2018-2019 Public Lands Transportation Fellows Program

Presented by: Andy Yuen and Dylan Corbin, San Diego NWRC



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Webinar logistics

- Duration is 1:00 2:30 PM Eastern
- Webinar recorded and archived. For quality of recording, phone will be muted during presentation
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- At the end there will be time for Q&A
- There is a handout pod at the bottom of the screen















Today's Presenters



Andy Yuen **Project Leader** San Diego National Wildlife Refuge Complex (SDNWRC)



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Dylan Corbin Public Lands Transportation Fellow (PLTF) San Diego National Wildlife Refuge Complex (SDNWRC)











Goal of this Webinar

To document and share the work completed by Dylan at the San Diego NWRC from 2018-2019.

To share information and lessons learned that can be applied to other Refuges and used by other public lands managers.



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Audience for this Webinar

- FWS Transportation Coordinators – Learn about new technologies, initiatives • Future Fellows future projects
- Future host refuges



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- Learn about Dylan's work as a case study to inform

Learn about what a PLTF may be able to accomplish















San Diego National Wildlife Refuge Complex Multi-Modal Transportation Plan

Andy Yuen, Project Leader San Diego NWR Complex



Why A Transportation Plan for the San Diego National Wildlife Refuge Complex?

- National Wildlife Refuges.

• Over 3.3 million people live within the San Diego metropolitan area; at least 2.3 million within 25 miles of the Tijuana Slough, San Diego Bay, and/or San Diego

• By informing the public of the range of transit and nonmotorized transportation options available for accessing our Refuges, we hope to connect more residents, particularly those from disadvantaged communities, with the Refuges' wildlife and other natural resources.





Transportation Planning Focus

- Identify available multi-modal options that support visitation at each Refuge.
- they can take advantage of these options.
- Refuges in the Complex.

• Develop tools for informing the public of how

Identify multi-modal and other transportation planning projects where Refuge involvement could result in improved access to one or more



A Changing Transportation Landscape

An update to the existing transportation plan was necessary to:

• Review and evaluate past proposals.

• Identify and address new proposals and partners with a potential to improve access to the Refuges.

• Describe new technologies and their role in improving access to the Refuges.



U.S. Fish & Wildlife Service

A Successful Outcome





San Diego **National Wildlife Refuge Complex**

Multi-Modal Transportation Plan







March 2015 - Updated 2019

Prepared by:

Jacob K. Connor, Public Lands **Transportation Scholar** March 2015

Revised and Updated by Dylan Corbin, Public Lands **Transportation Fellow** April 2019

U.S. Fish & Wildlife Service

From the Complex Staff

Thanks to Our Transportation Scholar Dylan Corbin

Walk, Roll, or Waddle: Public Access to a 21st Century Urban Wildlife Refuge

Lessons Learned Working as a Public Lands Transportation Fellow at San Diego National Wildlife Refuge Complex Presented by: Dylan Corbin

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THE INTERIOR NAGEMENT

1. Introduction

2. PLTF Projects

- 1. Electric Vehicle Charging
- 2. TRNERR CMP update
- 3. Liaison projects
- 3. Lessons Learned
- 4. Advice for Future Fellows
- 5. Q & A

Agenda

Introduction

Name: Dylan Corbin Refuge: San Diego National Wildlife Refuge Complex Hometown: Portland, OR Educational Background: Masters of City and Metropolitan Planning, University of Utah Academic Focus: Environmental Planning

- Located in San Diego and Orange Counties
- More than 12,000 acres across four refuges
- Highly urbanized surroundings

Complex
Refuges
Units

The three National Wildlife Refuges in San Diego County are wellknown and visited regularly by diverse communities. Refuge access points are clearly defined and welcoming to the public. The Refuges are integrated into the urban context and easily accessed by multiple modes of transportation.

90 miles T to Seal Beach NWR

Take I-5 north to Seal Beach Blvd

San Diego

Sweetwater Marsh Unit

(163)

San Diego Bay NWR

5

209

South San Diego Bay Unit

Tijuana Slough NWR

Electric Vehicle Charging • Goal: Procure electric vehicle charging stations for Sweetwater

- Marsh and Tijuana Slough
- Step 1: consultation with San Diego Gas & Electric

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Infrastructure & Equipment Needs 1) Connection to electrical grid 2) EV charging station 3) Wires, conduit, circuit breaker 4) Network subscription fee (for public use stations)

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AC Level 1 (L1) Charging

Uses a standard 110/120 volt alternating current (VAC) three-prong wall outlet widely available in all residential and commercial locations. Almost all plug-in vehicles come with a Level 1 cord set charger.

AC Level 2 (L2) Charging

Uses 208/240 VAC and can be hardwired or connected with a plug. AC Level 2 charging uses 208/240 VAC current and is used for electric vehicles with larger batteries, providing a faster charge than Level 1.

DC Fast Charging (DCFC)

A commercial-grade 208 V, 440 VAC or 480 VAC device that uses direct current (DC) to charge an electric vehicle.

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	Level 1	Level 2	DCFC
Charging Speed	2-5 miles of range per	10-20 miles of range per	24-50 miles of range in 20
	hour	hour	minutes
Typical	 One and two-family 	 One and two-family 	 Public access
Locations	homes	homes	 Large commercial office
	 Townhomes 	 Public access 	buildings or parks
	 Commercial office 	 Multi-family 	 Hospitality & recreation
	buildings	residential	facilities
		communities	
		 Commercial office 	
		buildings	

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cludes Labor)	Unit Measurement	Total Cost
\$8.70/ft.	85 ft.	\$739.50
\$1.20/ft.	85 ft.	\$102.00
\$47.78/ft.	5 ft.	\$238.90
\$2,000.00	1 station	\$2,000.00
173.00/breaker	1 breaker	\$173.00
\$181.00	1 permit	\$181.00

	EV
Van Accessible EV Space	÷
Equipment Type Unit Cost (In	clu
Conduit (3/4" steel including fittings)	
Electrical Panel (100 amp)	
Charging Station \$	8,0
Circuit Breakers \$1	73.
Permit Application Fee	0.0
Network Activation Fee S100.00-S4	UU.

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	Unit Measurement	Total Cost
\$11.35/ft	35 ft.	\$397.25
\$4.86/ft	35 ft.	\$170.10
\$47.78/ft	35 ft.	\$1,672.30
0.00 each	2 charging stations	\$8,000.00
0/breaker	2 breakers	\$346.00
\$2 <i>,</i> 800.00	1 panel	\$2,800.00
\$181.00	2 permits	\$362.00
0/charger	2 network subscriptions	\$800.00
		\$14,547.65

Electric Vehicle Charging Key questions 1) For whom? The public needs/wants faster charging speeds than employees/volunteers 2) When? Will the station always be open? If not, how will we secure it when it is closed? 3) Where? Consider security, maintenance, and ADA access

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https://www.gsa.gov/cdnstatic/Which_Charging_Station_is_best_for_me_BPA_Decision_Tree.pdf

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Tijuana River National Estuarine Research Reserve **Comprehensive Management Plan** update

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TRNERR CMP update

TRNERR CMP update

"To preserve, protect, and manage the natural and cultural resources within the Research Reserve, enhance scientific understanding and education, **ensuring compatible recreation and resource use** for the benefit of present and future generations. This will be accomplished through partnerships with the community, educational institutions, and government entities working in the estuary, its binational watershed, and biogeographic region."

TRNERR CMP update

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Last CMP update completed in 2010

CMPs drafted through a consensusbuilding effort among major partners

Includes chapters on facilities, administration, research, education and interpretation, stewardship, public access, and watershed coordination

Access to the beach and to the Tijuana River mouth is prized by local surfers, hikers, and equestrians. The coastal dunes at TRNERR host nesting sites for endangered birds, requiring access closure and visitor education.

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The Tijuana River has had its outlet closed by sediment build-up on several occasions in the last decade, requiring emergency mobilization of heavy equipment to re-open the river due to the risk of inland flooding.

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Updated Access Objectives

Objective 3: Facilitate access throughout the Reserve to ensure feasibility of critical resource management interventions, and also research and education priorities.

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No continue lás allá de este punto Utilice el sendero A la izquierda

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Objective 2: Facilitate appreciation for the range of topographic, habitat, and social/cultural elements that characterize the Reserve.

Objective 1: Collaborate with partners, such as the County of San Diego, and the cities of San Diego and Imperial Beach to improve year-round visitor access to the Reserve via public transit, private vehicles, and active transportation.

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Liaison on Partner Projects

PORTof SAN DIEGO Waterfront Development

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Liaison on Partner Projects

Chula Vista Bayfront Redevelopment

Source: Port of San Diego (https://www.portofsandiego.org/projects/chula-vista-bayfront)

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Preliminary Design Estuary

Source: Imperial Beach Boulevard Enhancement Project, Estuary Overlook Concept, Michael Baker International

Imperial Beach Boulevard Enhancement Project

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Source: SDNWRC Multimodal Transportation Plan

Imperial Beach Boulevard Enhancement Project

Imperial Beach Boulevard Enhancement Project

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Source: Imperial Beach Boulevard Enhancement Project, Estuary Overlook Concept, Michael Baker International

Could this become America's finest bus stop?

Chula Vista Bayfront Redevelopment

Active Transportation Improvements

Walkability Improvements

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Source: Port of San Diego, Chula Vista Bayfront Master Plan

Chula Vista Bayfront Redevelopment

Bayfront Shuttle concept

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Exhibit 4 - Chula Vista Bayfront Shuttle

Source: Port of San Diego, Chula Vista Bayfront Master Plan

Mobility as a Service (scooter, bikeshare) Work with municipalities 2018/2019: extremely fast change

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General Transit Feed Specification GTFS for the shuttle to Gunpowder Point It didn't work! that it made GTFS unworkable for the Fellow 1) fixed-route, unscheduled service 2) additional stop by request only 3) not operated by a transit agency

GBFS – General Bikeshare Feed Specification currently low adoption

- The shuttle was different enough from a traditional transit route
- Aims to standardize and distribute information about bikeshare,

Working environment Finding opportunities to work with other people Finding opportunities to get outside

Federal Government shutdown Challenging! find a good location to get work done **Relied more on Phil and Jaime**

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Disruptive to work flows – created the problem of needing to

Tips for Future Fellows

- Take pictures and back up the good ones. Don't leave all of
- related ones. You'll have more common ground with the people you meet.
- If you need help ask for help.

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• Show up to as many meetings and events as you are able to. your important photos on your phone lest you tempt disaster. • Keep up with local news and events, especially transportation

Thank you

Including, but not limited to:

- Vicki Touchstone, Andy Yuen, Jill Terp, Brian Collins • Jaime Sullivan, Phil Shapiro, Laurie Miskimins
- Corinne Jachelski and Vince Ziols
- Laura Whorton, Ben Rasmussen
- Favelino and the Region 1 IT Helpdesk
- Mom & Dad

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Resources

GSA EV Charging Station Decision Tree https://www.gsa.gov/cdnstatic/Which_Charging_Station_is_best_for_me_BPA_Deci sion_Tree.pdf https://www.gsa.gov/buying-selling/products-services/transportation-logistics-<u>services/vehicle-leasing/alternative-fuel-vehicles-technology/electric-vehicle-charging-</u> stations

GBFS Data Format Information https://github.com/NABSA/gbfs/blob/master/README.md

GTFS Data Format Information and User Guide https://gtfs.org/

Imperial Beach Boulevard Enhancement Project https://www.imperialbeachca.gov/?SEC=7CC21344-3FDB-4858-B7B4-F9838DF77543

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Directing your Questions via the Chat Pod

1. Chat pod is on left side of screen between attendees pod & closed caption pod

2. Type your question or comment here

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Chat (Everyone)

Everyone

3. Answers will appear here unless addressed verbally

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Contact Information

please contact:

Or contact the PLTF Program Manager at:

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If you have any questions related to this presentation,

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https://westerntransportationinstitute.org/professionaldevelopment/public-lands-transportation-fellows/

