



# Collaborative GIS-Based Sign Planning Tools for National Historic Trails

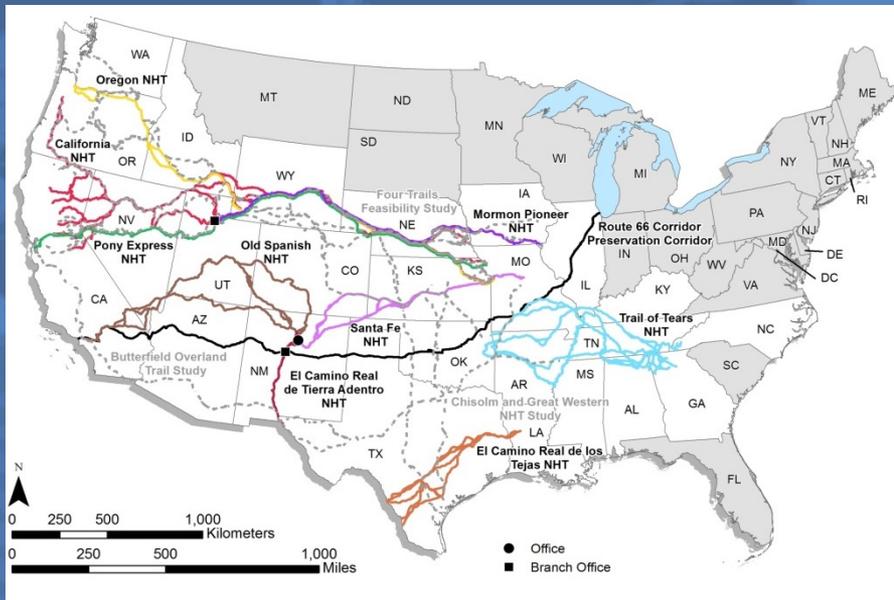
Derek Nelson, GIS Coordinator

*March 3, 2016*





## Trails are Complex...



- We have 3 office locations
- Infinite Number of Partners
- 25,000+ Miles
- 4 NPS Regions
- 24 States
- 451 Counties
- 109 Congressional Districts
- 3026 7.5 minute Quads of Interest



# National Trails System Act

**THE NATIONAL TRAILS SYSTEM ACT**  
**(P.L. 90-543, as amended through P.L. 111-11, March 30, 2009)**  
**(also found in *United States Code*, Volume 16, Sections 1241-1251)**

AN ACT

To establish a national trails system, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION I. This Act may be cited as the "National Trails System Act".

STATEMENT OF POLICY

SEC. 2. [16USC1241]

(a) In order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation, trails should be established (i) primarily, near the urban areas of the Nation, and (ii) secondarily, within scenic areas and along historic travel routes of the Nation which are often more remotely located.

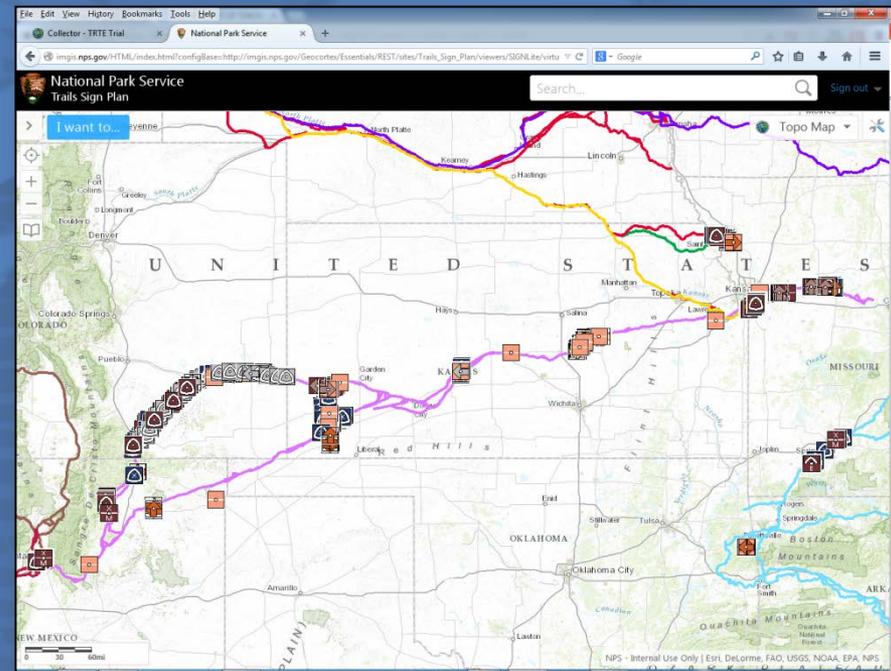
(b) The purpose of this Act is to provide the means for attaining these objectives by instituting a national system of recreation, scenic and historic trails, by designating the Appalachian Trail and the Pacific Crest Trail as the initial components of that system, and by prescribing the methods by which, and standards according to which, additional components may be added to the system.

(c) The Congress recognizes the valuable contributions that volunteers and private, nonprofit trail groups have made to the development and maintenance of the Nation's trails. In recognition of these contributions, it is further the purpose of this Act to encourage and assist volunteer citizen involvement in the planning, development, maintenance, and management, where appropriate, of trails.



# Sign Planning Assistance

- Viewer for partners
- Centralized data
- Tool to generate maps and estimate costs based on proposed sign locations





# The Sign Plan Report Tool

Input "Signs" Feature →

Sign Plan Name →

Trails in AOI →

Sign ID Number Sort →

Map Scale (Resolution) →

Map Templates Location →

Partner Preparers →

NPS Preparers →

Contact Info →

Road Sign Plan Report

Road Sign Feature Class

Plan Name

Version  
Draft

Trails

- CALI
- ELTE
- ELCA
- MOPI
- OLSP
- OREG
- POEX
- ROSI
- SAFE
- TRTE

Select All Unselect All Add Value

Map Index Sort  
Upper Right

Map Series Scale

Templates Folder

Partner Preparer(s) (optional)

NPS Preparer(s) (optional)

Partners Contact (optional)

NPS Contact (optional)

**Road Sign Plan Report**

This tool will generate a road sign plan report based on the user's selection. This report includes a title page, table of contents, a map sheet index, a sign plan map series, a report of the signs, summaries, and sign plan specification sheets depending on the trails chosen.

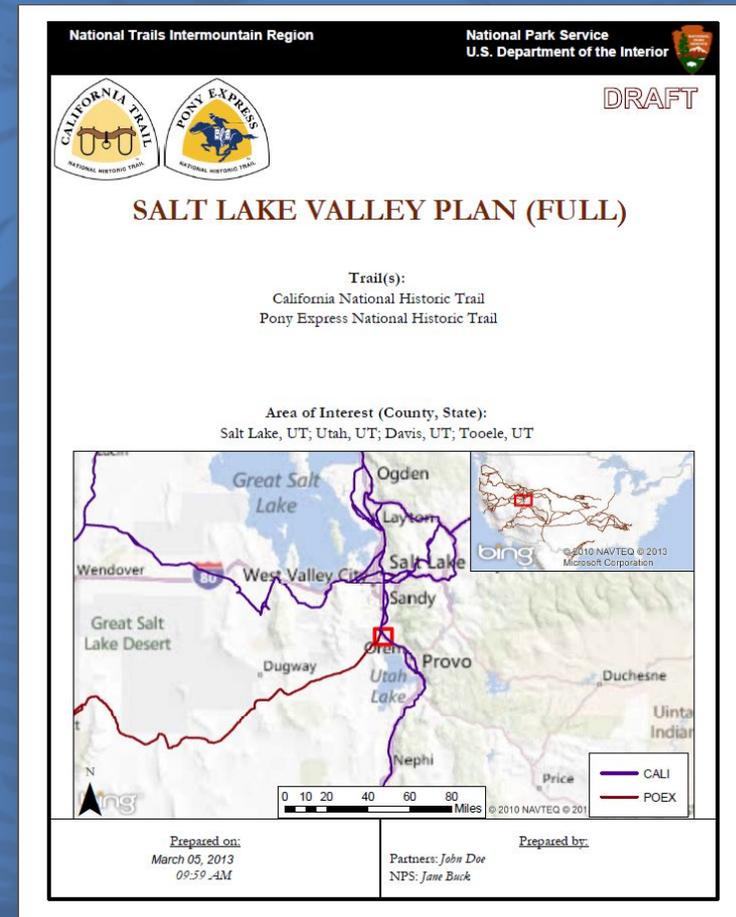
OK Cancel Environments... << Hide Help Tool Help



# The Sign Plan

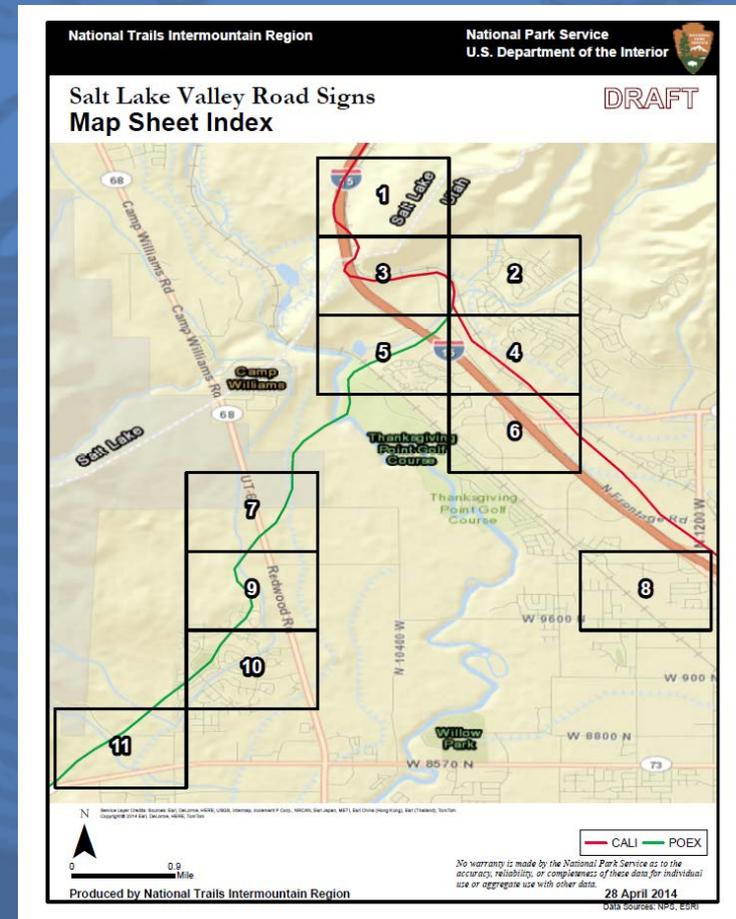
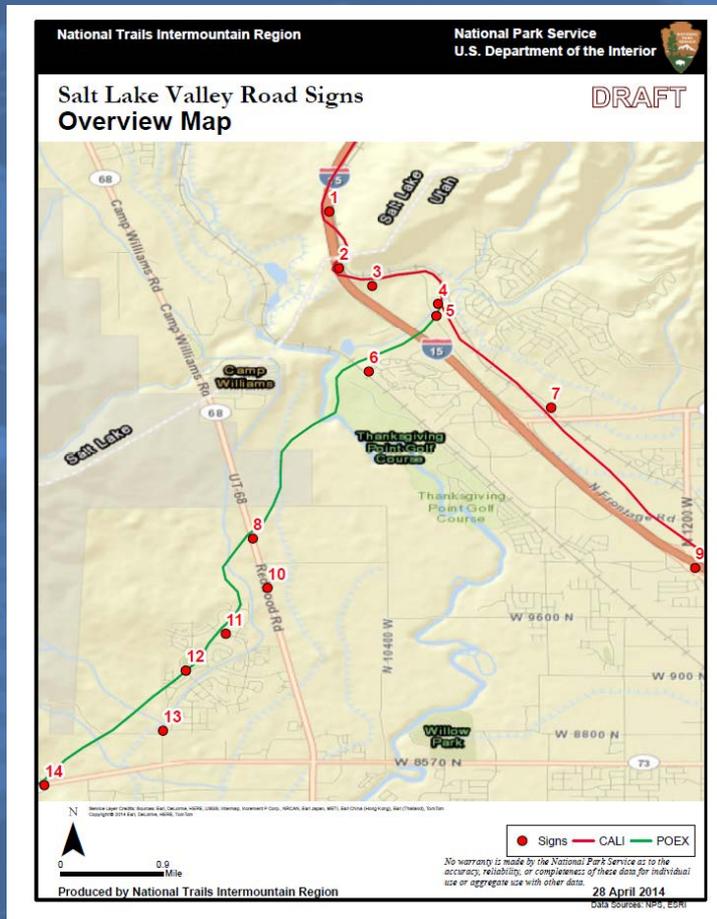
## Sign Plan Report

- Title Page
- Table of Contents
- Map Sheet Reference Index
- Sign Plan Map Series
- Reports
  - Sign Summary
  - County/State Sign Summary
  - Road Jurisdiction Sign Summary
  - Cost Estimate Summary
  - County/State Cost Summary
  - Road Jurisdiction Cost Summary
  - Sign Status Cost Summary
- Sign Plan Specification Sheets





# The Sign Plan Report





# The Sign Plan Report

National Trails Intermountain Region
National Park Service  
U.S. Department of the Interior

**Salt Lake Valley Plan (Full)**  
**Map #: 3**

DRAFT

Sign ID	Sign Type	Site Name	Notes
5	Original_Route_Begin	SLC Route 15	
6	Original_Route_End	Redwood Camp	
7	Auto_Tour_Route_Left_Arrow	SLC Route 15	

Produced by National Trails Intermountain Region

No warranty is made by the National Park Service as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

05 March 2013  
Data sources: NPS, ESRI

National Trails Intermountain Region
County\State
National Park Service  
U.S. Department of the Interior

03/05/2013  
Final/Precise Locations to Be Determined On Installation

County\State	Sign ID	Sign Type	Site Name	Road Name	Direction	Nearest Intersect	Road Join:
<b>Davis, UT</b>							
	8	Historic_Site_Name_Left_Arrow	21st	W 2100 N	South	<null>	Davis County
	12	Sea-Glass_Highway_Right_Arrow	Redwood Trail	N Redwood Rd	Southeast	W 2100 N	Davis County
	13	To_Original_Route_Right_Arrow	SLC Route 15	Route 15	North	<null>	Davis County
	15	Original_Route_Begin	Fountain Place	Fountain Rd	North	W Emeryville Pkwy	Davis County
	17	Original_Route_Begin	Mountain Blvd	Traverse Mountain Blvd	South	<null>	Davis County
<b>Davis Total #: 5</b>							
<b>Salt Lake, UT</b>							
	1	Original_Route_Begin	SLC Route 15	Route 15	East	W 2100 N	Salt Lake County
	2	Local_Tour_Route	SLC Route 15	Route 15	East	W 9600 N	Salt Lake County
	3	Local_Tour_Route_Left_Arrow	SLC Route 15	Route 15	North	Redwood Rd	Salt Lake County
	4	Interstate_Route_Left_Arrow	SLC Route 15	Route 15	North	Route 15	Salt Lake County
	5	Original_Route_Begin	SLC Route 15	Route 15	North	Fountain Rd	Salt Lake County
	7	Auto_Tour_Route_Left_Arrow	SLC Route 15	Route 15	West	<null>	Salt Lake County
	10	Original_Route_Next_M_Miles	Fountain Place	Fountain Rd	Southwest	<null>	Salt Lake County
	14	Original_Route	SLC Route 15	Route 15	South	<null>	Salt Lake County
<b>Salt Lake Total #: 8</b>							
<b>Tooele, UT</b>							
	11	Historic_Site_Name_Left_Arrow	SLC Route 15	Route 15	Northwest	N 2300 W	Tooele County
<b>Tooele Total #: 1</b>							
<b>Utah, UT</b>							
	6	Original_Route_End	Redwood Camp	Redwood Rd	East	<null>	Utah County
	9	To_Original_Route_Right_Arrow	Redwood Camp	Redwood Rd	Southeast	<null>	Utah County
	16	Side_Road_Detour_Left_Arrow	Alpen Hill	<null>	<null>	N 11600 W	Utah County
<b>Utah Total #: 3</b>							
<b>UT Total #: 17</b>							

Page 1 of 1



# Signs As of 02/26/16

2016-02-26 14:58:11.393000

Pedestrian Signs = 180

Viewer Pedestrian Signs = 135

Road Signs = 2770

Viewer Road Signs = 1451

CALTRANS = 989

Total = **5525**

Finished in 47.1256259852 seconds





# QUESTIONS?

Working with you to protect, develop,  
and promote national historic trails.