

There are 121 NPS Transit Systems with 36.5 million passenger boardings



Transit and the Centennial Call to Action

THEME

Connecting PEOPLE TO PARKS

GOALS: TO CONNECT PEOPLE TO PARKS IN THE NEXT CENTURY, THE NPS *must*

DEVELOP and nurture lifelong connections between the public and parks—especially for young people—through a continuum of engaging recreational, educational, volunteer, and work experiences.

CONNECT urban communities to parks, trails, waterways, and community green spaces that give people access to fun outdoor experiences close to home.

EXPAND the use of parks as places for healthy outdoor recreation that contributes to people’s physical, mental, and social well-being.

WELCOME and engage diverse communities through culturally relevant park stories and experiences that are accessible to all.

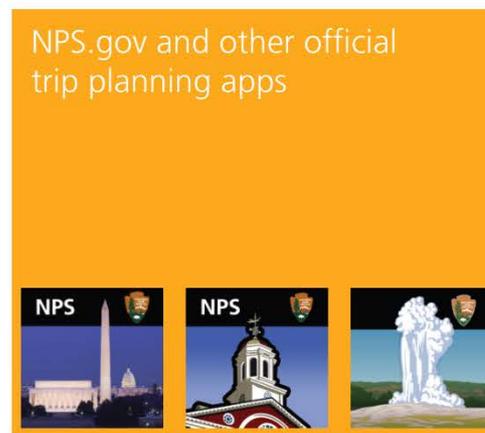
How do visitors get information on National Parks?



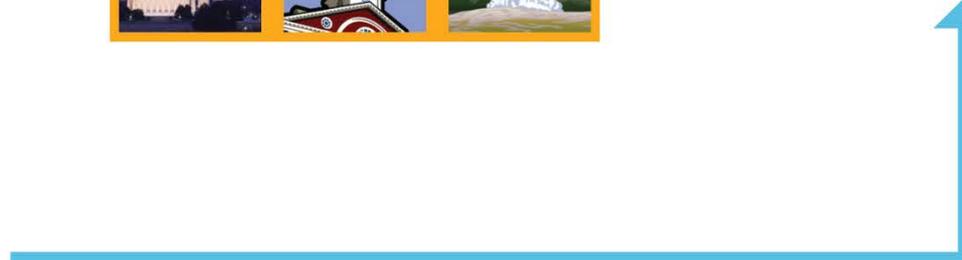
NPS visitors



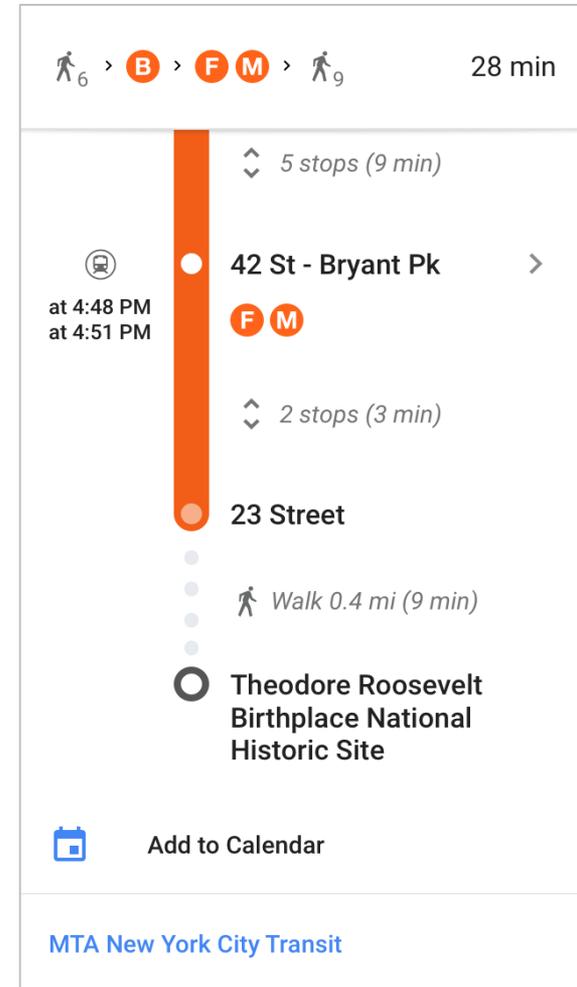
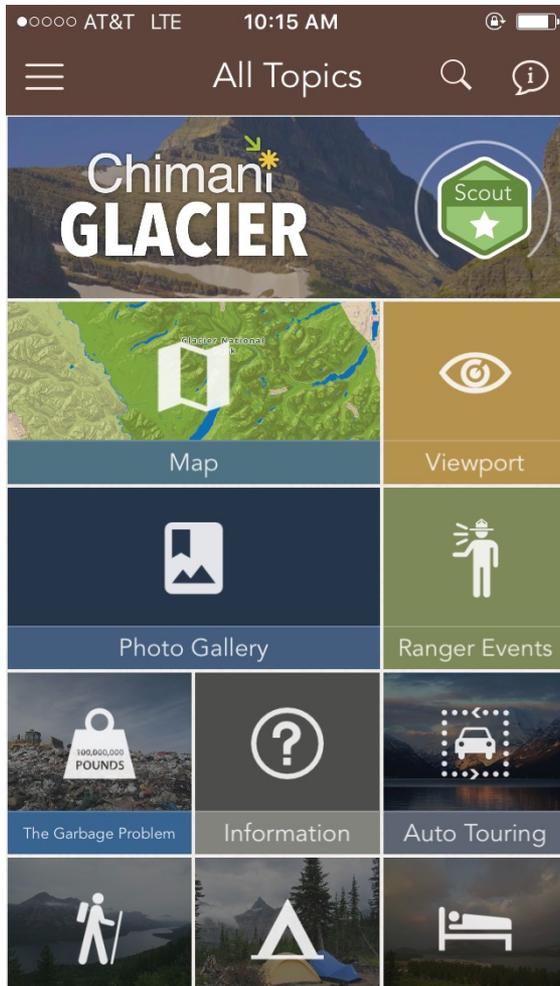
How do visitors get information on National Parks?



NPS visitors



Visitors use many non-NPS apps to plan their visit to parks



Visitors use many non-NPS apps to plan their visit to parks

The image shows a screenshot of a transit directions application. The left panel displays a vertical timeline of the route with the following stops and modes:

- 3:34 PM - 3:29 PM:** Orange Line towards Forest Hills (3 min, 2 stops, 10 min late, Stop ID: 70026). Stop: State Street.
- 3:31 PM:** Blue Line towards Wonderland (2 min, non-stop, Stop ID: 70042). Stop: Aquarium. Note: Police activity.
- 3:40 PM:** Walk (About 2 min). Stop: Long Wharf, Boston.
- 4:05 PM:** Hingham Ferry towards Hewitt's Cove, Hingham (25 min, non-stop). Stop: Pemberton Point, Hull.
- 4:06 PM:** Walk (About 1 min, 0.1 mi). Stop: Peddocks Island.

The right panel is a map of the Boston Harbor area, showing the route from State Street in Boston to Peddocks Island. The route is highlighted in blue and includes the Hingham Ferry and Hull Ferry segments. Key locations on the map include Spectacle Island, Long Island, Thompson Island, John F. Kennedy Presidential Library, University of Massachusetts Boston, Peddocks Island, and Pemberton Point, Hull. The map also shows the Boston Harbor Islands National Recreation Area and various streets and landmarks in the surrounding area.

General Transit Feed Specification (GTFS)

T Massachusetts Bay Transportation Authority

Schedules & Maps | Fares & Gifts | Rider Tools | Riding the T | About the M

Schedules & Maps

Schedules & Maps → Bus → 83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Schedule Information | Interactive Street Map

83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Direction: Timing:

83 CENTRAL SQ VIA PORTER SQ : Weekday Effective 12/26/15

Rindge Ave @ Russell Field	Somerville Ave @ Massachusetts Ave	Hampshire St @ Inman St
05:10 AM	05:14 AM	05:19 AM
05:30 AM	05:34 AM	05:39 AM
05:50 AM	05:54 AM	05:59 AM
06:10 AM	06:14 AM	06:19 AM
06:30 AM	06:35 AM	06:45 AM
06:50 AM	06:55 AM	07:05 AM
07:10 AM	07:15 AM	07:25 AM
07:30 AM	07:37 AM	07:52 AM
07:50 AM	07:57 AM	08:12 AM
08:10 AM	08:17 AM	08:32 AM
08:35 AM	08:42 AM	08:57 AM
08:55 AM	09:07 AM	09:17 AM

General Transit Feed Specification (GTFS)

T Massachusetts Bay Transportation Authority

Schedules & Maps | Fares & Gifts | Rider Tools | Riding the T | About the M

Schedules & Maps

Schedules & Maps → Bus → 83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Schedule Information | Interactive Street Map

83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Direction: Inbound | Timing: Weekday | [Redisplay Time](#)

83 CENTRAL SQ VIA PORTER SQ : Weekday Effective 12/26/15

Rindge Ave @ Russell Field	Somerville Ave @ Massachusetts Ave	Hampshire St @ Inman St
05:10 AM	05:14 AM	05:19 AM
05:30 AM	05:34 AM	05:39 AM
05:50 AM	05:54 AM	05:59 AM
06:10 AM	06:14 AM	06:19 AM
06:30 AM	06:35 AM	06:45 AM
06:50 AM	06:55 AM	07:05 AM
07:10 AM	07:15 AM	07:25 AM
07:30 AM	07:37 AM	07:52 AM
07:50 AM	07:57 AM	08:12 AM
08:10 AM	08:17 AM	08:32 AM
08:35 AM	08:42 AM	08:57 AM
08:55 AM	09:07 AM	09:17 AM

Rider Tools

Rider Tools → Trip planner

Trip Planner

Start: [Help](#)

End:

Plan your trip using [Landmarks & Stations](#)

Depart Arrive

and

With a walking distance of Accessible trip

[Clear](#)

Map data ©2016 Google | Terms of Use | Report a map error

General Transit Feed Specification (GTFS)

Massachusetts Bay Transportation Authority

Schedules & Maps | Fares & Gifts | Rider Tools | Riding the T | About the M

Schedules & Maps

Schedules & Maps → Bus → 83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Schedule Information | Interactive Street Map

83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Direction: Timing:

83 CENTRAL SQ VIA PORTER SQ : Weekday Effective 12/26/15

Rindge Ave @ Russell Field	Somerville Ave @ Massachusetts Ave	Hampshire St @ Inman St
05:10 AM	05:14 AM	05:19 AM
05:30 AM	05:34 AM	05:39 AM
05:50 AM	05:54 AM	05:59 AM
06:10 AM	06:14 AM	06:19 AM
06:30 AM	06:35 AM	06:45 AM
06:50 AM	06:55 AM	07:05 AM
07:10 AM	07:15 AM	07:25 AM
07:30 AM	07:37 AM	07:52 AM
07:50 AM	07:57 AM	08:12 AM
08:10 AM	08:17 AM	08:32 AM
08:35 AM	08:42 AM	08:57 AM
08:55 AM	09:07 AM	09:17 AM



```

"83","BUS42015-hbt45011-weekday-02","28743686","R
"83","BUS42015-hbt45011-weekday-02","28743685","R
"83","BUS42015-hbt45011-weekday-02","28743684","R
"83","BUS42015-hbt45011-weekday-02","28743683","R
"83","BUS42015-hbt45011-weekday-02","28742674","R
"83","BUS42015-hbt45011-weekday-02","28743690","R
"83","BUS42015-hbt45011-weekday-02","28743678","R
"83","BUS42015-hbt45011-weekday-02","28743663","R
"83","BUS42015-hbt45011-weekday-02","28743657","R
"83","BUS42015-hbt45011-weekday-02","28743673","R
"83","BUS42015-hbt45011-weekday-02","28743659","R
"83","BUS42015-hbt45011-weekday-02","28743671","R
"83","BUS42015-hbt45011-weekday-02","28743661","R
"83","BUS42015-hbt45011-weekday-02","28743668","R
"83","BUS42015-hbt45011-weekday-02","28743667","R
"83","BUS42015-hbt45011-weekday-02","28743662","R
"83","BUS42015-hbt45011-weekday-02","28743665","R
"83","BUS12016-hbt16h17-Sunday-02","29423506","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423742","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423740","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423738","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423734","Ri
"83","BUS12016-hbt16017-Sunday-02","29198171","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423518","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423732","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423514","Ri
"83","BUS12016-hbt16017-Sunday-02","29198387","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423728","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423726","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423724","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423744","Ri
"83","BUS12016-hbt16017-Sunday-02","29198160","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423736","Ri
"83","BUS12016-hbt16n01-weekday-02","29673636","R
"83","BUS12016-hbt16n01-weekday-02","29673637","R
"83","BUS12016-hbt16h17-Sunday-02","29423499","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423495","Ri
"83","BUS12016-hbt16017-Sunday-02","29198152","Ri
"83","BUS12016-hbt16017-Sunday-02","29198385","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423491","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423486","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423482","Ri
"83","BUS12016-hbt16017-Sunday-02","29198183","Ri
"83","BUS12016-hbt16017-Sunday-02","29198167","Ri
"83","BUS12016-hbt16017-Sunday-02","29198179","Ri
"83","BUS12016-hbt16017-Sunday-02","29198175","Ri
"83","BUS12016-hbt16h17-Sunday-02","29423510","Ri
"83","BUS12016-hbt16011-weekday-02","29669927","R
"83","BUS12016-hbt16017-Sunday-02","29198403","Ri
"83","BUS12016-hbt16017-Sunday-02","29198401","Ri
"83","BUS12016-hbt16017-Sunday-02","29198399","Ri
"83","BUS12016-hbt16017-Sunday-02","29198405","Ri
"83","BUS12016-hbt16017-Sunday-02","29198397","Ri
"83","BUS12016-hbt16017-Sunday-02","29198143","Ri
"83","BUS12016-hbt16017-Sunday-02","29198395","Ri

```

General Transit Feed Specification (GTFS)

Massachusetts Bay Transportation Authority

Schedules & Maps | Fares & Gifts | Rider Tools | Riding the T | About the M

Schedules & Maps

Schedules & Maps → Bus → 83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Schedule Information | Interactive Street Map

83 - Rindge Ave. - Central Sq., Cambridge via Porter Square Station

Direction: Inbound | Timing: Weekday | Redisplay Time

83 CENTRAL SQ VIA PORTER SQ : Weekday Effective 12/26/15

Rindge Ave @ Russell Field	Somerville Ave @ Massachusetts Ave	Hampshire St @ Inman St
05:10 AM	05:14 AM	05:19 AM
05:30 AM	05:34 AM	05:39 AM
05:50 AM	05:54 AM	05:59 AM
06:10 AM	06:14 AM	06:19 AM
06:30 AM	06:35 AM	06:45 AM
06:50 AM	06:55 AM	07:05 AM
07:10 AM	07:15 AM	07:25 AM
07:30 AM	07:37 AM	07:52 AM
07:50 AM	07:57 AM	08:12 AM
08:10 AM	08:17 AM	08:32 AM
08:35 AM	08:42 AM	08:57 AM
08:55 AM	09:02 AM	09:17 AM



```

"83" "BUS42015-hbt45011-weekday-02" "28743686" "R
"83" "BUS42015-hbt45011-weekday-02" "28743685" "R
"83" "BUS42015-hbt45011-weekday-02" "28743684" "R
"83" "BUS42015-hbt45011-weekday-02" "28743683" "R
"83" "BUS42015-hbt45011-weekday-02" "28742674" "R
"83" "BUS42015-hbt45011-weekday-02" "28743690" "R
"83" "BUS42015-hbt45011-weekday-02" "28743678" "R
"83" "BUS42015-hbt45011-weekday-02" "28743663" "R
"83" "BUS42015-hbt45011-weekday-02" "28743657" "R
"83" "BUS42015-hbt45011-weekday-02" "28743673" "R
"83" "BUS42015-hbt45011-weekday-02" "28743659" "R
"83" "BUS42015-hbt45011-weekday-02" "28743671" "R
"83" "BUS42015-hbt45011-weekday-02" "28743661" "R
"83" "BUS42015-hbt45011-weekday-02" "28743668" "R
"83" "BUS42015-hbt45011-weekday-02" "28743667" "R
"83" "BUS42015-hbt45011-weekday-02" "28743662" "R
"83" "BUS42015-hbt45011-weekday-02" "28743665" "R
"83" "BUS12016-hbt16h17-Sunday-02" "29423506" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423742" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423740" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423738" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423734" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198171" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423518" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423732" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423514" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198387" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423728" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423726" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423724" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423744" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198160" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423736" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29673636" "R
"83" "BUS12016-hbt16h17-Sunday-02" "29673637" "R
"83" "BUS12016-hbt16h17-Sunday-02" "29423499" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423495" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198152" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198385" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423491" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423486" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423482" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198183" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198167" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198179" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198175" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29423510" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29669922" "R
"83" "BUS12016-hbt16h17-Sunday-02" "29198403" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198401" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198399" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198405" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198397" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198143" "Ri
"83" "BUS12016-hbt16h17-Sunday-02" "29198395" "Ri
  
```



AT&T 4G LTE 10:57 AM Market Basket

Harvard University Beacon St

Kolbeh of Kabob

Broadway

Purnam Ave River St

EAST BRIDGE

83 > Red Line > 6 25 min

11:13 AM on time

Beacon St @ Washington St

83 towards Central Square

9 stops (9 min)

11:19 AM

Magazine St @ Green St

Walk 1 min

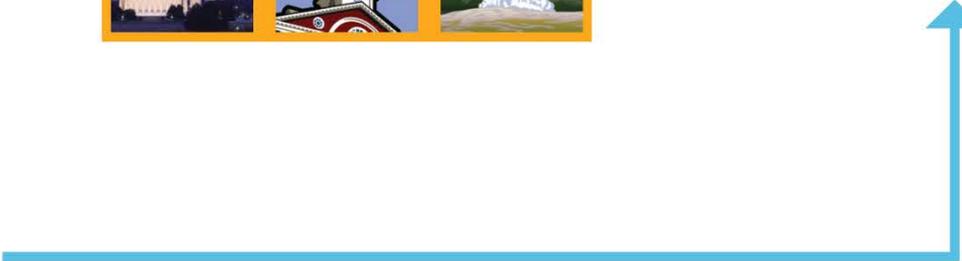
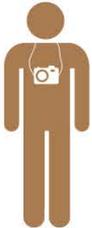
11:30 AM

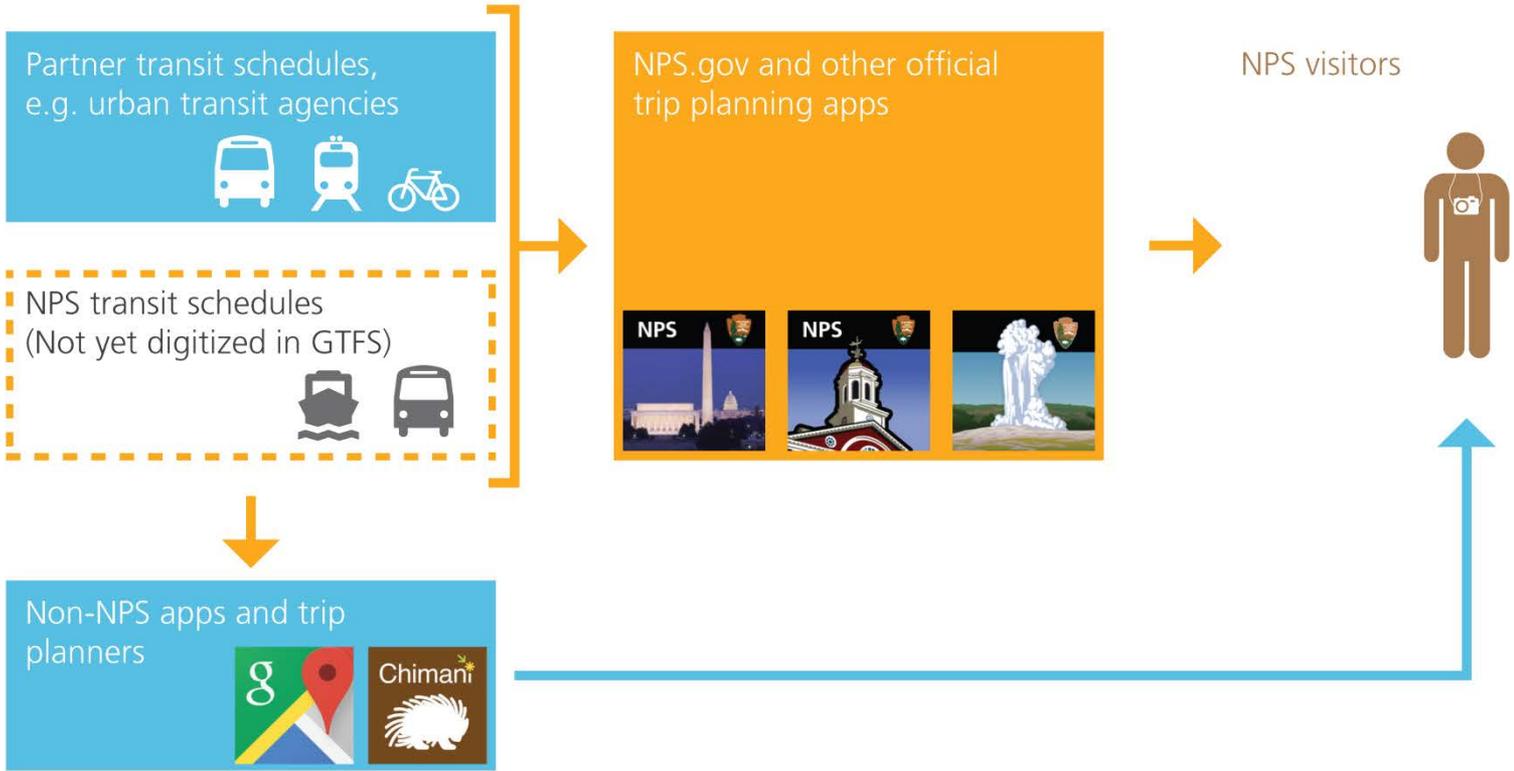
Central

Red Line towards Ashmont



NPS visitors





Digital Transit Data Approach

STEP 1: DIGITIZE SCHEDULES (GTFS)

Partner transit schedules, e.g. urban transit agencies



NPS transit schedules (Not yet digitized in GTFS)

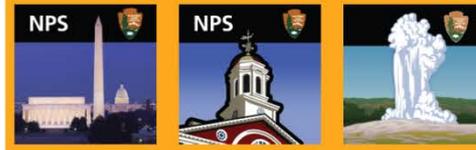


Non-NPS apps and trip planners

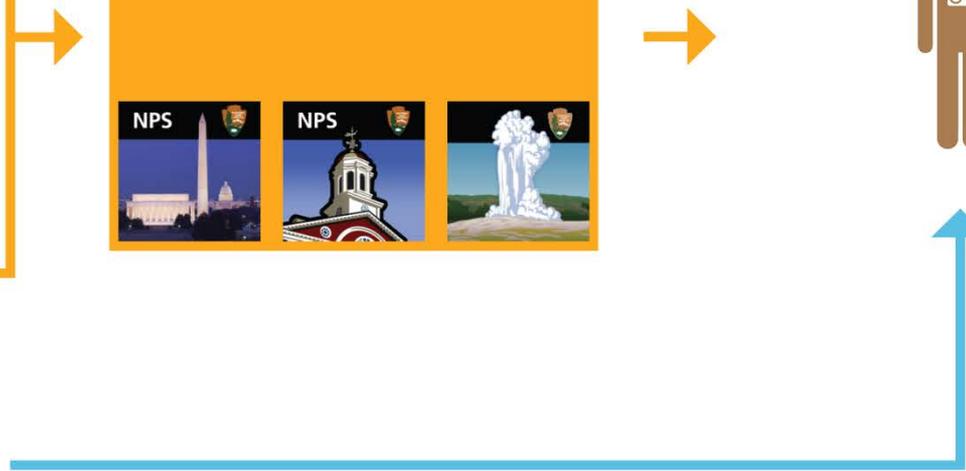


STEP 2: INTEGRATE INTO NPS.GOV + NPS APPS

NPS.gov and other official trip planning apps



NPS visitors



GTFS Pilot Parks

- ❑ Boston Harbor Islands National Park, Massachusetts
 - Harbor Islands Ferries
- ❑ Cuyahoga Valley National Park, Ohio
 - Cuyahoga Valley Scenic Railroad
- ❑ Golden Gate National Recreation Area, California
 - Alcatraz Ferry
- ❑ Rocky Mountain National Park, Colorado
 - Rocky Mountain NP Shuttles

GTFS Pilot Schedule

1. Fall 2015: Identify pilot parks, create initial feeds
2. Winter 2016: Outreach to app developers
3. Spring 2016: Update schedules for 2016 season
4. Spring 2016: Work with parks to conduct outreach to the public
5. Summer/Fall 2016: Evaluate impacts and share findings

GTFS Pilot Schedule

1. Fall 2015: Identify pilot parks, create initial feeds
2. Winter 2016: Outreach to app developers
3. Spring 2016: Update schedules for 2016 season
4. Spring 2016: Work with parks to conduct outreach to the public
5. Summer/Fall 2016: Evaluate impacts and share findings

Preliminary Insights

1. Make the feeds easy to access, easy to maintain
2. Developers are not used to dealing with a national “transit agency”
3. GTFS is not a one-size fits all solution

1. Make the feeds easy to access, easy to maintain

This screenshot shows the GitHub interface for the repository `nationalparkservice / nps-gtfs`. At the top, there is a search bar for the repository and navigation links for Pull requests, Issues, and Gist. The repository is tracked by 7 users, has 2 stars, and 0 forks. Below the repository name, there are tabs for Code, Issues (0), Pull requests (0), Wiki, Pulse, and Graphs. A description states: "A repository of GTFS for National Park Service transit systems. <https://nationalparkservice.github.io/nps-gtfs/README.md>".

Repository statistics include 24 commits, 1 branch, 0 releases, and 2 contributors. The current branch is `gh-pages`, and there is a "New pull request" button. Action buttons include "New file", "Find file", "HTTPS" (with a dropdown), a URL `https://github.com/national`, and "Download ZIP".

The commit history shows the latest commit by Eric Burkman, "Updated Agency Name", on Dec 8, 2015. The commit list includes:

Commit	Message	Time
boha/ferries	Updated Agency Name	a month ago
cuva/scenic-rail	Rename	3 months ago
romo/shuttles	Rename	3 months ago
CONTRIBUTING.md	Add license	3 months ago
LICENSE.md	Add license	3 months ago
README.md	Add license	3 months ago

2. Developers are not used to dealing with a national “transit agency”

3. GTFS is not a one-size fits all solution

Digital Transit Data Approach

STEP 1: DIGITIZE SCHEDULES (GTFS)

Partner transit schedules, e.g. urban transit agencies



NPS transit schedules (Not yet digitized in GTFS)

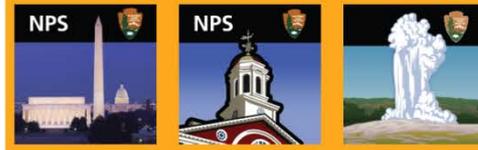


Non-NPS apps and trip planners

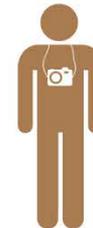


STEP 2: INTEGRATE INTO NPS.GOV + NPS APPS

NPS.gov and other official trip planning apps



NPS visitors



GTFS Pilot Parks

- ❑ Boston Harbor Islands National Park, Massachusetts
 - Harbor Islands Ferries
- ❑ Cuyahoga Valley National Park, Ohio
 - Cuyahoga Valley Scenic Railroad
- ❑ Golden Gate National Recreation Area, California
 - Alcatraz Ferry
- ❑ Rocky Mountain National Park, Colorado
 - Rocky Mountain NP Shuttles

Next Steps

- ❑ NPS GTFS Pilot concluding in fall 2016, insights should help answer questions such as:
 - Is it worth continuing to maintain these feeds beyond the pilot?
 - If so, who will be responsible for them?
- ❑ Want to gather feedback from developer community, users, park staff
- ❑ How to further integrate transportation and transit into the NPS digital strategy for connecting people to parks?
- ❑ What about real-time data?

Contact

- ❑ Logan Nash
U.S. DOT Volpe Center
logan.nash@dot.gov
617-494-2547

- ❑ Krista Sherwood
NPS Washington Office – Transportation Branch
Krista_Sherwood@nps.gov