “cost”, measured in both travel time and safety, is greatly reduced
- Less disruptive to urban fabric
  - no years of torn up streets
  - no residential incompatibilities from high-density redevelopment along rail corridors
  - fits the city we have rather than rebuilding the city to fit a fixed-route transit model
- Adaptable
  - can expand service without expanding infrastructure
  - can flex for commuting on weekdays vs. weekend and special events
  - flexes as the future city changes shape
- Reduces traffic – Door-to-door convenience and cost savings will induce private car drivers to use ride-sharing transit
- Preserves parklands – Can reduce parking demand at major parks, preserving parkland for recreation rather than garages and surface parking
- Sustainable – publicly available charging stations support wider EV adoption
- Fast implementation – the only new physical infrastructure is charging stations
- Proven, commercially available technology, used in other cities, dispatching software matches vans to sets of riders along approximate paths and constructs optimal routes

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