



Analysis of the Adoption of Esri Story Map Apps

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Esri - Redlands



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Story Maps

- a series of maps presented in sequence to narrate a story

Exploring Theodore Roosevelt National Park

These Park Units: The driving distance between the North and South units is 68 miles. The Elkhorn Ranch Unit is a 10-hour drive from Medora. See maps for details.

Stay Safe, Protect the Park: Federal law protects all natural and cultural features in the park. Do not collect or disturb objects. Wild animals are dangerous and best viewed from a distance. For their sake and yours, do not approach or feed them.

Carry plenty of water when hiking. The park's natural water sources are not potable. Pets must be leashed and are not allowed on trails. For a complete list of regulations, including firearms policy, visit the park website.

Accessibility: We strive to make our facilities, services, and programs accessible to all. For information, check at a visitor center, call, or visit the park website.

Emergencies call 911

National Park System
 U.S. Department of the Interior
 National Park Service

NORTH UNIT HIGHLIGHTS (CENTRAL TRAIL)

Painted Canyon Overlook Here, on the upper margin of the Badlands is a magnificent panorama of the broken topography in its colorful hues.

Onlook Overlook Here, the Little Missouri takes a hard turn to east. The river originally continued north to Hudson Bay. During the most recent ice age, continental glaciers blocked its way, hence the turn.

River Bend Overlook Take a short walk from the parking area to a view of the Little Missouri floodplain. The stone shelter was built in the 1930s by the Civilian Conservation Corps.

Elkhorn Ranch Here, the site of Roosevelt's beloved second ranch. The buildings no longer exist, but stone markers and interpretive signs.

Peaceful Valley Ranch This complex spans the successive eras of the area's recent history. It was a ranch in the late 1800s, a dude ranch in the 1920s, headquarters of the CCC and NPS in the 1930s, park headquarters in the 1950s, and a facility for guided horseback rides until 2014.

Elkhorn Ranch Unit (WILDERNESS)

The Elkhorn Ranch Unit is the site of Roosevelt's beloved second ranch. The buildings no longer exist, but stone markers and interpretive signs.

Before going to the Elkhorn, ask for information at one of the visitor centers. The roads are unpaved, steep, and easily washed out by storms.

In 1884 Theodore Roosevelt lived without cow and pig ranching and moved permanently back to New York to continue his political career.

By 1887 drought and blizzards had destroyed Roosevelt's herd. He gave up ranching and moved permanently back to New York to continue his political career.

South Unit HIGHLIGHTS (SACRAMENTO TRAIL)

Longhorn Steers The park maintains this historic demonstration herd as a reminder of the Badlands cattle industry.

Cannonball Concoctions Follow these "cannonballs" - some famous when sand grains from an ancient river deposit were cemented together by minerals dissolved in groundwater.

14 Miles Snake Drive The guided road starts at the entrance station, along the way are overlooks, pullouts and interpretive signs.

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THIS DYNAMIC PLANET
 WORLD MAP OF VULNERABLE ECOSYSTEMS, WETLANDS, AND COASTAL ECOSYSTEMS

USGS, Smithsonian Institution, U.S. Naval Research Laboratory

1. How Great Grasses in the Great Plains Shaped Theodore Roosevelt's Vision

2. How Four Seasons in Park Back Along Deep Creek Shaped Theodore Roosevelt's Vision

3. How the Badlands Shaped Theodore Roosevelt's Vision

4. How the Elkhorn Ranch Shaped Theodore Roosevelt's Vision

5. How the Peaceful Valley Ranch Shaped Theodore Roosevelt's Vision

6. How the South Unit Shaped Theodore Roosevelt's Vision

7. How the North Unit Shaped Theodore Roosevelt's Vision

8. How the Wilderness Area Shaped Theodore Roosevelt's Vision

9. How the Little Missouri National Grassland Shaped Theodore Roosevelt's Vision

10. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part One

11. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Two

12. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Three

13. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Four

14. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Five

15. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Six

16. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seven

17. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eight

18. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Nine

19. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ten

20. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eleven

21. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twelve

22. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirteen

23. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fourteen

24. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifteen

25. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Sixteen

26. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventeen

27. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighteen

28. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Nineteen

29. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty

30. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-One

31. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Two

32. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Three

33. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Four

34. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Five

35. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Six

36. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Seven

37. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Eight

38. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Twenty-Nine

39. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty

40. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-One

41. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-Two

42. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-Three

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44. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-Five

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46. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-Seven

47. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-Eight

48. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Thirty-Nine

49. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Forty

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54. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Forty-Five

55. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Forty-Six

56. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Forty-Seven

57. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Forty-Eight

58. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Forty-Nine

59. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty

60. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty-One

61. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty-Two

62. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty-Three

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66. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty-Seven

67. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty-Eight

68. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Fifty-Nine

69. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Sixty

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78. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Sixty-Nine

79. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy

80. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy-One

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83. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy-Four

84. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy-Five

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86. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy-Seven

87. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy-Eight

88. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Seventy-Nine

89. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty

90. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-One

91. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Two

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93. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Four

94. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Five

95. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Six

96. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Seven

97. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Eight

98. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Eighty-Nine

99. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety

100. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-One

101. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Two

102. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Three

103. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Four

104. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Five

105. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Six

106. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Seven

107. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Eight

108. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part Ninety-Nine

109. Theodore Roosevelt - When Plains Shaped Theodore Roosevelt, Part One Hundred

Story Maps Today

Palm Springs Map Tour

Rupert Essinger from the Esri Story Maps team shares some cool places to go in this fantastic desert resort.

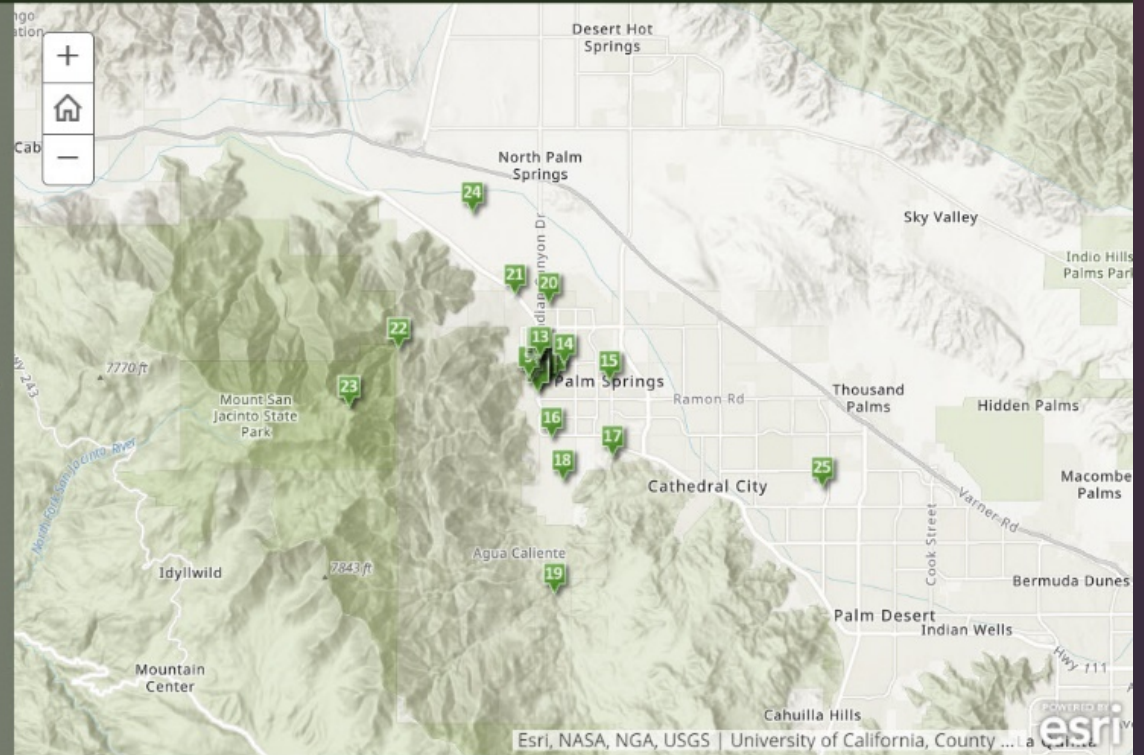
A story map [f](#) [t](#) [e](#)



Welcome to Palm Springs!

Palm Springs, California, is an American Shangri-La in a unique desert environment with endless sun, rediscovered mid-century architecture and a fun, relaxed atmosphere.

Photo: Greater Palm Springs Convention and Visitors Bureau



1 Palm Springs Convention Center



2 Renaissance Hotel



3 Sherman's Deli and Bakery



4 Downtown / Palm Canyon Drive



5 Starbucks



6 Lulu California Bistro



7 Architecture and Design Center



8 Palm Springs Art Museum



9 The Museum Trail



Uses of story maps

- Share specific information
- Make sense of our world
- Celebrate special places
- Raise awareness about an issue
- As a tool for education
- Inspire action
- As a reporting mechanism
- To imagine different possibilities

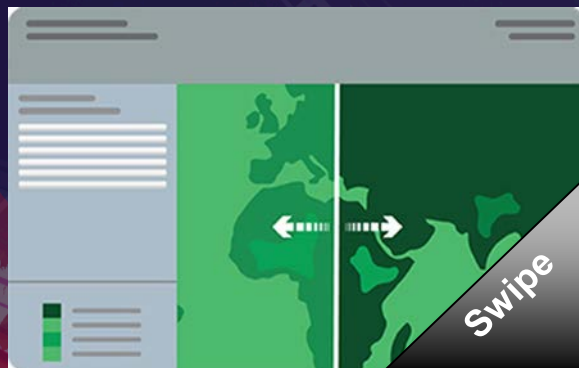
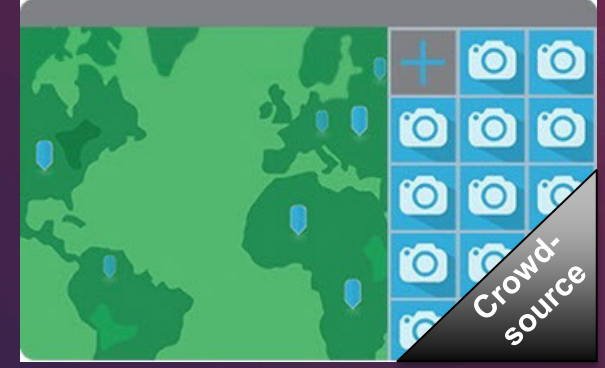
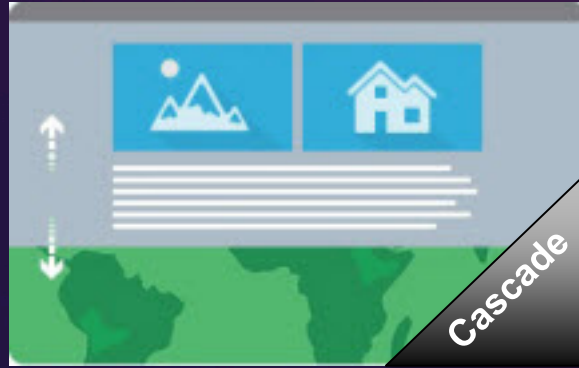
“Stories are remembered up to 22 times more than facts alone, according to Jennifer Aaker, a marketing professor at Stanford's Graduate School of Business.”

Uses of Esri story map apps

For a variety of presentation, communication, or visualization needs

- Promote advocacy and outreach
- Provide a virtual tour
- Deliver public information
- Share a portfolio
- Create more compelling briefings and presentations
- Introduce people
- Promote and market events
- Showcase projects or activities
- As an interactive report
- As a multimedia teaching tool
- To provide a more engaging resumé
- As an effective public relations tool
- To create a dashboard that shows current conditions
- As a dynamic atlas

Esri Story Map Apps

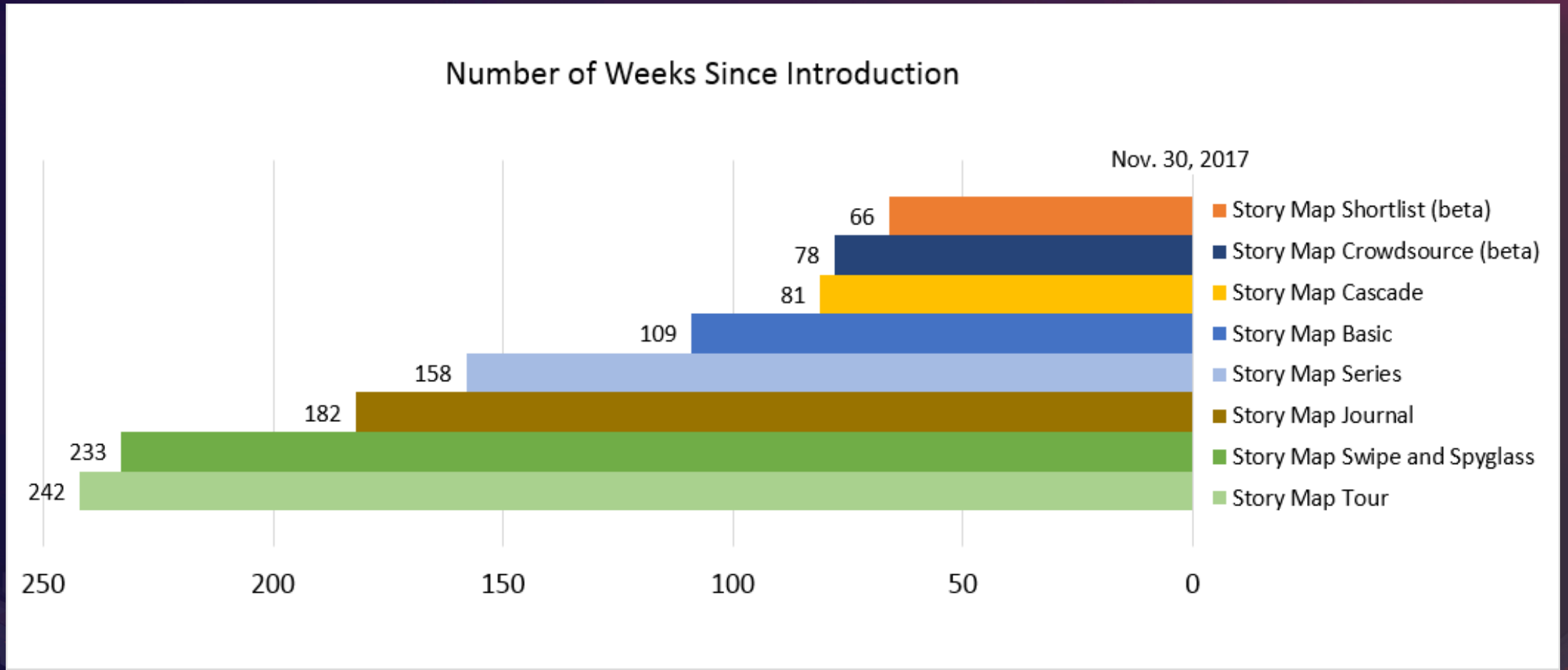


Data

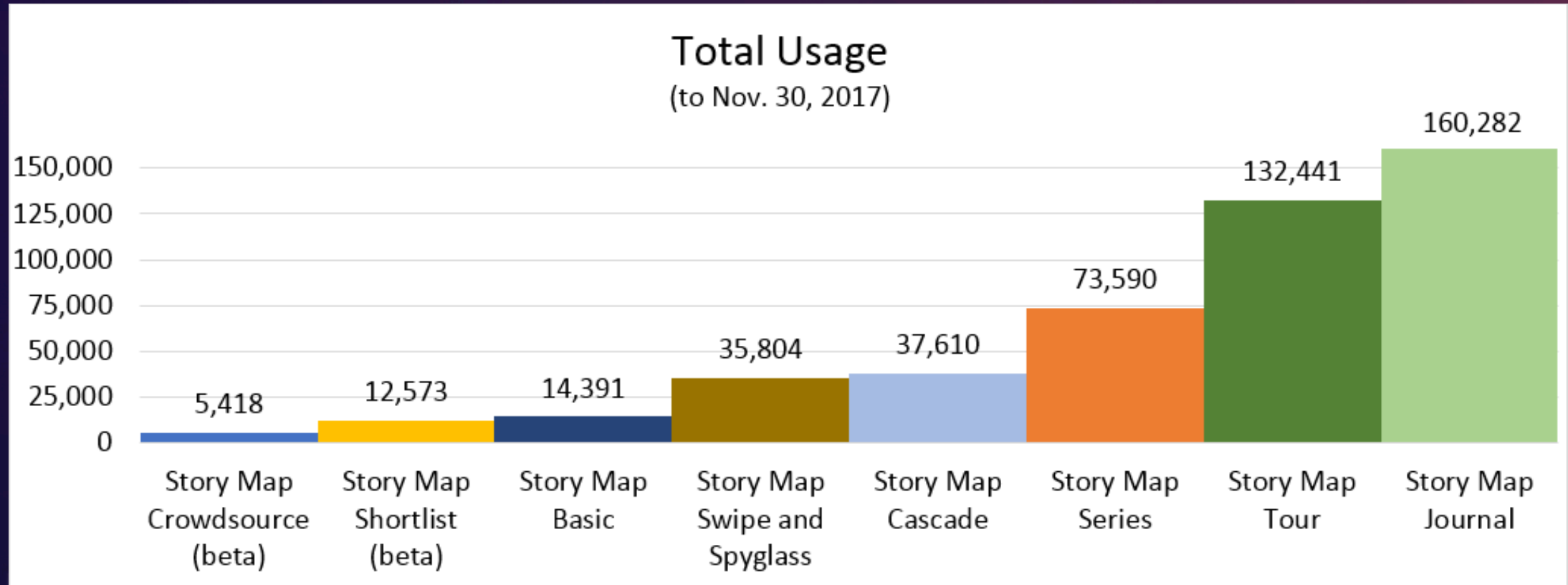
- Number of times an app was used to create a story map
- “On [date], users created [total] story maps of type [app]”
- From the date of introduction of each app
- To Nov. 30, 2017

	A	B	C	D
1	date	app	total	
2	2/3/2018	Story Map Basic	7	
3	2/2/2018	Story Map Basic	25	
4	2/1/2018	Story Map Basic	29	
5	1/31/2018	Story Map Basic	33	
6	1/30/2018	Story Map Basic	37	
7	1/29/2018	Story Map Basic	34	
8	1/28/2018	Story Map Basic	16	
9	1/27/2018	Story Map Basic	7	
10	1/26/2018	Story Map Basic	45	
11	1/25/2018	Story Map Basic	60	
12	1/24/2018	Story Map Basic	31	
13	1/23/2018	Story Map Basic	47	
14	1/22/2018	Story Map Basic	26	
15	1/21/2018	Story Map Basic	8	
16	1/20/2018	Story Map Basic	10	
17	1/19/2018	Story Map Basic	40	
18	1/18/2018	Story Map Basic	38	
19	1/17/2018	Story Map Basic	28	
20	1/16/2018	Story Map Basic	32	
21	1/15/2018	Story Map Basic	15	
22	1/14/2018	Story Map Basic	5	
23	1/13/2018	Story Map Basic	6	
24	1/12/2018	Story Map Basic	28	
25	1/11/2018	Story Map Basic	24	
26	1/10/2018	Story Map Basic	82	
27	1/9/2018	Story Map Basic	70	
28	1/8/2018	Story Map Basic	41	
29	1/7/2018	Story Map Basic	8	
30	1/6/2018	Story Map Basic	9	
31	1/5/2018	Story Map Basic	5	

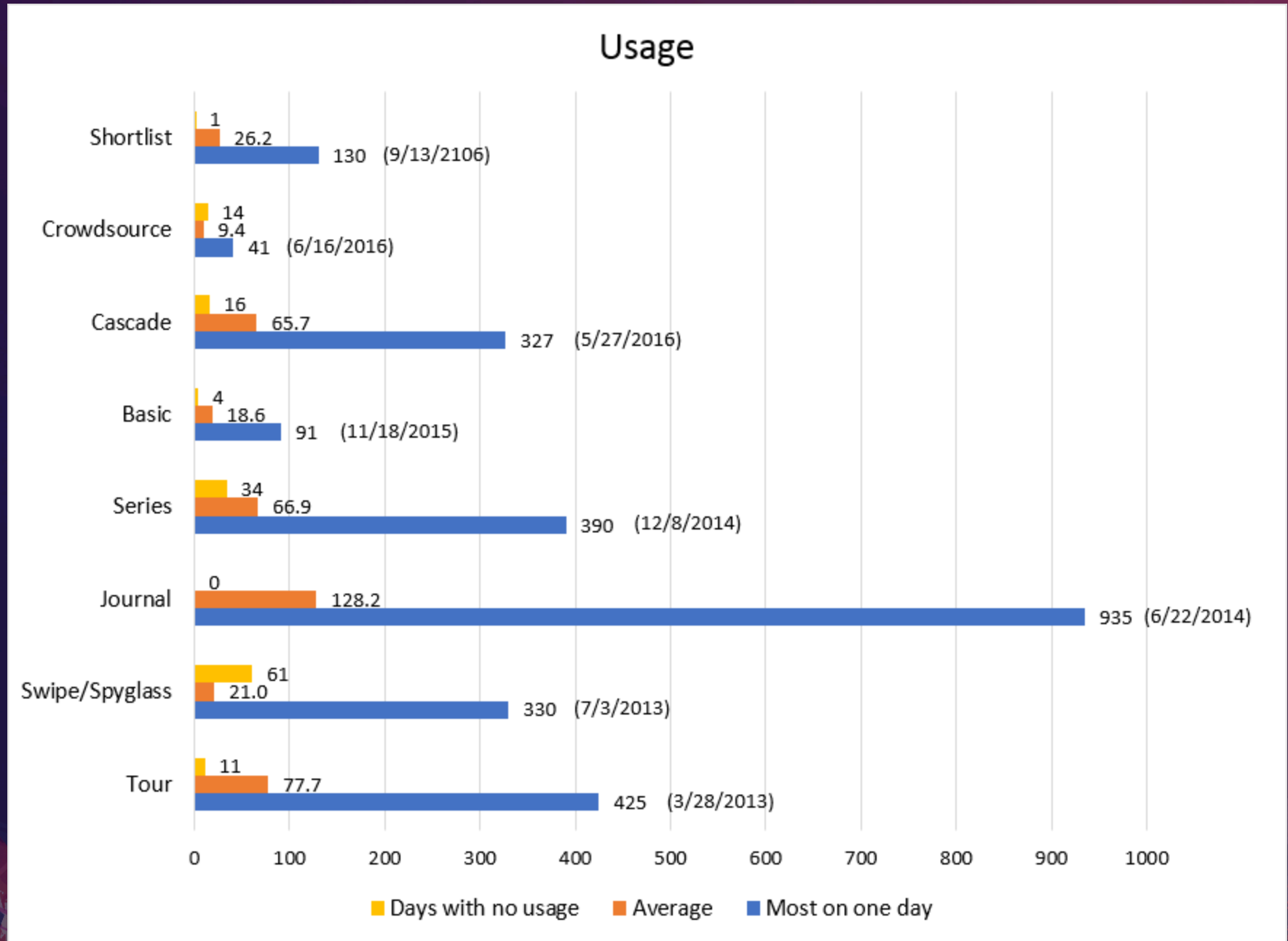
Visual analysis



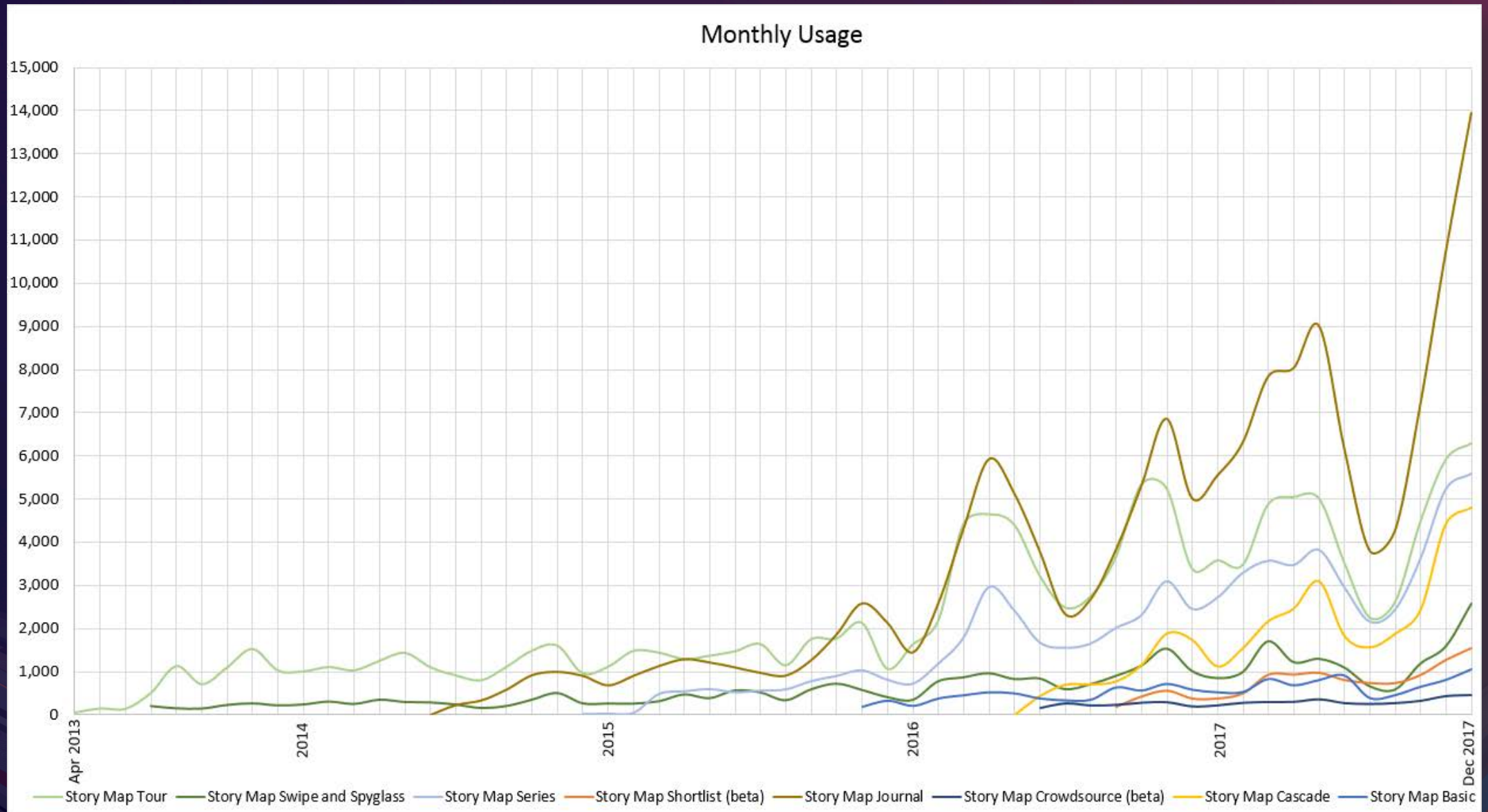
Visual analysis



Visual analysis of the data

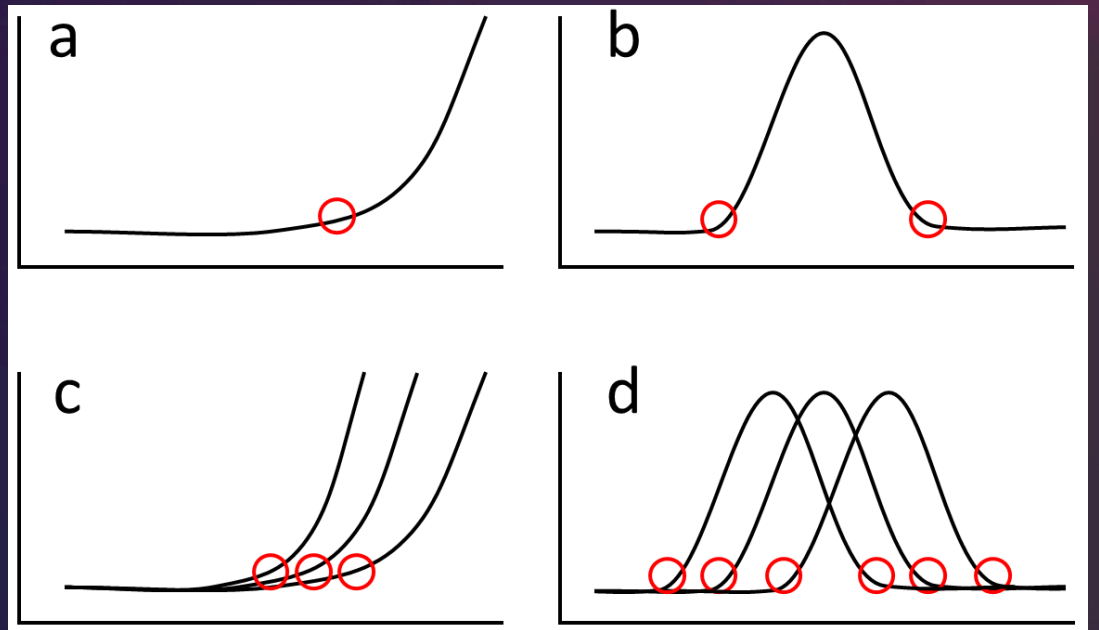


Visual analysis

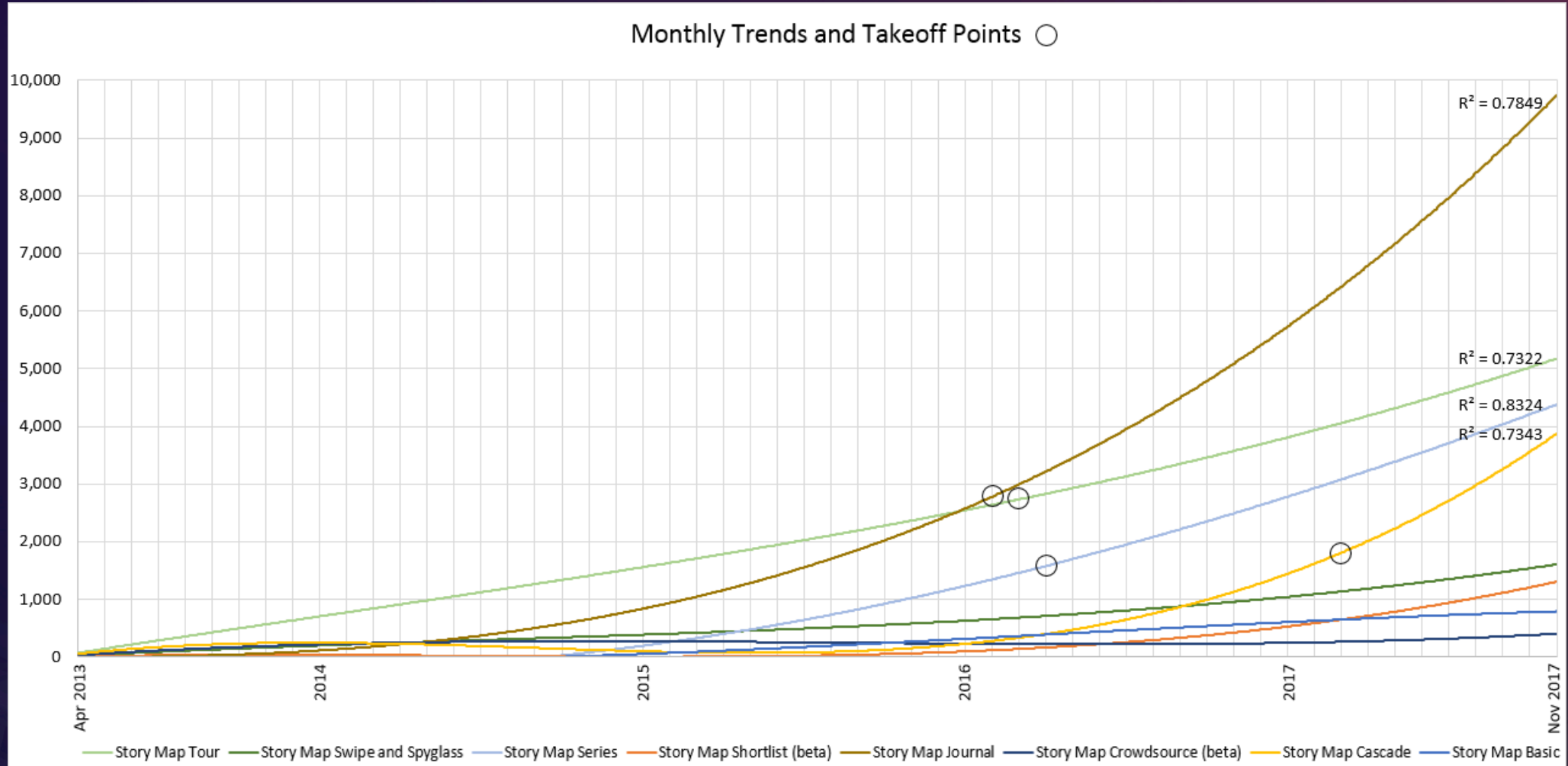


Changepoint analysis

- Estimating the point at which the statistical properties of a sequence of observations change
- Can help to identify the cause, plan a response, and predict future change
- Synonyms: segmentation, structural breaks, break points, regime switching, and detecting disorder



Changepoint analysis results



Changepoint analysis results

Story Map app	Date of introduction	Date of takeoff	Number of months from introduction to takeoff
Tour	4/2013	3/2016	35
Journal	6/2014	2/2016	20
Series	12/2014	4/2016	16
Cascade	5/2016	3/2017	10

Conclusions

- All apps exhibit a clear, slow, introductory period of usage
- Time-to-takeoff is apparent for the four full-featured apps indicating that they match a previously-observed pattern:
 - “New products do not grow into maturity at a steady rate. Rather, their sales pattern is marked by a long introduction period when sales linger at low levels. At a certain point in time, the new product breaks into rapid growth, associated with a huge jump in sales” (Trellis et al, 2003)
- Each new generation of a full-service story map app is taking less time to reach takeoff
- Other apps that are primarily “special purpose apps” with less functionality do not exhibit the same accelerated growth after the takeoff point
- Usage of all apps continues to climb

Future work

- **Why are some apps used every day, others not?**
- **Is usage related to events (Esri conferences, natural disasters, political events,...)?**
- **Are there times when we can predict higher/lower usage (holidays, ...)?**
- **Is there anything to the apparent clustering of time-to-takeoff for three of the four full-function apps?**
- **What would an analysis of cumulative usage reveal?**
- **Can we predict usage of future apps (which will be more popular, time-to-takeoff, ...)?**
- **What kinds of apps should we build for the future, if any?**



Thank you!

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esri

THE
SCIENCE
OF
WHERE