Moab Region Transit Study-Grand County Commissioners

5/18/2021

Discussion of service options and associated characteristics of a new pilot program transit system for Moab and Grand County
2018 "Recreation Hotspot" Grant ($10M)

- Goals are to reduce traffic congestion, support economic development, and increase recreation and tourism

2020 Hotspot Coordinating Committee Project Recommendations

- Dispersed parking
- 5-year pilot transit system
- Spanish Valley Drive pathway

Background
Local Financial Commitment for Pilot Transit System

➢ $1.5 million Hotspot funds will pay for first three years
➢ $1.0 million from local community for next two years
➢ UDOT is seeking formal financial commitment in order to approve recommended projects

Moab Region Transit Study

➢ Define a new transit system for the Moab region that can be implemented quickly
➢ Moab City Council provided feedback in May 4th work session
➢ Seeking feedback from Grand County Commission
Project Process

Moab Region Transit Study

Travel Needs and Market Analysis
• Completed February and March 2021
• Included stakeholder input

Develop System Alternatives
• Three alternatives developed
• Stakeholder and Moab City Council meetings
• 4th hybrid alternative created
  • Grand County presentation

Create Operating and Financial Plan
• By end of early June

Final Moab Transit Plan
• Presentation to UDOT Transportation Commission mid-June 2021
• Plan complete: end of June 2021

Service Contracting and Implementation
• August 2021 – February 2022
• Goal of service start in March 2022
• COMMON THEMES
  • Need for transit service
  • Traffic and parking issues
  • Primary market: visitors (but must work for locals too)
  • Community connectivity

• SERVICE CHARACTERISTICS
  • Seasonal (March-October) with year-round as goal
  • Scheduled service
  • Bus that has Moab-feel
  • Strong marketing and branding
  • 7 days per week
TOP TRIP PATTERNS

- Hotels, motels, campgrounds, and RV parks (along US-191) to/from downtown Moab.
- Upper Spanish Valley to/from downtown Moab.
- Point-to-point within Moab city limits between a variety of origin and destination locations.

TARGET MARKETS

- Visitors traveling between their lodging properties and downtown Moab.
- Employees living in the upper Spanish Valley area and working in downtown Moab.
- Residents of Moab, primarily youth, older adults, and those with limited access to a vehicle, needing to move around Moab for a variety of trip purposes through a variety of trip patterns.
- Bus will be in same traffic as everyone else
- Distinguishing bus from all other buses and bigger vehicles on the road
- Limited budget for frequent service with enough daily hours
- Getting visitors to park once and leave their car behind
- US-191 (north of town) bus stop challenges and operational impact
- ADA paratransit requirement
- Facility for vehicle storage
- Finding the right contractor
• March through October season to start
• 7 days/week service during Mar-Oct season
• For fixed route options: 20-25 passenger buses
• For microtransit and paratransit zones: 10-14 passenger vans and/or smaller battery electric car
• Turn-key operations through a contractor at an estimated rate of $110/hour for small bus and $75/hour for microtransit vans.
• Oversight, administration by City of Moab with supporting partnerships with Grand County and other community groups
• Fare-free to riders
• **Fixed Route**: scheduled times, defined route, specific stops.

• **Deviated Fixed Route**: similar to fixed route but bus can deviate ¾ of a mile off route in between stops to pick up those who can’t make it to existing bus stops. Allows for bus to serve ADA paratransit trips, as opposed to having dedicated ADA van, but general public could use too.

• **ADA Paratransit Zone**: FTA requires any fixed route to have complementary paratransit for those qualifying under the ADA.
Microtransit Examples

- Arlington TX
  - Entire city
- UTA SLC
  - Southern SLC County
- Aspen CO
  - Standalone downtown circulator
- Summit County UT
  - Replaced some fixed route
- Tampa FL
  - Downtown Circulation

Source: Downtowner App, Inc.
**Microtransit Basics**

What is it?
- Form of on-demand response transit using a smartphone app to match trip requests in real-time
- Small vans or shuttle buses
- Can be contracted turn-key or operated by an agency with purchased ride-matching technology
- Can operate as a dynamic route with established time points or be point-to-point within a defined area (zone), as well as possibility for flag stops

What are critical success factors?
- Smaller service area connecting low-medium density to key destinations
- Ability to group trips to/from key destination (downtown) at similar times
- Fares that balance convenience and ridership
- Marketing

**How it works:**
- Request by app/phone/web
- Dynamic routing
- Rider pickup
- Efficient sharing
- Seamless dropoffs

Source: High Valley Transit (UT)
On-Demand Transit Service Models

Point-to-Point
Travel anywhere

First-Mile / Last-Mile
One connection point

Hub and Spoke
Multiple connection points

Stop Flexibility

Efficiency

Source: RideCo, Inc.

Microtransit Models

Source: Via Transportation, Inc.
**OPTION 1**
Fixed Route with Paratransit and Microtransit Zones

**Evaluation:**

- **Frequent Connections Along US-191**
  - Medium

- **Passenger Convenience**
  - High

- **Ridership Potential**
  - Medium

- **Ability to Connect to Many Destinations**
  - High

**Route Option Highlights**

- Fixed route
- ADA Paratransit zone to the north (required)
- Microtransit zone for Moab general public
- Hourly frequency

**Characteristics**

- 5.5 miles one-way
- 18-24 minutes one-way travel time
- 6.6 mi² Microtransit zone
- 2.4 mi² Paratransit zone
- Requires 1 bus and 1 van
- 11 hours of service/day
- 200 estimated riders/day
**OPTION 2:**
Fixed Route with Deviated Zone

**Highlights**

- Fixed route with more frequency
- Deviated zone for paratransit (but general public would have access too)
- Slightly shorter route than Option 1 to allow for potential deviations
- 30-minute frequency

**Evaluation:**

- Frequent Connections Along US-191: High
- Passenger Convenience: Medium
- Ridership Potential: High
- Ability to Connect to Many Destinations: Medium

**Characteristics**

- 4.6 miles one-way
- 20-26 minutes one-way travel time
- 8 mi² ADA Paratransit deviated zone
- Requires 2 buses
- 10 hours of service/day
- 300 estimated riders/day
OPTION 3: Microtransit Zone throughout Moab

Evaluation:
- **Frequent Connections Along US-191**: Medium
- **Passenger Convenience**: High
- **Ridership Potential**: Low
- **Ability to Connect to Many Destinations**: High

Route Option Highlights
- Full microtransit on-demand for Moab and surrounding area
- Any two points could be combined within the zone
- Dynamically-routed vehicles
- Trips/passengers would be combined where possible

Characteristics
- 10-15 minutes trip response time
- 6.5 mi$^2$ microtransit zone
- Requires 2 vans
- 14 hours of service/day
- 100 estimated riders/day
**OPTION 4**

**Flex Microtransit Route with Microtransit Zone**

**Evaluation:**

- **Frequent Connections Along US-191** (Medium)
- **Passenger Convenience** (High)
- **Ridership Potential** (High)
- **Ability to Connect to Many Destinations** (High)

**Route Option Highlights**

- Flex route in north Moab with limited time points; ability to respond to smartphone app requested trips in real-time (flex route van would serve blue route and red microtransit zone area)
- Microtransit zone for southern Moab, connecting any two points within the zone (green zone)
- Flex zone and microtransit zone overlap in downtown and would allow for transfers
- 30-minute frequency on flex route, 10–15-minute response time for microtransit zone

**Characteristics**

- 3 miles one-way flex route length with 4.7 mi² flex zone
- 6–10-minute one-way travel time on flex route
- 5.9 mi² Microtransit zone
- Requires 2 vans
- 14 hours of service/day
- 250–300 estimated riders/day
### Turn-key Operating Budget Constraint

<table>
<thead>
<tr>
<th>Option*</th>
<th>Fleet</th>
<th>Fixed Route Bus Cost</th>
<th>On-demand Van Cost (microtransit or paratransit)</th>
<th>Total – Turn-key Operations</th>
<th>Resulting hours of operation per day**</th>
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<tr>
<td>Option 1</td>
<td>1 bus, 1 van</td>
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</table>

* Assumes March through October season with 7 days/week of service

** For example, 11 hours of operation could be 8:00 AM – 7:00 PM
## Typical Roles and Responsibilities

<table>
<thead>
<tr>
<th>UDOT</th>
<th>City of Moab</th>
<th>Partner Organizations</th>
<th>Contract Operator</th>
</tr>
</thead>
</table>
| • Administer state and federal funding  
• Manage funding allocation, award, and contracting process of rural transit funding  
• Ensure grantee compliance with state and federal regulations (e.g., ADA, Title VI, drug and alcohol testing, etc.)  
• Periodic reviews of grantee operations | • Comply with terms of UDOT funding contract  
• Develop local matching funds  
• Oversee day-to-day operations of contractor  
• Bus stops and transit supportive on-street infrastructure  
• Review and resolve serious customer complaints  
• Other possibilities – provide/develop transit facility, provide/purchase transit vehicles, operate portion (or eventually all) of services  | • Support development of new funding sources  
• Provide additional funding for transit services  
• Market and promote the services  
• Advocate for community support of transit  
• Solicit feedback on service improvements and long-term development  | • Provide necessary vehicles, drivers, insurance, dispatch, supervisors, vehicle storage, fuel, maintenance, and microtransit ridematching technology  
• Operate service day-to-day according to the service plan  
• Be accountable to specific performance metrics and provide excellent customer service  
• Resolve minor customer complaints and service  
• Make suggestions on service improvements, based on operations knowledge |
Implementation: Turn-Key Model

**PROS**
- Fast implementation
- Low capital costs
- Vendor offers expertise and scale

**CONS**
- Potentially higher ongoing cost
- Less flexibility and control

**KEY POINT:** Turn-key contractors are responsible for supplying everything necessary to deliver day-to-day operations including: vehicles for operations, spare vehicles, supervision of service, drivers, dispatch function, and necessary smart phone app/ridematching technology, in case of microtransit on-demand solution.
## Evaluation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>OPTION 1 – Fixed Route</th>
<th>OPTION 2 – Deviated Fixed Route</th>
<th>OPTION 3 – Microtransit</th>
<th>OPTION 4 – Flex Route with Microtransit (hybrid of 2 and 3)</th>
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<tbody>
<tr>
<td>Frequent connections along US-191</td>
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<tr>
<td>Easy to understand for new users</td>
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<tr>
<td>Passenger convenience (how is it use the service, once they know how it works)</td>
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<tr>
<td>Ridership potential (ability to help with traffic)</td>
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</tr>
<tr>
<td>Ability to connect many destinations throughout Moab (coverage)</td>
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<tr>
<td>Asset to locals</td>
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<tr>
<td>Asset to visitors</td>
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<tr>
<td>Ease of vehicle electrification</td>
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<tr>
<td>Amount of service hours provided per day</td>
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## DRAFT Financial Plan - Operations: SCENARIO 1

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<th>Revenues</th>
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<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
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Capital Expenses – Long-term

- Bus storage facility: $100,000 - $200,000
- Passenger amenities, bus shelters: $20,000 - $30,000
- Vehicles (if City/County leverage federal funds to purchase vehicles directly)
  - Buses: $125,000 - $250,00 each, size dependent (more than double if battery-electric)
  - Vans: $45,000 - $55,000
  - Sedan (battery-electric): $40,000
Critical Questions

- How can the County and City quickly come to agreement on cost sharing? When could a joint meeting or workshop be scheduled, as a follow-up?
- Can City/County resources be identified to manage and oversee the service?
- What if City or County or other partner provided ADA paratransit service instead of a contractor?
- Can the community be working on supportive tasks sooner than later?
  - Examples – vehicle storage, vehicle fueling arrangement, vehicle washing, bus stop improvements and signage, marketing support
- Who gets to name the system? Any ideas on a potential name?
Thank you. Questions?