



# COCOPAHI TRIBE

EAST RESERVATION CIRCULATION PLAN

EXECUTIVE SUMMARY





# Cocopah Tribe East Reservation Circulation Plan

---

## Executive Summary

*Prepared for:*  
**Cocopah Tribe**

*Prepared by:*



Kimley-Horn  
and Associates, Inc.

March 2013

# Cocopah East Reservation Circulation Study

## Executive Summary

The Cocopah Tribe East Reservation Circulation Plan was funded by the Arizona Department of Transportation (ADOT) Multimodal Planning Division's (MPD) Planning Assistance for Rural Areas (PARA) program. The PARA program receives funding support through the Federal Highway Administration's (FHWA) State Planning and Research program. PARA study projects assist non-metropolitan communities for the purpose of conducting transportation planning studies. PARA funds may be applied to address a broad range of planning issues related to road and non-motorized transportation modes.

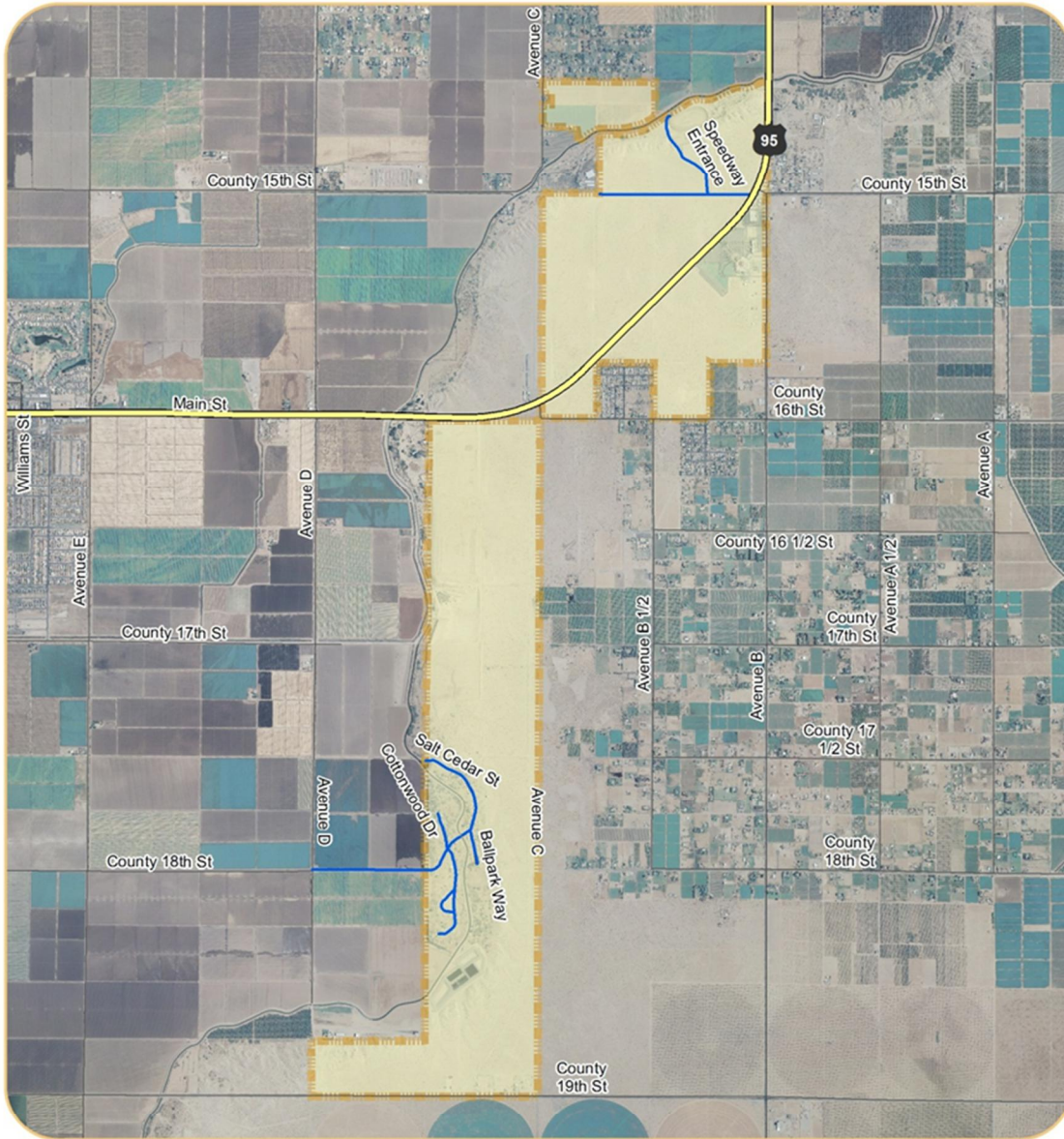
This circulation study developed transportation improvements for all transportation modes, including automobile, transit, bicycle, pedestrian, and equestrian transportation. Although bicycle and equestrian travel is not common on the East Reservation, projects were developed to encourage future use of these modes of travel. The plan recommends transportation improvements for five-, 10-, and 20-year planning horizons.

The Cocopah Tribe has three reservation areas, the North Reservation, the East Reservation, and the West Reservation. This study is focused on the East Reservation area. The Cocopah East Reservation is shown in its statewide and Yuma area context in Figure 1. The East Reservation is situated approximately 1.5 miles south of US 95, 0.5 miles east of Avenue D, and 8 miles north of the United States/Mexico border. The residential area of the East Reservation is split by a canal and the only access to the reservation is via Salt Cedar Street and County 18th Street.

### ***Study Objectives***

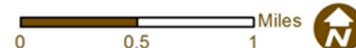
Key study objectives are:

- Connectivity to local and regional transportation networks.
- Promote travel safety and mobility, enhance economic vitality, and improve community livability.
- Support of the Tribe's current and future planning for economic and community development.
- Development of pedestrian and bicycle circulation plan.
- Improve emergency access.



**Legend**

-  US and State Highways
-  Cocopah Tribal Transportation Inventory Roads
-  Other Roads
-  Study Area (East Cocopah Reservation)



**Figure 1 - Study Area**

## ***Public and Stakeholder Outreach***

This project involved the East Reservation community through two rounds of public involvement outreach. The first public meeting was held in August 2012 and the focus of the meeting was to obtain input on transportation needs. The second public involvement meeting was held in November 2012. At this meeting, recommended transportation improvement projects were presented for public review and comment. Both public meetings were held at the Head Start Center on the East Reservation. In addition to the public outreach, a Technical Advisory Committee was formed, comprised of staff representing the Cocopah Tribe, Yuma Metropolitan Planning Organization, Somerton, Yuma County, Yuma County Intergovernmental Public Transit Authority (YCIPTA), ADOT staff, and others. The Committee held four meetings during the study to contribute technical advice into the planning process.

A Project Management Team, which was comprised of the Cocopah Tribe project manager and a senior Cocopah tribal planner, ADOT project manager, ADOT Communications and the consultant project team met monthly to discuss progress and issues and guide the project to completion.



*Entry into the East Reservation on Salt Cedar Street*

## ***Identifying Transportation Needs and Associated Projects***

Transportation projects were developed through a study planning process that included stakeholder interviews, public input through public meetings, and traffic analysis. Transportation improvements were also based on future travel demands, estimated using a regional transportation model.

A summary of transportation needs, and how they were addressed through the development of transportation projects, is summarized in Table 1.

Location and description of recommended projects are shown on Figure 2. Individual project descriptions are shown beginning on page 9.

This project also provides a plan to develop a pedestrian and bicycle system for the community. The plan for bicycle routes is shown on Figure 3. Road widening projects on East Reservation streets include provision of a shoulder (on one side of the street) that can be used as a bicycle lane, as well as an area for emergency service providers to park. In addition, a path recommended along the East Main Canal can also be used by bicyclists. These projects will encourage bicycle use on the East Reservation.

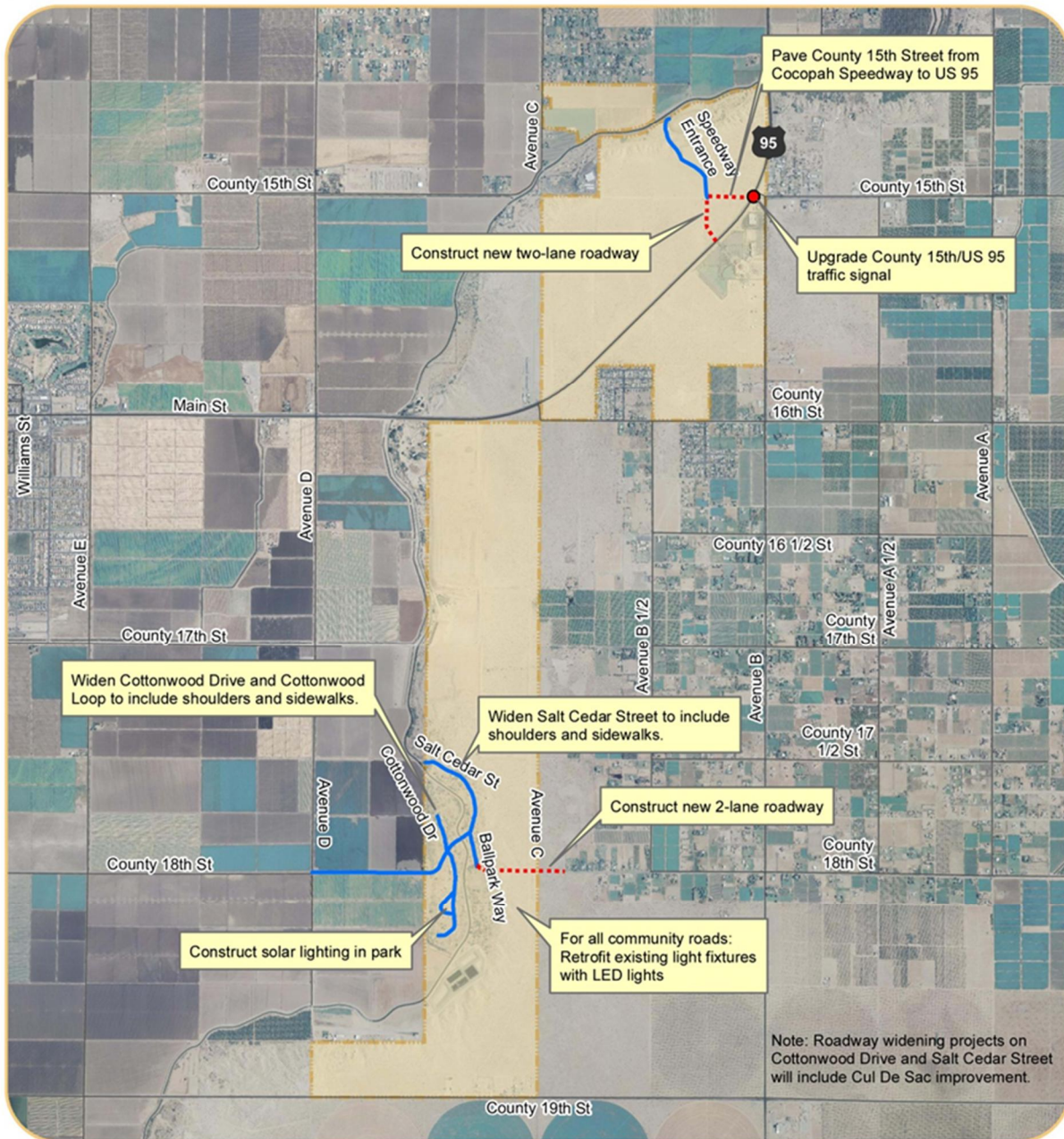
The plan for pedestrian routes is shown on Figure 4. By including sidewalks (on one side) for road widening projects on Cottonwood Drive, Cottonwood Loop, Salt Cedar Street, and Ballpark Way, residents will have a connected sidewalk system throughout the East Reservation. This will make it safer for schoolchildren to walk to bus stops and make it easier for elders and residents to walk throughout the community. A trail is also recommended to provide a loop between the sidewalk system on Salt Cedar Street and the canal area. An example of a canal path within the City of Yuma is shown in the photo below. It should be noted that as homes are rehabilitated or upgraded through Cocopah Indian Housing and Development, sidewalks can also be installed as part of the project.



*City of Yuma shared use path by East Main Canal*

**Table 1 - Transportation Needs and Recommended Improvements**

Transportation Need	Recommended Project(s)
Wider streets	<ul style="list-style-type: none"> <li>• Cottonwood Drive and Cottonwood Loop road widening</li> <li>• Salt Cedar Street road widening</li> <li>• Ballpark Way road widening</li> </ul>
Intersection improvements	<ul style="list-style-type: none"> <li>• County 15th Street / US 95 intersection improvement (turn lane improvements on west leg of intersection and signal modifications).</li> </ul>
Paving dirt roads to asphalt	<ul style="list-style-type: none"> <li>• Pave County 15th Street from Cocopah Speedway to US 95.</li> </ul>
New access to East Reservation Community	<ul style="list-style-type: none"> <li>• Ballpark Way Road extension between south end of ballpark Way and paved section of County 18th Street, east of Avenue C.</li> </ul>
New access to US 95 from Cocopah Speedway	<ul style="list-style-type: none"> <li>• New access road from County 15th Street to US 95.</li> </ul>
Street lighting	<ul style="list-style-type: none"> <li>• Solar park lighting.</li> <li>• Street lighting rehabilitation.</li> </ul>
Bicycle Lanes - new shoulder construction	<ul style="list-style-type: none"> <li>• Part of the road widening projects includes a shoulder on one side of the street that can be used as a bicycle lane.</li> </ul>
Rehabilitation of striping and signing	<ul style="list-style-type: none"> <li>• East Reservation striping and signing.</li> </ul>
Sidewalks	<ul style="list-style-type: none"> <li>• Part of the road widening projects includes a sidewalk on one side of the street.</li> </ul>
Shared Use Path	<ul style="list-style-type: none"> <li>• Shared use path, between Salt Cedar Street (near the canal bridge) and north end of Salt Cedar Street.</li> </ul>
Transit Improvements	<ul style="list-style-type: none"> <li>• Transit service evening hours.</li> <li>• New bus shelter.</li> <li>• New Sunday transit service.</li> <li>• Improve transit service frequency.</li> <li>• Reconfigure transit service to serve the East Reservation in both directions and extend service to Salt Cedar Street.</li> </ul>
Functional Classification update recommendations	<ul style="list-style-type: none"> <li>• The two new roads recommended in this study, which are the Ballpark Way extension and the new road from County 15th Street to US 95 are recommended to be classified as local collector roads.</li> </ul>
Future studies	<ul style="list-style-type: none"> <li>• Project assessments and environmental clearances for the two new road connections recommended in this study, which are the Ballpark Way extension and the new road from County 15th Street to US 95.</li> </ul>



**Legend**

- US and State Highways
- Cocopah IRR Inventory Roads
- Other Roads
- East Cocopah Reservation
- Intersection Needs
- Recommended Projects

**Transit Projects:**

- Improved signage and amenities
- Construct additional bus shelter
- Improve frequency to one half-hour headway
- Route improvement to provide service in both directions
- Extend transit service hours to evenings and Sundays



**Figure 2 - Recommended Projects**





**Legend**

-  Study Area (East Cocopah Reservation)
-  Recommended Bicycle System
-  Recommended Shared-Use Path



**Figure 3 - Recommended Bicycle System Plan**



**Legend**

-  Study Area (East Cocopah Reservation)
-  Recommended Pedestrian System
-  Recommended Shared-Use Path



**Figure 4 - Pedestrian System Plan**

## Project Information Sheet – East Reservation Streets: Restriping and New Signage

<b>Street Name (s)</b>	Cottonwood Drive, Cottonwood Loop, Salt Cedar Street, Ballpark Way
<b>Project Location</b>	East Reservation residential area.
<b>Project Description</b>	Painting of new striping where paint has faded or disappeared and includes the replacement of old signs and placement of new signs.
<b>Project Justification</b>	Upgrade of signing and striping will improve safety in the community.
<b>Cost Estimate</b>	\$20,000
<b>Potential Funding Sources</b>	Tribal Transportation Program Tribal Highway Safety Grants State or Local Highway Safety Improvement Program IHS Injury Prevention Program
<b>Comments</b>	This is a short-range transportation project in the Tribal Long Range Transportation Plan



School speed limit sign marked with graffiti on Cottonwood Drive. It is an example of signage to be replaced. Also note the lack of edge line striping.

## Project Information Sheet – Cottonwood Drive and Cottonwood Loop: Road Widening

<b>Street Name (s)</b>	Cottonwood Drive and Cottonwood Loop street widening
<b>Project Location</b>	Cottonwood Drive and Cottonwood Loop
<b>Project Description</b>	Widen to include two through lanes, and shoulder and sidewalk on one side of street. Widen cul-de-sacs as part of construction, 0.76 miles.
<b>Project Justification</b>	Widening the road to provide for shoulders and sidewalks will improve safety and provide better facilities for walkers and bicyclists in the community. Wider cul-de-sacs will improve safety and access for emergency service vehicles
<b>Cost Estimate</b>	\$486,000
<b>Potential Funding Sources</b>	State or Local Highway Safety Improvement Program Transportation Alternatives Program Tribal Transportation Program Tribal Highway Safety Grants Indian Community Development Block Grant Program
<b>Comments</b>	This is a long range transportation project in the Tribal Long Range Transportation Plan



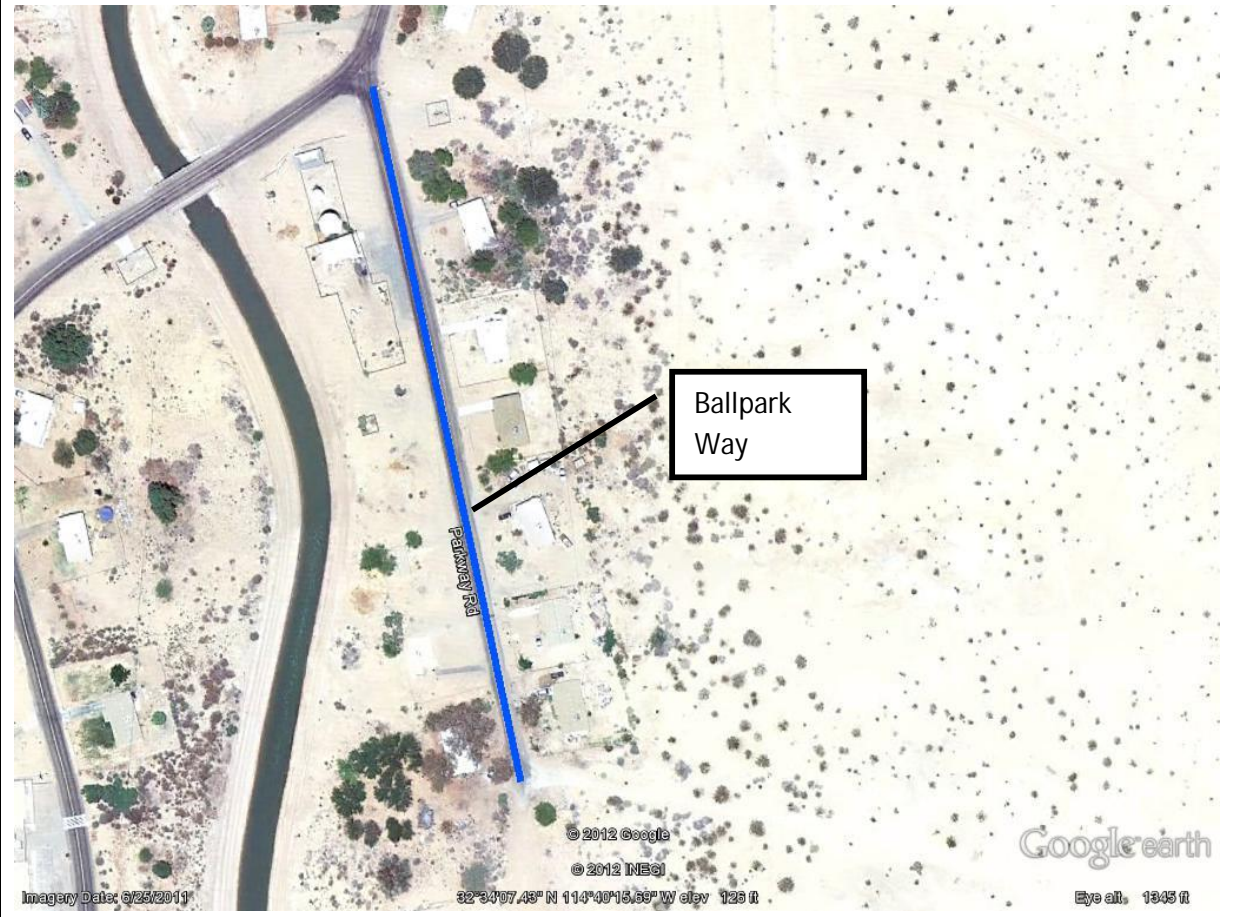
## Project Information Sheet – Salt Cedar Street: Road Widening

<b>Street Name (s)</b>	Salt Cedar Street
<b>Project Location</b>	Salt Cedar Street (entire length)
<b>Project Description</b>	Widen to include two through lanes, and shoulder and sidewalk on one side of street. Widen cul-de-sac as part of construction, 0.72 miles.
<b>Project Justification</b>	Widening the road to provide for shoulders and sidewalks will improve safety and provide better facilities for walkers and bicyclists in the community. Wider cul-de-sacs will improve safety and access for emergency service vehicles
<b>Cost Estimate</b>	\$460,000
<b>Potential Funding Sources</b>	State or Local Highway Safety Improvement Program Transportation Alternatives Program Tribal Transportation Program Tribal Highway Safety Grants Indian Community Development Block Grant Program
<b>Comments</b>	This is a long range transportation project in the Tribal Long Range Transportation Plan.



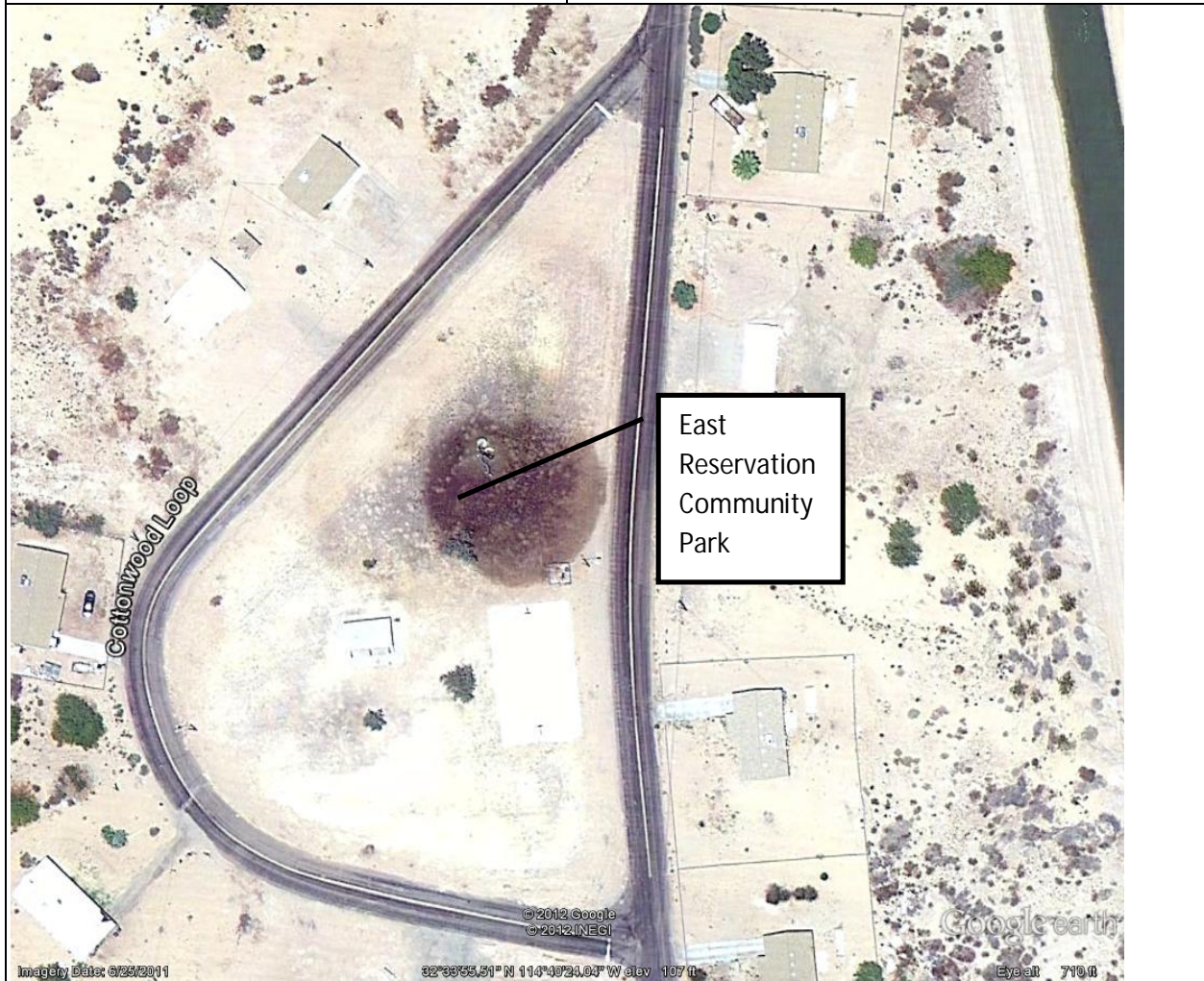
## Project Information Sheet – Ballpark Way: Road Widening

<b>Route Name</b>	Ballpark Way
<b>Project Location</b>	Ballpark Way, Salt Cedar Street to south terminus of road, 0.16 miles
<b>Project Description</b>	Widen to include two through lanes, shoulders and sidewalks.
<b>Project Justification</b>	Widening the road to provide for shoulders and sidewalks will improve safety and provide better facilities for walkers and bicyclists in the community.
<b>Cost Estimate</b>	\$120,000
<b>Potential Funding Sources</b>	State or Local Highway Safety Improvement Program Transportation Alternatives Program Tribal Transportation Program Tribal Highway Safety Grants Indian Community Development Block Grant Program
<b>Comments</b>	This is a long range transportation project in the Tribal Long Range Transportation Plan.



## Project Information Sheet – East Reservation Park Lighting

<b>Street Name (s)</b>	N/A
<b>Project Location</b>	Install pedestrian – level solar street lighting on East Reservation Park
<b>Project Description</b>	Pedestrian level lighting around the park area of the East Reservation
<b>Project Justification</b>	Solar street lighting will improve safety within the park area, and solar street lighting is a cost efficient solution that can be constructed without wiring to a grid. Solar lighting in the park will allow more evening recreation for children.
<b>Cost Estimate</b>	\$12,000
<b>Potential Funding Sources</b>	Transportation Alternatives Program Tribal Transportation Program
<b>Comments</b>	Design to minimize light intrusion.



## Project Information Sheet – East Reservation Lighting Rehabilitation

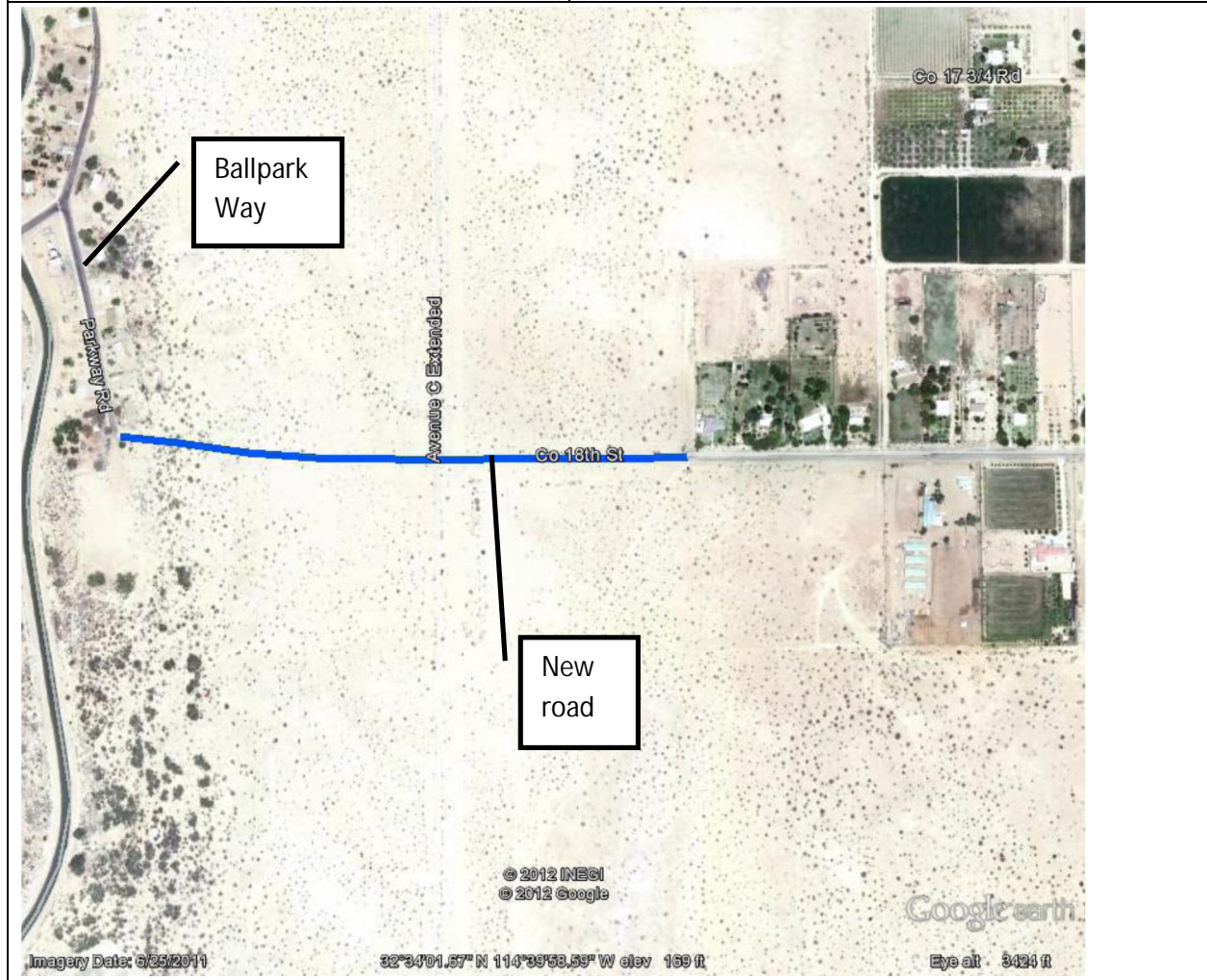
<b>Street Name (s)</b>	Salt Cedar Street, Cottonwood Drive, Cottonwood Loop, Ballpark Way
<b>Project Location</b>	East Reservation streets
<b>Project Description</b>	Upgrade existing street light luminaires with LED bulbs.
<b>Project Justification</b>	New energy efficient luminaires will reduce electricity costs and last longer.
<b>Cost Estimate</b>	\$60,000 (assumes fixture material costs of \$2,500 and labor costs of \$1,500 per luminaire).
<b>Potential Funding Sources</b>	Transportation Alternatives Program Tribal Transportation Program
<b>Comments</b>	Note: the cost of LED lights is frequently changing since it is a new and evolving technology. There are 15 luminaires on the East Reservation.





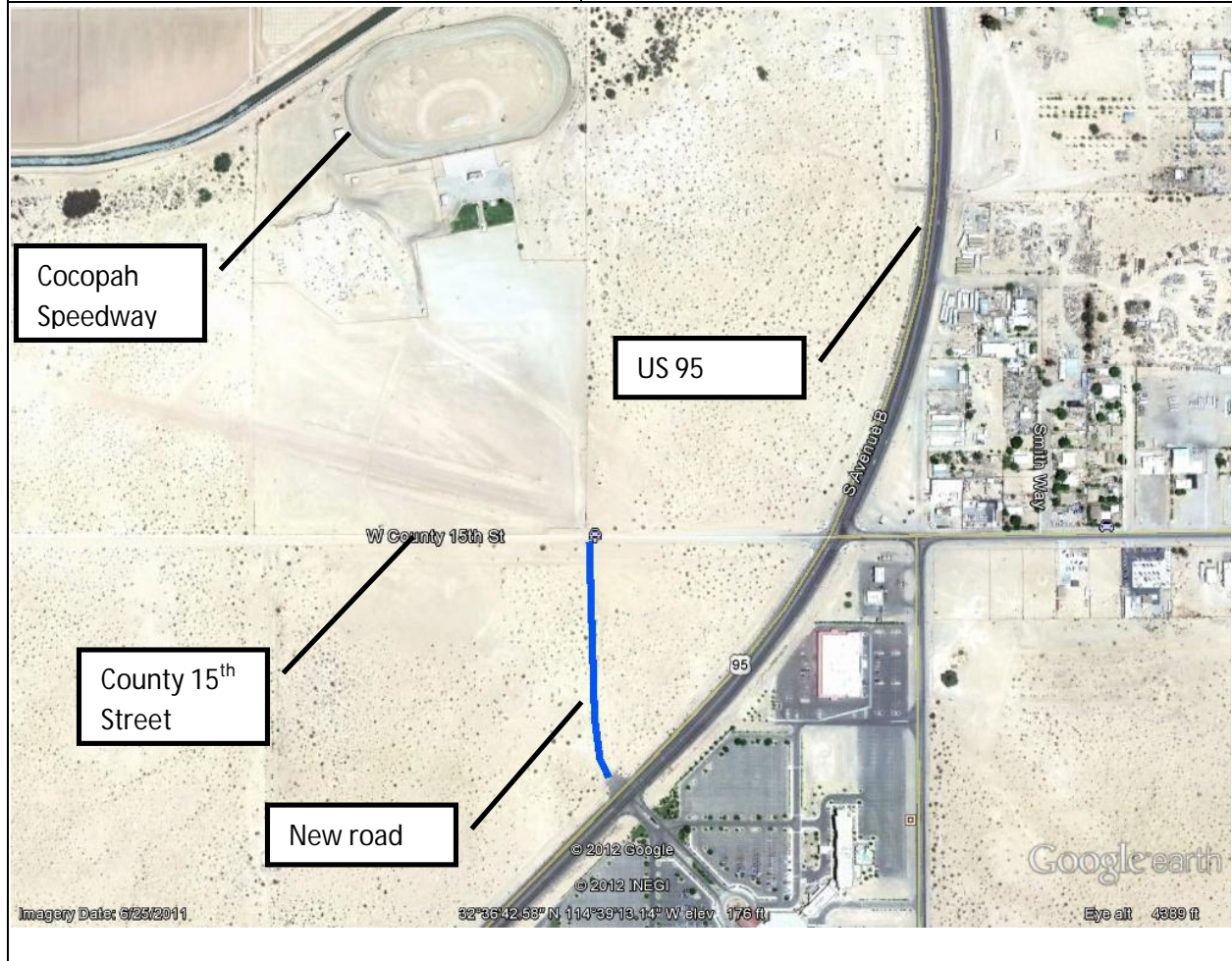
## Project Information Sheet – New Access Road- Ballpark Way Extension

<b>Route Number</b>	New Access Road to East Reservation – Ballpark Way Extension
<b>Project Location</b>	Ballpark Way to paved section of County 18 <sup>th</sup> Street, 0.38 miles
<b>Project Description</b>	New two lane road with curb and gutter. Right-of-way designed to allow for future sidewalk.
<b>Project Justification</b>	This project will provide a new access into the East Reservation residential area, which currently has one-way in and one way out.
<b>Cost Estimate</b>	\$490,000
<b>Potential Funding Sources</b>	Tribal Transportation Program
<b>Comments</b>	This project will require coordination with the Arizona State Land Department, BLM, and Yuma County.



## Project Information Sheet – New Access Road, County 15<sup>th</sup> Street to US 95

<b>Route Number</b>	New Road to East Reservation – County 15 <sup>th</sup> Street to US 95
<b>Project Location</b>	New road between County 15 <sup>th</sup> Street and US 95, 0.18 miles
<b>Project Description</b>	This project would construct a new two-lane road with shoulders
<b>Project Justification</b>	This project will provide a new access road to serve commercial land uses within the East Reservation and provide access to encourage new development.
<b>Cost Estimate</b>	\$230,000
<b>Potential Funding Sources</b>	Tribal Transportation Program Congestion Mitigation and Air Quality Improvement Program
<b>Comments</b>	This road connection will extend from County 15 <sup>th</sup> Street to the traffic signal at the US 95/Cocopah Casino and Resort intersection. A traffic signal modification is required.



## Project Information Sheet - County 15<sup>th</sup> Street Paving, Cocopah Speedway to US 95

<b>Route Name</b>	County 15 <sup>th</sup> Street
<b>Project Location</b>	County 15 <sup>th</sup> Street, west of US 95
<b>Project Description</b>	This project would pave County 15 <sup>th</sup> Street between the Cocopah Speedway entrance and US 95, 0.18 mi.
<b>Project Justification</b>	This project will reduce dust in the area and provide better access on County 15 <sup>th</sup> Street.
<b>Cost Estimate</b>	\$210,000
<b>Potential Funding Sources</b>	Tribal Transportation Program Congestion Mitigation and Air Quality Improvement Program (CMAQ)
<b>Comments</b>	County 15 <sup>th</sup> Street is a county road. This project would likely be a joint project between the Cocopah Tribe, and Yuma County.



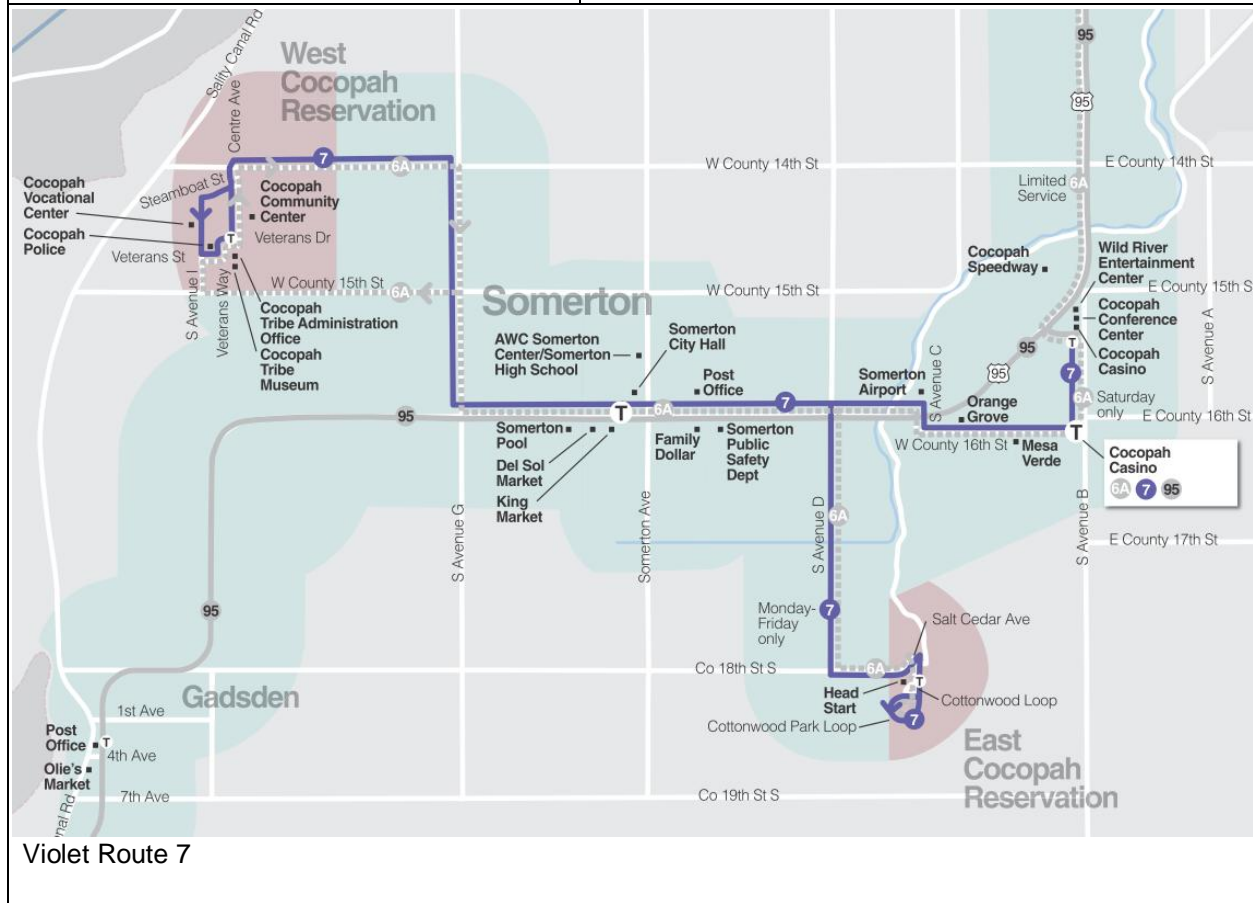
## Project Information Sheet - County 15<sup>th</sup> Street / US 95 Intersection Improvement

<b>Route Name</b>	County 15 <sup>th</sup> Street / US 95 Intersection
<b>Project Location</b>	County 15 <sup>th</sup> Street/ US 95 Intersection
<b>Project Description</b>	This project will provide a left turn lane on the EB approach and left turn phase when warranted.
<b>Project Justification</b>	The improvements will reduce delays, especially during special events.
<b>Cost Estimate</b>	\$250,000
<b>Potential Funding Sources</b>	Tribal Transportation Program
<b>Comments</b>	County 15 <sup>th</sup> Street is a county road. This project would likely be a joint project between the Cocopah Tribe, and Yuma County.



## Project Information Sheet – Evening Service Hours on Route 7

<b>Project Name</b>	Extend Transit Service Hours on Violet Route 7
<b>Project Location</b>	East Reservation
<b>Project Description</b>	Extend Violet Route 7 transit service hours from 6 p.m. to 10 p.m. weekdays
<b>Project Justification</b>	This project was requested by East Reservation residents to provide more flexibility for workers to take the bus.
<b>Cost Estimate</b>	\$69,985.44/year <sup>1</sup> or \$375,295 over 5–year period.
<b>Potential Funding Sources</b>	Section 5311– Rural Public Transportation Program Tribal Transportation Program
<b>Comments</b>	Requested at public meeting. An option to initially build demand is an alternate service such as dial-a ride.



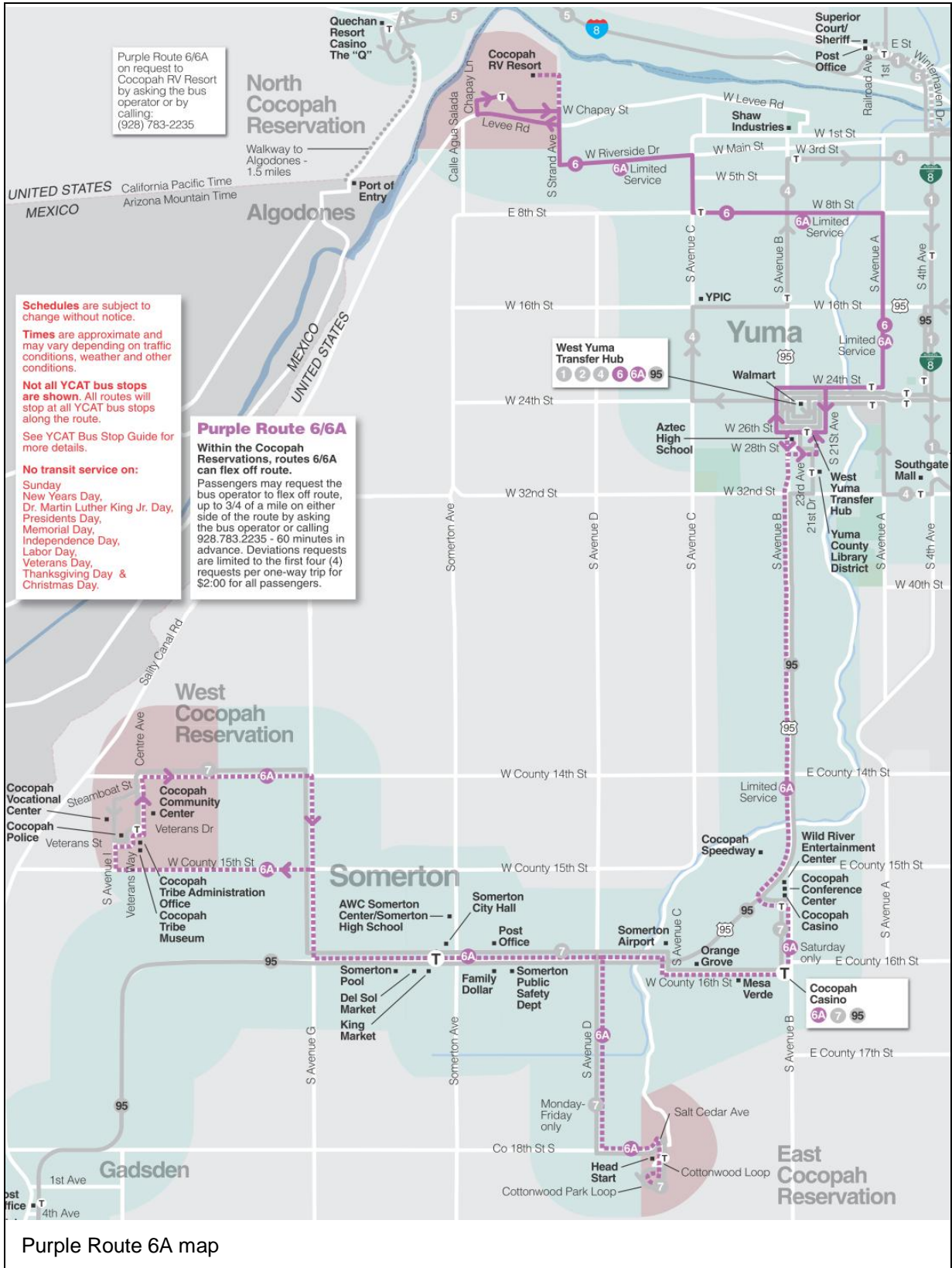
<sup>1</sup> Cost estimate based on \$69.43 cost/hour\* 4 hours/day\*252 days/year. This cost escalates 3.5% per fiscal year.

## Project Information Sheet – Provide Sunday Transit Service on Route 6A

<b>Project Name</b>	Provide Sunday Transit Service Hours on Purple Route 6A
<b>Project Location</b>	East Reservation
<b>Project Description</b>	Provide Sunday Transit Service, similar to existing Saturday service (2 hour headways, between 10 a.m. and 4 p.m.)
<b>Project Justification</b>	This project was requested by East Reservation residents.
<b>Cost Estimate</b>	\$24,839.28 / year <sup>2</sup> or \$ 133,200 over 5-year period
<b>Potential Funding Sources</b>	Section 5311(c) – Rural Public Transportation on Indian Reservation Program Tribal Transportation Program
<b>Comments</b>	See next page for Purple Route 6A map

---

<sup>2</sup> Cost estimate based on \$69.43/hour \*6.88 hours per day\*52 days /year. This cost escalates 3.5% per fiscal year.



Purple Route 6A map

## Project Information Sheet – Construct New Bus Shelter on East Reservation

<b>Project Name</b>	New bus shelter
<b>Project Location</b>	Cottonwood Loop at Cottonwood Drive
<b>Project Description</b>	Construct one new bus shelter on East Reservation
<b>Project Justification</b>	A bus shelter will encourage transit ridership by making it more comfortable to wait for the bus.
<b>Cost Estimate</b>	\$20,000
<b>Potential Funding Sources</b>	Section 5311(c) – Rural Public Transportation on Indian Reservation Program
<b>Comments</b>	





## Project Information Sheet – Redesign Transit Routes to Serve East Reservation in Both Directions

<b>Project Name</b>	Redesign transit routes 7 and 6A to serve East Reservation in both directions
<b>Project Location</b>	East Reservation
<b>Project Description</b>	Redesign transit routes to serve East Reservation in both directions and extend route to north end of Salt Cedar Street.
<b>Project Justification</b>	Having the bus run in both directions will make it more attractive to potential transit riders because the trip lengths will be shorter.
<b>Cost Estimate</b>	\$249,754 – first year cost <sup>3</sup> . Increases by 3.5% per year thereafter.
<b>Potential Funding Sources</b>	Section 5311(c) – Rural Public Transportation on Indian Reservation Program Tribal Transportation Program
<b>Comments</b>	Ridership would need to increase to support improved service.



Existing transit stop at Cottonwood Loop and Cottonwood Drive Intersection

<sup>3</sup> Cost estimate based on :

1. Increase headways from 60 minutes to 75 minutes –  $0.25 * 252 * 10 * \$69.43 = \$43,740.90$  (weekday) +  $0.25 * 52 * 6.88 * \$69.43 = \$6,209.82$  (Saturday) (escalates 3.5% each fiscal year).
2. Add second bus to keep 60 minute headway –  $10 * 252 * \$69.43 = \$174,963.60$  (weekday) and  $\$69.43 * 6.88 * 52 = \$24,839.28$  (Saturday) (escalates 3.5% each fiscal year).

## Project Information Sheet – Increase Transit Service Frequency

<b>Project Name</b>	Improve transit frequency
<b>Project Location</b>	East Reservation
<b>Project Description</b>	Improve transit frequency to half hour service
<b>Project Justification</b>	More frequent bus service will make it easier and more attractive to using bus service.
<b>Cost Estimate</b>	\$199,803 - first year cost <sup>4</sup> . Cost increases 3.5 % per year thereafter.
<b>Potential Funding Sources</b>	Section 5311(c) – Rural Public Transportation on Indian Reservation Program Tribal Transportation Program
<b>Comments</b>	Ridership would need to increase to support improved service.



YCAT bus at Cottonwood Loop

<sup>4</sup> Cost for second bus on route to increase frequency -  $10 * 252 * \$69.43 = \$174,963.60$  (weekday) and  $\$69.43 * 6.88 * 52 = \$24,839.28$  (Saturday) =  $\$199,802.88$ .

## Project Information Sheet – Shared Use Path

<b>Project Name</b>	Shared use path along East Main Canal
<b>Project Location</b>	East Reservation
<b>Project Description</b>	Eight - foot wide shared use path, 0.43 miles
<b>Project Justification</b>	This shared use path, when connected to a future planned sidewalks on Salt Cedar Street, will create a loop for walkers and bicyclists.
<b>Cost Estimate</b>	\$150,000
<b>Potential Funding Sources</b>	Transportation Alternatives Program
<b>Comments</b>	Shared use path will need to be developed using Yuma County Water Users Association Guidelines. Coordination with the Yuma County Water Users' Association is important for this project.



View of East Main Canal and existing access, looking north from Salt Cedar Street

## ***Prioritizing Roadway Improvements***

The recommended transportation projects were prioritized into the following categories:

Short-range projects – Short range projects are those identified for implementation within five years. Others could reasonably be funded through existing sources or would need committed funds in order to be built. Implementation of these short range projects would greatly improve signing and striping on the East Reservation, lighting, and multimodal options for residents and visitors. These projects are shown in Table 2. In Table 3, these projects are presented in the standard format for inclusion in the Tribal Transportation Improvement Program (TIP).

Mid-range projects – Mid-range projects are those that may be implemented within the next six to ten years. These projects have a reasonable expectation of funding in the time period from 2018-2022, and address transit needs, safety, paving concerns, and the need for an additional route to serve the northern area of the East Cocopah Reservation. These projects would need committed funds in order to be built. These projects are shown in Table 4.

Long-term (2021 to 2030 and beyond) projects – Long-range projects are those that are recommended for implementation in the period from 2022 to 2032. Some of these projects are scheduled to correspond with projects already programmed in the Long Range Transportation Plan, such as East Reservation road widening projects, and the Ballpark Way Road extension. Transit long range projects include improving transit service frequency to one-half hour headways and providing transit service in both directions. These projects are shown in Table 5.

It should be noted that in the comment sections, it is noted whether the project is part of the Tribal Transportation Improvement Program (short range program) or the Long Range Transportation Plan (contains long, mid- and short range projects).

**Table 2 – Short-Term (2012-2015) Projects**

<b>Project Name</b>	<b>Project Limits</b>	<b>Project Description</b>	<b>Length (miles)</b>	<b>Estimated Cost<sup>1</sup></b>	<b>Comments</b>
Street lighting Rehabilitation	East Reservation streets	Install LED lighting and rehabilitate as needed	N/A	\$60,000	Not currently in the Tribal Transportation Improvement Plan (TTIP).
Solar park Lighting	East Reservation Community park	Install solar lighting	N/A	\$12,000	Not currently in the TTIP.
Transit service evening hours	N/A	Extend transit service to 10 p.m.	N/A	\$70,000 – first year of operation, escalating 3.5% per year thereafter.	YCIPTA project in conjunction with Cocopah Tribe. For 2013-2014, the Cocopah Tribe will provide upfront contribution for transit service to the Cocopah Reservation and will be reimbursed through a Federal Transit Administration Grant. An option may be to implement a dial-a ride service initially in order to build ridership.
East Reservation restriping and resigning	East Reservation streets	Replace signage and restripe streets	N/A	\$20,000	Listed as a short-range project in the TTIP.
New bus shelter/stop on East Reservation	Cottonwood Loop transit stop	Construct bus shelter/stop at Cottonwood Loop bus Stop	N/A	\$20,000	YCIPTA project. Currently the bus shelter is on order and is planned to be installed by mid-2013.

<sup>1</sup>These are planning level design cost estimates, and are based on construction prices in 2012. These costs are projected to increase an estimated 3 % per year to account for future costs. It should be noted that fluctuations on the market price for asphalt and concrete can further affect these estimates.

**Table 3 - Summary of Projects Recommended in the Five Year Time Frame**

Road Name/Route Number	Beginning/ending Point of Project	Project Mileage	Existing Roadway / Site Conditions	Functional Classification	Proposed Improvement	Existing and/or Proposed Development served by road	Benefit derived from the project	Existing average daily traffic, vehicles per day (vpd)	Projected average daily traffic
East Reservation streets	Street lighting fixtures Ballpark Way, Cottonwood Drive, Cottonwood Loop, Salt Cedar Street	N/A	Existing two lane roads	All streets are community roads	Street lighting Rehabilitation	East Reservation	Improved safety	<ul style="list-style-type: none"> <li>• Ballpark Way -225 vpd</li> <li>• Cottonwood Drive, north of Salt Cedar Street -118 vpd</li> <li>• Cottonwood Drive, south of Salt Cedar Street – 365 vpd</li> <li>• Salt Cedar Street, north of Ballpark Way- 362 vpd</li> <li>• Salt Cedar Street, between Cottonwood Drive and Ballpark Way-348 vpd</li> <li>• Salt Cedar Street, west of Cottonwood Drive- 440 vpd</li> </ul>	<ul style="list-style-type: none"> <li>• Ballpark Way -321 vpd</li> <li>• Cottonwood Drive, north of Salt Cedar Street -169 vpd</li> <li>• Cottonwood Drive, south of Salt Cedar Street – 521 vpd</li> <li>• Salt Cedar Street, north of Ballpark Way- 517 vpd</li> <li>• Salt Cedar Street, between Cottonwood Drive and Ballpark Way-497 vpd</li> <li>• Salt Cedar Street, west of Cottonwood Drive- 628 vpd</li> </ul>
East Reservation Community Park	N/A	N/A	N/A	N/A	Solar park Lighting	East Reservation	Improved safety	N/A	N/A
YCAT Transit Violet Route	N/A	N/A	N/A	N/A	Transit service evening hours	East Reservation	Improved travel options	N/A	N/A
East Reservation streets	Ballpark Way, Cottonwood Drive, Cottonwood Loop, Salt Cedar Street	1.64 miles	Existing two lane roads	All streets are community roads	Replace signage and restripe streets	East Reservation	Improved safety	<ul style="list-style-type: none"> <li>• Ballpark Way -225 vpd</li> <li>• Cottonwood Drive, north of Salt Cedar Street -118 vpd</li> <li>• Cottonwood Drive, south of Salt Cedar Street – 365 vpd</li> <li>• Salt Cedar Street, north of Ballpark Way- 362 vpd</li> <li>• Salt Cedar Street, between Cottonwood Drive and Ballpark Way-348 vpd</li> <li>• Salt Cedar Street, west of Cottonwood Drive- 440 vpd</li> </ul>	<ul style="list-style-type: none"> <li>• Ballpark Way -321 vpd</li> <li>• Cottonwood Drive, north of Salt Cedar Street -169 vpd</li> <li>• Cottonwood Drive, south of Salt Cedar Street – 521 vpd</li> <li>• Salt Cedar Street, north of Ballpark Way- 517 vpd</li> <li>• Salt Cedar Street, between Cottonwood Drive and Ballpark Way-497 vpd</li> <li>• Salt Cedar Street, west of Cottonwood Drive- 628 vpd</li> </ul>

**Table 3, Continued - Summary of Projects Recommended in the Five Year Time Frame**

Road Name/Route Number	Beginning/ending Point of Project	Project Mileage	Existing Roadway / Site Conditions	Functional Classification	Proposed Improvement	Existing and/or Proposed Development served by road	Benefit derived from the project	Existing average daily traffic, vehicles per day (vpd)	Projected average daily traffic
Bus shelter on Cottonwood Loop Road	N/A	N/A	Shelter to be placed at existing bus stop	Cottonwood Loop is a community road	New bus shelter/stop on East Reservation	East Reservation	Shelter for riders and a location to post schedule information	N/A	N/A

**Table 4 - Mid-Range Projects**

Project Name	Project Limits	Project Description	Length (miles)	Estimated Cost <sup>1</sup>	Comments
New north-south road: County 15 <sup>th</sup> Street to US 95	County 15 <sup>th</sup> Street to US 95	Two lane paved road with curb and gutter	0.18	\$230,000	Not included in LRTP.
County 15 <sup>th</sup> Street paving	Cocopah Speedway to US 95	Pave existing dirt road	0.18	\$210,000	Joint project with Yuma County.
County 15 <sup>th</sup> Street/US 95 Intersection improvements	County 15th Street/US 95 Intersection	Turn lane improvements on west leg of intersection and signal modifications.	N/A	\$250,000	Joint project with Yuma County.
Provide Sunday Transit Service	N/A	Provide Sunday Transit Service on Purple Route 6A (assume additional 352 vehicle hours/year)	N/A	\$25,000 – first year, escalating 3.5% per year thereafter.	YCIPTA project in conjunction with Cocopah Tribe. For 2013-2014, the Cocopah Tribe will provide upfront contribution for transit service to the Cocopah Reservation and will be reimbursed through a Federal Transit Administration Grant. Providing dial-a ride service initially is an option to build ridership.
Shared use path	Salt Cedar Street (near canal bridge) to north end of Salt Cedar Street	Construct 8-foot wide shared use path	0.43 miles	\$150,000	Coordination needed with Yuma County Water Users' Association.

<sup>1</sup> These are planning level design cost estimates, and are based on construction prices in 2012. These costs are projected to increase an estimated 3 % per year to account for future costs. It should be noted that fluctuations on the market price for asphalt and concrete can further affect these estimates.



**Table 5 - Long Range Projects**

Project Name	Project Limits	Project Description	Length (miles)	Estimated Cost <sup>1</sup>	Comments
Cottonwood Drive and Cottonwood Loop: Road widening	Cottonwood Drive and Cottonwood Loop	Widen to include shoulder and sidewalk on one side of street	1.36	\$486,000	Listed as a long-range project in the LRTP.
Salt Cedar Street: Road widening	Salt Cedar Street	Widen to include shoulder and sidewalk on one side of street	0.72	\$460,000	Listed as a long-range project in the LRTP.
Ballpark Way: Road widening	Ballpark Way	Widen to include shoulder and sidewalk on one side of street	0.16	\$120,000	Listed as a long-range project in the LRTP.
New road: Ballpark Way Extension	Ballpark Way to paved section of County 18 <sup>th</sup> Street, east of Avenue C	Two lane paved road with curb and gutter	0.38	\$490,000	A feasibility study is recommended as a long-range project in the LRTP.
Improve transit service frequency	East Reservation	Improve transit service frequency from one hour to one half hour	N/A	\$200,000 – first year operating cost, increases 3.5 % per year thereafter	YCIPTA project in conjunction with Cocopah Tribe.
Reconfigure transit route to provide service to East Reservation	N/A	Reconfigure transit route to provide service to East Reservation in eastbound and westbound direction and extend service to Salt Cedar Street	N/A	\$250,000 – first year operating cost, increases 3.5 % per year thereafter	YCIPTA project in conjunction with Cocopah Tribe.

<sup>1</sup>These are planning level design cost estimates, and are based on construction prices in 2012. These costs are projected to increase an estimated 3 % per year to account for future costs. It should be noted that fluctuations on the market price for asphalt and concrete can further affect these estimates.

## ***Funding Sources***

Potential sources of funding for the transportation projects were identified and are detailed in the Final Report and Working Paper 2, including the following programs:

### Roadway Project Funding Sources

Program	Administering Agency
Tribal Transportation Program	BIA-DOT Western Regional Office
Tribal High Priority Projects Program	BIA-DOT Western Regional Office
Tribal Transportation Planning	BIA-DOT Western Regional Office
National Bridge and Tunnel Inventory	BIA-DOT Western Regional Office
Surface Transportation Program	ADOT, YMPO
Planning Assistance for Rural Areas Program	ADOT
Indian Community Development Block Grant Program	US Dept. of Housing and Urban Development

### Safety Projects Funding Sources

Program	Administering Agency
Alcohol Impaired Driving Program	National Highway Traffic Safety Administration (NHTSA) and Governor's Office of Highway Safety
State or Local Highway Safety Improvement Program	ADOT and YMPO
Tribal Safety Program	Bureau of Indian Affairs
State and Community Highway Safety Grant Program	National Highway Traffic Safety Administration (NHTSA) and Governor's Office of Highway Safety
Injury Prevention Program	Indian Health Service
Road Safety Assessment	ADOT Traffic Safety Section

### Pedestrian, Bicycle and Equestrian Projects Funding Sources

Program	Administering Agency
Transportation Alternatives Program	ADOT and YMPO
Southwest Civilian Conservation Corps	Southwest Civilian Corps

### Transit Funding Sources

Program	Administering Agency
Section 5310, Enhanced Mobility of Seniors and Individuals with Disabilities Transit Program	ADOT
Section 5311(c), Public Transportation on Indian Reservations Program (Tribal Transit Program)	ADOT
Rural Transit Assistance Program	ADOT
Section 5304 – Statewide Transportation Planning Program	ADOT