Mississippi National River and Recreation Area

Mississippi River Paddle Share

Susan Overson, Landscape Architect/Park Planner
2018 National Outdoor Recreation Conference
April 23-26, 2018 Burlington, VT
MISSISSIPPI NRRA

- 54,000-acre urban, national park established by Congress in 1988 to preserve, enhance, and protect the Mississippi River in the Twin Cities metro area
- To preserve and enhance the area’s scenic, recreational, historical, cultural, natural, and scientific values
- 72 miles along both sides of river, 55,000 acres
- NPS owns very little land (mostly Islands)
- Not eligible for many NPS funding sources
- Everything we do is in partnership w/ others
- Work with over 25 local governments and 90 river management entities
- CMP did not address transportation planning
History of Transportation Planning

- 1996 – Present – Working w/partners to complete a continuous trail and open space, and now transportation corridor on both sides of the Mississippi River
- 2009 – Proposed a pilot alternative transportation project focusing on Mississippi River Trail as the primary transportation facility through the NRRA.
- 2010- Submitted funding request for pilot project (Unsuccessful)
- 2011 – Received funds to develop Alternative Transportation Plan (ATP) ID 300+ connections to river
  1. Nice Ride Minnesota launched in Minneapolis
  2. Aha! Bike share could be the means to connect destinations along the river
  3. Requested $1.2 million to fund bikeshare
  4. Received $849K to install over 30 stations in St. Paul
- 2012 – 2014 – Received additional funds for more bike share stations
  1. Concept of paddle share discussed - based on City of Ramsey model
  2. Developed route criteria
  3. Tested 6 routes (paddle and bike)
  4. North Miss to Boom Island selected
  5. Presented concept to MPRB and MWMO
- 2015 – Received funds to install paddle/bike share system
- 2016 - Launched August 25 (NPS Centennial) – First of a kind paddle share station in Mpls.
- Lots of media attention (national and international)
- 2017 - 2018– Received funds to expand Mississippi River Paddle Share
Implementation Plan

- Based on Goal: “Create a seamless and recognizable alternative transportation system that gets visitors to the river without a car while reducing congestion, emissions, and protecting resources in the park.”
- Prioritizes project funding
- Requires partners provide match
- Sets 5 year implementation schedule (updated annually)
- Contingent on Congressional budget
- Includes Paddle Share project
Alternative Transportation System

Goals:
- Minimizes impacts to park resources
- Focus on funding priority partner projects that connect visitors to and along the river.
- Made up of existing transit infrastructure owned, operated, and maintained by partners
- 20% to projects that meet NPS criteria
- Includes bike and paddle share stations, trail/transit connections, pedestrian access to/from transit facilities/NPS transportation gateways, signage and user information like www.rivertripplanner.org
- Everything owned, operated, and maintained by partners.
Existing Transportation System
Transportation Facilities

Existing:
- The Mississippi River National Millennium Trail (MRT)
- Regional Transportation System (LRT, Bus, High Speed Rail, Amtrak)
- Regional and State Bike Trail System
- Nice Ride Bike Share
- Mississippi River (Barge, personal motorized and non-motorized craft)

Added:
- 60+ additional bike share stations
- 9 Alternative Transportation Gateways
- Trail Connections/other facilities (pedestrian bridges, tunnels, etc.) to existing infrastructure
- 17 Paddle/Bike Share Stations (Rentals and Return)
Alternative Transportation Gateways

Alternative Transportation Node Information

<table>
<thead>
<tr>
<th>Alternative Transportation Node</th>
<th>Centerpoint of Node</th>
<th>Mnr Map Page</th>
<th>Transportation, destination, and amenity options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramsey COR</td>
<td>Ramsey Northstar Station</td>
<td>A16</td>
<td>Rail Station</td>
</tr>
<tr>
<td>Downtown Anoka</td>
<td>3rd Ave. &amp; Main St.</td>
<td>A18</td>
<td>1</td>
</tr>
<tr>
<td>Crocus Dam Regional Park Visitors Center</td>
<td>A20</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Fridley Field Northstar Station</td>
<td>B28</td>
<td>1</td>
<td>8</td>
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<tr>
<td>Downtown Minneapolis</td>
<td>50th Street/Minnehaha Park Light Rail Station</td>
<td>B31</td>
<td>3</td>
</tr>
<tr>
<td>University of Minnesota</td>
<td>University Ave. &amp; Pleasant St.</td>
<td>B31</td>
<td>1</td>
</tr>
<tr>
<td>Minnehaha</td>
<td>50th Street/Minnehaha Park Light Rail Station</td>
<td>B31</td>
<td>3</td>
</tr>
<tr>
<td>Fort Snelling/Coldwater Spring</td>
<td>Fort Snelling Light Rail Station</td>
<td>C40</td>
<td>2</td>
</tr>
<tr>
<td>Downtown Saint Paul</td>
<td>Union Station</td>
<td>D46</td>
<td>1</td>
</tr>
<tr>
<td>Downtown Hastings</td>
<td>Tyler St. &amp; 2nd St.</td>
<td>E47</td>
<td>No</td>
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</table>
Projects funded 2015 – 2018*

2015 – Rec’d $727,500

- Minnesota MRT Route Signage – Phase 2
- Fabricate ATS Floor Maps (Science Museum)
- MRT Connections – Anoka County Riverfront Regional Park (Anoka County)
- Mississippi River Skyway, Phase I (City of Ramsey)
- Mississippi River Skyway, Phase II (City of Ramsey)
- MRT in Mississippi West Regional Park (Anoka Co)

2016 – Rec’d $531,334

- Paddle/Bike Share Pilot Project (MPC)
- REI Match $ 40,000
- Coon Rapids Dam Boat Launch (Anoka Co)
- Minnehaha Trail (NPS)
- Updated Miss Companion (NPS)

2017 - $907,647

- Paddle/Bike Share (Saint Paul and Three Rivers )
- Bike Share Stations (Nice Ride MN)
- Trunk Highway 169 Tunnel (City of Champlin)
- Interactive Signage MSP Airport (MSP Foundation)

2018 - $765,000

- Pickerel Lake Paddle Share/Adaptive Paddling
- Match funds for West Coon Rapids Dam Reg Park
- Robert Pirham Regional Trail

2019 – 2022: $2.3M Requested

* Does not include other federal funds like FLAP and FHWA
Partners

- Landowners - 5 Regional Park Implementing Agencies, 25 local communities, MnDOT, DNR, USFWS

- Non Profits - Nice Ride Minnesota, Mississippi Park Connection, MWMO, National Park Foundation

- Private – REI, Wenonah Canoe, Blue Cross/Blue Shield, American Lung Association, Creating Ability
Project Examples

Bike Share - 60+ stations Mpls/St. Paul
Fort Snelling State Park
Project Examples

Mississippi River Trail
Harriet Island
Mississippi River Paddle Share
Launched August 25, 2016

www.paddleshare.org
How It All Began
Sunfish Lake, Ramsey MN
(Free/Over 1,100 subscribers)
Ipaddleport System
Shell Rock River State Water Trail, Albert Lea, MN
First online reservation system
2016 Pilot Project

- First-of-a-kind in a national park
- Get people to river via alternative transportation (paddling/biking/transit)
- Self-serve operation similar bikeshare system
- Funding - $175,000 NPS/$40,000 REI
- Ranked 6 routes according to specific selection criteria
- Chose 3.9 mile stretch in Minneapolis (North Miss to Boom Island)
- Identified three paddle share stations locations:
- 300+ rentals
Selection Criteria

- Existing safe bike and canoe route (safety in general)
- Financial sustainability (O & M, rebalancing)
- Population (in nearby area/density)
- Existing bike share or new system?
- Alternative transportation access
- Amenities - bathrooms, staffed visitor center, water
- Variety of short and long route options
- Pleasant bike route/experience
- Soft landing
3 Proposed/3 Future Routes

- St. Croix WSR
- Minnesota River/MN Valley NWR
- Mississippi NRRA
- Rum River
- Crow River
- Vermillion River
- Minnesota River/MN Valley NWR
- St. Croix WSR
## Segment Rankings

<table>
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<tbody>
<tr>
<td>MWMO (858.5) to Flagpole Plaza (854.5) = 2 miles</td>
<td>Boom Island in Minneapolis (855) (and likely Psycho Suzi's, which is private)</td>
<td>West side to Broadway Avenue Bridge, then East side</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Mississippi North (859.5) to Boom Island (855) = 3.5 miles</td>
<td>MWMO in Minneapolis (858.5)</td>
<td>East side to Camden Bridge, then West side</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
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<td>3</td>
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<tr>
<td>Ft. Snelling State Park/Picnic Island (845.5) to Harriet Island/Kelly's Landing (840) = 4.5 miles</td>
<td>Lilydale (842)</td>
<td>West side</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>22</td>
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<tr>
<td>Hidden Falls (846.5) to Harriet Island/Kelly's Landing (840) = 6.5 miles</td>
<td>Lilydale (842)</td>
<td>West side to Highway 5 Bridge, then East side</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>20</td>
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<tr>
<td>Bohemian Flats (853) to Minneapolis Rowing Club (850) = 3 miles</td>
<td>--</td>
<td>West side</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>19</td>
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<tr>
<td>Coon Rapids Dam West (866) to Mississippi North (868.5) = 7.5 miles</td>
<td>River Park in Brooklyn Park (863)</td>
<td>West side</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>17</td>
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<tr>
<td>Mississippi West (875) to Coon Rapids Dam East (886) = 9 miles</td>
<td>Peninsula Point in Anoka (871.5)</td>
<td>East or West side from CRD to Anoka, East side from Anoka to Ramsey</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>14</td>
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Selected Route
North Miss to Boom Island (Most Urban)

- 3.9 miles
- 3 partner sites
  - Existing boat launches
  - Visitor center
  - Bike share stations
  - Station location app
- 6 new paddle share stations
  - 4 rental stations w/equipment
  - 2 return stations
- Potential opportunity for outfitter
Project Components

All equipment
(Racks, lockers, pfds, paddles, locks, software for reservation system)
2 paddle share stations/8 boats ea
Equal number of Nice Ride bikes
Website/Reservation Portal
1-800 Call-in Center
Ability to shut down due to weather or river conditions
4 days/week June - Aug
Weekends Sept/Oct
3 reservation windows/day
How It Works

- Go to [www.paddleshare.org](http://www.paddleshare.org)
- Click “Make a Reservation” at your preferred launch site
- Choose a rental period for a single or tandem kayak
- Read/watch safety info/sign waiver
- Pay with a credit card
- Receive access code via email or text that unlocks a specific locker
- Remove your equipment, lock locker. Enjoy your paddle!
- Return equipment to return station
- Take a Nice Ride Minnesota bike back to your launch or home.
NPS Role

- Oversees project including equipment purchase, delivery, and installation
- Funding/agreements/budget
- Compliance with all federal requirements
- Safety information for users
- Operations Plan for partners
- Coordination with Nice Ride MN
- Marketing, social media (Facebook and twitter)
- Websites consistent with NPS standards and to improve reservation revenue:
  - [www.paddleshare.org](http://www.paddleshare.org)
  - [www.rivertripplanner.org](http://www.rivertripplanner.org)
Partner Roles and Responsibilities

- Landowners – Own, operate, and carry liability insurance
- Mississippi Park Connection Non-profit partner oversees the Minneapolis project, fundraising, marketing
- iPaddleport – Manufacture, install, reservation system
- REI – Private partner funding
- WheelFun Rentals – Operations and Maintenance
- St. Paul, Three Rivers Parks District – O & M
- 2017 and 2018 contributions to O and M shortfall
Sustainable Operations Model

- Ensure revenue equals/exceeds O&M costs
- Partners own stations and do operations and maintenance
- Partners carry liability insurance
- Site work/installation (Partners)
- Public (NPS) and private funding (NPS and MPC)
- Robust and coordinated marketing strategy (2017-2018)
- 2018 first full season May – Oct
- Private funding helped subsidize 2016 and 2017 operations
2017 Project Budget

Coon Rapids-North Miss
- Total capital costs: $118,591
- Total O&M estimate: $18,271
- Revenue estimate: $19,608

North Miss-Boom Island
- Total capital costs: $19,589
- Total O&M estimate: $20,804
- Revenue estimate: $19,608

Bohemian Flats-Rowing Club
- Total capital costs: $28,912
- Total O&M estimate: $2,172
- Revenue estimate: $13,072

Hidden Falls-Harriet Island
- Total capital costs: $69,090
- Total O&M estimate: $18,271
- Revenue estimate: $13,072

Assumptions
- Five months in operation = 89 days
- Three 3-hour rental blocks/day
- Revenue = $18/rental (cost is $25/rental)
- Rental rate = 17% (based on last year)
- Revenue will exceed costs
## 2017 Analysis, Budget, Operations

<table>
<thead>
<tr>
<th>Expense</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Equipment</td>
<td>$2,376</td>
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<tr>
<td>Fuel</td>
<td>$1,595</td>
</tr>
<tr>
<td>Insurance (truck, trailer, liability for transfers)</td>
<td>$15,000</td>
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<tr>
<td>Licenses and permits</td>
<td>$338</td>
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<tr>
<td>Parts and tools</td>
<td>$1,228</td>
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<tr>
<td>Payroll</td>
<td>$45,120</td>
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<tr>
<td>Taxes</td>
<td>$4,512</td>
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<tr>
<td>Phone</td>
<td>$547</td>
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<tr>
<td>Repairs and maintenance</td>
<td>$8,250</td>
</tr>
<tr>
<td><strong>Total operations expenses</strong></td>
<td><strong>$78,966</strong></td>
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<tr>
<td>Truck purchases</td>
<td>$29,372</td>
</tr>
<tr>
<td>Trailer purchases</td>
<td>$9,678</td>
</tr>
<tr>
<td>Total truck and trailer purchases</td>
<td>$39,050</td>
</tr>
<tr>
<td>1/3 of truck and trailer purchases (3-yr amortization)</td>
<td>$13,017</td>
</tr>
<tr>
<td><strong>Total reimbursable expense</strong></td>
<td><strong>$91,983</strong></td>
</tr>
</tbody>
</table>

- **52 Days in season**
- **$1,769 Average revenue/day to break even**
- **$2,326 Maximum revenue/day possible**
- **76.0% Average reservation rate to break even**
2017 Analysis, Cont’d

- Total Revenue: $37,566
- Total Bookings: 1162 (Up from 300)
- Total Operational Expenses: $77,203
Project Successes

- Put our park/Mississippi River on map as a paddle destination
- No incidents
- Everyone loves Paddle Share
- Very seamless for user
- First of a kind in a nat’l park
- Received nat’l and local awards
- Lots of media attention
- Congressional support (Betty McCullum and Keith Ellison)
- Sustained by public and private funding
- Model for other parks and river communities
Paddle Share Survey*

- Activities
- Knowledge of River
- Comfort Level
- Participant’s race
- Participant’s Age

* Credit: Mississippi Park Connection
Challenges/Concerns

- Never done on a river before
- NPS does not own/manage land
- Multiple agreements/permits
- On-water liability/safety - Who?
- Partner coordination
- Uncertainty in meeting revenue goals
- Dockless bike share system - ?
- Equipment gets beat up
- O and M operator withdrew in January – New operator (high)
- Federal and private funding always uncertain but necessary
- Being sustainable requires combination of funding
- No control over weather or flooding
- System not perfect
- Graffiti!
2018 Season Changes

- All locations open Memorial Weekend – mid October
- Reduced reservation windows = reduced operating costs:
  - 3 days/week
  - 2 windows/day
- Water taxi return option
- Adaptive equipment in St. Paul
- Partner Operations Manual
- $15K/partner contribution incl NPS
- O and M expenses up ($120K)
- 52% reservation rate to break even
- Additional public and private funding continue to be needed
- Secretary of Interior approval for all projects over $50K = delays
Next Steps

- Finalize partner agreements
- Update Operations Plan
- Agreements for partner funding to cover shortfall
- Order/deliver new equipment (May - June 2018)
- Update website
- Update www.paddleshare.org
  www.rivertripplanner.org
- Update safety plans to include accessible paddling videos
- Sign contract w/ new operator
- Paddle new stretches
- Open Memorial Weekend!
How it’s tied together

- The River!
- Existing transportation infrastructure
- New connections including dockless bikeshare
- User information:
  - 9 Gateway Signs
  - Interactive Signage
  - Mississippi River Companion
  - Paddle Share Video (Volpe)
  - www.niceridemn.org
  - www.rivertripplanner.org
  - www.paddleshare.org
  - www.metrotransit.org
Questions?
Thank you!

Contact Information:
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