

### Yuma County Intergovernmental Public Transportation Authority

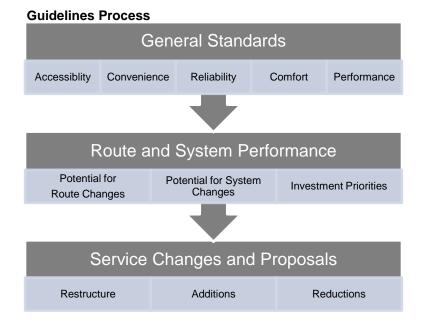
FY 2012-2013 Transit System Performance Report

February 2014

#### Introduction

Yuma County Intergovernmental Public Transportation Authority (YCIPTA) has developed Transit Service Evaluation Guidelines; to facilitate the use of limited resources; determine location of demand, planning, and implementation and management of Yuma County Area Transit (YCAT) service within the area. Service guidelines help the agency balance between productivity, social equity, geographic coverage, and investment needs. In most cases, these's flexible guidelines help define minimum thresholds, which should be met. Performance principals discussed and used in this report will examine the system at the route level and their interrelation for fiscal year (FY) 2012-2013 compared to FY 2011-2012 as well as year-to-date (November 2013) data. This report is organized to present the system composition and findings pertaining to its evaluation.

- Section 1 Route Profiles
- Section 2 Service Area
- Section 3 System Performance and Productivity
- Section 4 Convenience
- Section 5 Customer and Public Satisfaction
- Section 6 Reliability
- Section 7 Conclusion and Recommendations



## While it is never a goal to take away anyone's transportation, YCIPTA may reduce service and reinvest the hours to address demand needs on other routes or financial constraints. Service that operates below the productivity thresholds is typically considered for changes. However, not all routes that operate below productivity thresholds have the same priority for service changes. We describe routes as having high potential for major changes when they operate below the productivity threshold and are largely duplicative of other routes.

#### Section 1 – Route Profiles

Since YCIPTA's inception, routes are evaluated after 90 days and changes are made when necessary. Pronounced changes occurred in January 2012 when YCIPTA became managing agency of YCAT. Following the major system change, two additional routes were added (Turquoise 10 and Brown 3) as well as NightCAT, WelltonCAT, and segments of various routes were subtracted, modified, or added. On the next pages, the following figures show service changes compared to January 2012. Tables to this document contain a detailed narrative of route changes and performance.

YCAT provides a family of services that are designed to meet a wide array of travel needs. The four classes of the service are:

- 1. Fixed provides service on a recurring, set schedule along a particular route path with pickup and drop-off of passengers at specific locations.
  - Urban (Route 1, 2/2A, 4, 10, and 95)
  - Rural (Route 5, 8A, and 9)
- 2. Flex allows for deviations from a particular route path, to provide direct pickup and drop-off of passengers, who live in the designated geographic area of the basic route.
  - Urban (Route 3 and 6)
  - Rural (Route 6A, 7, and 8)
- 3. Special Service (NightCAT, HolidayCAT, and Shuttle Service) generally provides service for a target group of passengers, with a unique transportation need.
- 4. Demand Response (YCAT OnCall and WelltonCAT) passenger trips are generated by calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick the passengers up and transport them to their destinations. This service is primarily for ADA eligible customers.
- 5. Vanpool an arrangement in which a group of at least 7 passengers, with a volunteer driver, share the use and cost of a van to travel between prearranged destinations and employment location.

YCAT OnCall	Span of	Service	Service Changes
ADA Service Monday-Saturday	Post January 2013	Post October 2013	
Provides door-to-door service, to individuals with a disability, that prevents them from using fixed route bus service. Service is provided within ¾ of a mile, from a non commuter fixed bus route.	M-F 5:50 AM- 7:30 PM Sat 9:15 AM- 6:30 PM	M-F 5:50 AM- 7:30 PM Sat 9:15 AM- 6:30 PM	(Post January 2012) Fully replacing Greater Yuma Area Dial-A-Ride, YCAT OnCall is available to ADA customers only. (Post January 2013) With the implementation of Brown Route 3, ADA service is no longer available in the Fortuna Foothills.

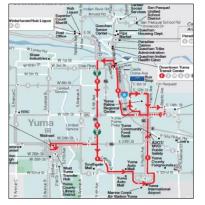
WeltonCAT	Span of Service		
Friday Only	Post January 2013	Post October 2013	
Provides deviated service throughout Wellton and Tacna with limited service to Fortuna Foothills along the North and South Frontage Road between Avenue 8E and Foothills Boulevard, including Walmart.	10:00 AM- 2:00 PM	3:00 PM- 7:00 PM	

NightCAT	S	Span of Servic	e	
Colleges In Session	Post January 2012	Post January 2013	Post October 2013	Service Changes
Pickup of passengers at select locations and dropped off of passengers at any YCAT stop.	8:10 PM - 9:10 PM 10:10 PM - 11:10 PM	8:15 PM - 9:15 PM 10:15 PM - 11:15 PM	7:15 PM- 8:15 PM 8:45 PM- 9:45 PM 10:15 PM- 11:15 PM	(Post January 2012) The only pickup location is AWC/NAU/UA. (Post October 2013) Several pickup locations were added: Downtown Yuma Transit Center, Airport, Yuma Regional Medical Center, West Yuma Transfer Hub, Paradise/ Quechan Casino, San Luis, and Somerton. (Pickup times vary) One additional trip was added as well.

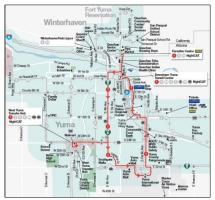
Red 1- Counter Clockwise Loop	Span of Service			Service Changes
60 Minute Service Monday-Saturday	Post January 2012	Post January 2013	Post October 2013	Gervice Onlanges
Via 4 <sup>th</sup> Avenue and South Pacific Avenue, along East 32 <sup>nd</sup> Street.	M-F 6:30 AM- 7:30 PM Sat 9:30 AM- 5:30 PM	M-F 6:30 AM- 6:25 PM Sat 8:30 AM- 5:25 PM	M-F 6:30 AM- 6:25 PM Sat 9:30 AM- 5:25 PM	(Post January 2013) Service to Winterhaven and Paradise Casino discontinued. Provided service to YCAT office, on-request. (Post October 2013) Service to Paradise Casino restored service to YCAT office discontinued. Route 1 returns to transit center along Castle Dome Avenue.



#### Post January 2013



#### Post October 2013



Orange 2/2A-	Span of Service			
Clockwise Loop 60 Minute Service Monday-Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via 4 <sup>th</sup> Avenue or East County 10 <sup>th</sup> Street, returning along East 32 <sup>nd</sup> Street and 24 <sup>th</sup> .	M-TH 6:30 AM -7:30 PM (F 6:30 PM) Sat 9:30 AM- 5:30 PM	M-F 6:30 AM- 7:10 PM Sat 9:30 AM- 4:25 PM	M-F 6:30 AM- 7:15 PM Sat 10:30 AM- 4:15 PM	(Post January 2013) Service to Fortuna Rd and 35 <sup>th</sup> PI discontinued. Brown 3 now provides service to these areas. Returns to Downtown Yuma Transit Center, along E 32 <sup>nd</sup> St and 24 <sup>th</sup> St. (Post October 2013) Provides service to YCAT office (on-request), returns to transit center along Redondo Center Drive.

#### Post January 2013





Brown 3 - Flex	Span of Service			
60 Minute Service Monday-Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Connects Mesa del Sol and Fortuna Foothills with the AWC/NAU/UA as a deviated service.	Service Provided by Orange 2	M-F 5:52 AM- 4:51 PM On Request 4:52-5:51 PM Sat 9:52 AM- 3:51 PM On Request 3:52-4:51 PM	M-F 5:52 AM- 4:51 PM On Request 4:52-5:51 PM Sat 10:52 AM-2:51 PM On Request 2:52-3:51 PM	(Post October 2013) Route 3 starts and ends an hour later on Saturday.

#### Post October 2013 (Orange 2/2A)



Green 4	S	Span of Servic		
Clockwise Loop 60 Minute Service Monday-Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via South Pacific and South Avenue B, along East 32 <sup>nd</sup> Street.	M-F 6:30 AM- 7:30 PM Sat 9:30 AM- 5:30 PM	M-F 6:30 AM- 7:25 PM Sat 9:30 AM- 5:25 PM	M-F 6:30 AM- 7:26 PM Sat 9:30 AM- 4:26 PM	(Post January 2013) Service to Marine Corps Air Station entrance discontinued.

#### Post January 2012



#### Post January 2013

Post January 2013



Blue 5 - Counter	S	pan of Servic		
Clockwise Loop 60 Minute Service Monday-Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via Quechan/Fort Yuma Reservation, Winterhaven, connecting Paradise/Quechan Casinos.	M-F 7:10 AM- 7:00 PM Sat 9:10 AM- 6:00 PM	M-F 7:15 AM- 7:10 PM Sat 8:15 AM- 4:10 PM	M-F 7:15 AM- 7:12 PM Sat 9:15 AM- 5:12 PM	(Post January 2013) Provides service past Indian Rock Road, on-request and Sapphire/Diamond Lane discontinued. (Post October 2013) Service added to Algodones port of entry. Service along Indian Rock Road discontinued.



#### Post January 2013



#### Post October 2013

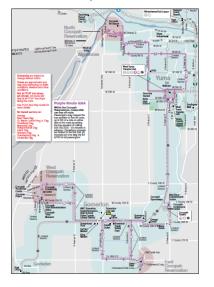


Purple 6	S	Span of Servic	Comico Changes	
60 Minute Service Monday-Friday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via South Avenue A and S Avenue B, providing service to North Cocopah Reservation Cocopah.	M-F 8:15 AM- 5:13 PM	M-F 8:15 AM- 5:13 PM	4 AM/PM Trips	(Post January 2013) Service to East/West Cocopah Reservation discontinued after August. Route 6A was added to connect North/East /West Cocopah Reservation and casino. (Saturday and 1 AM/PM Trip Only) Route 6A also replaced route 7 on Saturday.

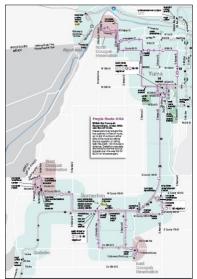
Purple 6A	S	Span of Servic	e	
1 AM/PM Trip Weekday - 2 Hour Service Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via South Avenue A and S Avenue B, providing service to North/West/East Cocopah Reservation.	1 AM/PM Trip Weekday 10: 00 AM- 5:00 PM Saturday	1 AM/PM Trip Weekday 10: 00 AM- 5:00 PM Saturday	10: 00 AM- 5:00 PM Saturday	(Post January 2013) Returns to West Yuma Transfer Hub via S Ave C instead of S Ave A. (Post October 2013) Enters and leaves West Cocopah Reservation along West County 15 <sup>th</sup> Street. Enters casino on South Avenue B and leaves on Highway 95.

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#### Post January 2013

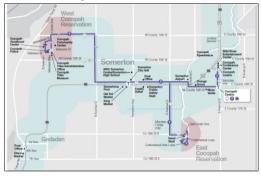


Post October 2013

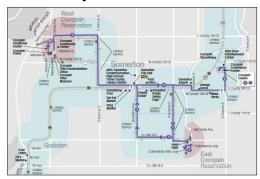


Violet 7	S	Span of Service	e	
60 Minute Service Monday-Friday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via Somerton and Cocopah Casino, connecting West/East Cocopah Reservation along West County 15 <sup>th</sup> Street and County 18 <sup>th</sup> Street.	M-F 7:00 AM- 6:30 PM	M-F 7:38 AM- 6:38 PM	M-F 7:38 AM- 6:38 PM	(Post January 2013) Service added along Somerton Avenue. (Post October 2013) Route 7 leaves Cocopah Casino along Highway 95 and returns along South Avenue B. Enters and leaves West Cocopah Reservation along West County 15 <sup>th</sup> Street.

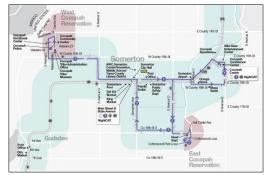
#### Post January 2012



#### Post January 2013



#### Post October 2013

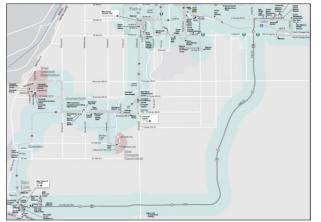


Gold 8/8A	Span of Service			
1 AM/PM Trip Monday-Friday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via Interstate 8, South Frontage Road, and William Street, connecting Wellton, Yuma, and AWC/NAU/UA.	1 to Yuma AM 1 to Wellton PM	1 to Yuma AM 1 to Wellton PM	1 to Yuma AM 1 to Wellton PM	(Post January 2013) Service on Saturday discontinued. (Post October 2013) Route Gold 8A was added to connect Mesa del Sol and Fortuna Foothills with Yuma West Transfer Hub, East 32 <sup>nd</sup> Street and South Avenue A.

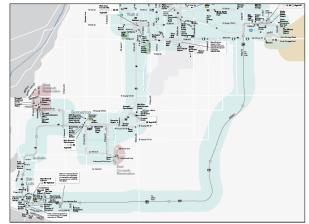


Sliver 9 3 AM/PM Trips	Span of Service			
2 PM Trips Monday-Thursday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via State Route 195, connecting San Luis with AWC/NAU/UA as well as West/East Cocopah (PM Only).	3 to Colleges AM/PM 2 to San Luis AM/PM	3 to Colleges AM 2 to Colleges PM 3 to San Luis PM	3 to Colleges AM 3 to San Luis PM	(Post January 2013) Service on Saturday discontinued. Service added to Avenue E/F and County 24 Street (on-request). (Post October 2013) Enters and leaves West Cocopah Reservation along West County 15 <sup>th</sup> Street.

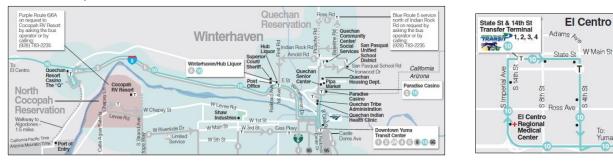
#### Post January 2012



#### Post January 2013



Turquoise 10	5	Span of Servic	е	
2 AM/PM Trips Monday /Wednesday /Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes
Via Interstate 8 and South Imperial Avenue, and Winterhaven, connecting Yuma and El Centro.	Service Provided by Imperial Valley Transit	1 to El Centro AM 1 to Yuma AM 1 to El Centro PM 1 to Yuma PM	1 to El Centro AM 1 to Yuma AM 1 to El Centro PM 1 to Yuma PM	(Post October 2013) Service was added to the Imperial Valley Mall (on-request) and Yuma Palms Regional Center. Route 10 now boards at the Imperial Valley Transit center in El Centro.



#### Post October 2013



Yellow 95	S	Span of Servic	е		
45 Minute Service Monday-Saturday	Post January 2012	Post January 2013	Post October 2013	Service Changes	
Via South Pacific Avenue and South 1 <sup>st</sup> /4 <sup>th</sup> Avenue, along East 24 <sup>th</sup> Street, connecting Yuma with San Luis and Somerton.	M-F 6:30 AM- 7:30 PM Sat 9:30 AM- 5:30 PM	M-F 6:30 AM- 7:25 PM Sat 9:30 AM- 5:25 PM	M-F 6:13 AM- 7:36 PM Sat 9:38 AM- 6:36 PM	(Post January 2013) Enters San Luis along 4 <sup>th</sup> Street and departs on Main Street. This route previously operated every 60 minutes, 45 minute frequency was added. (Post October 2013) Saturday service changed to 60 minute frequency.	

W Main St

To: Yuma

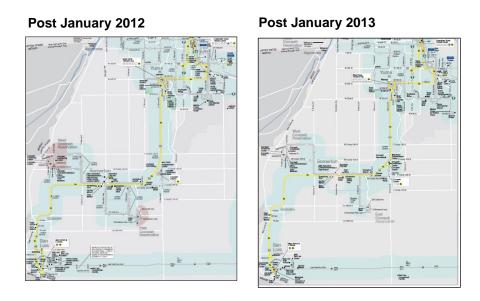
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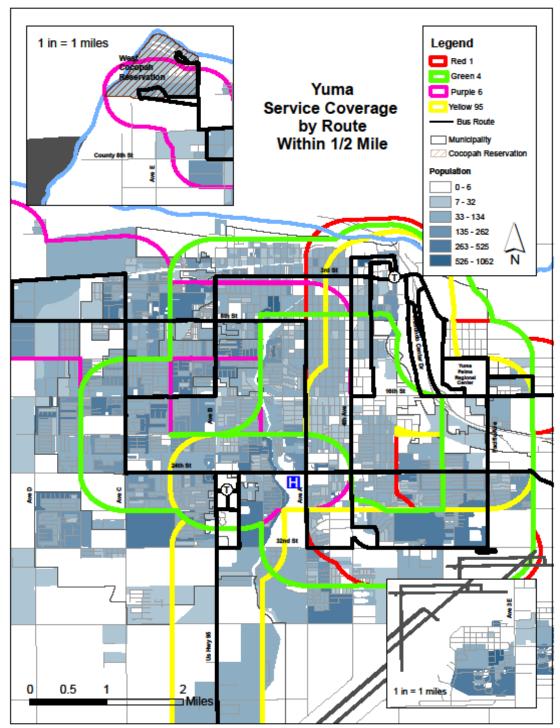


#### Section 2 – Service Area

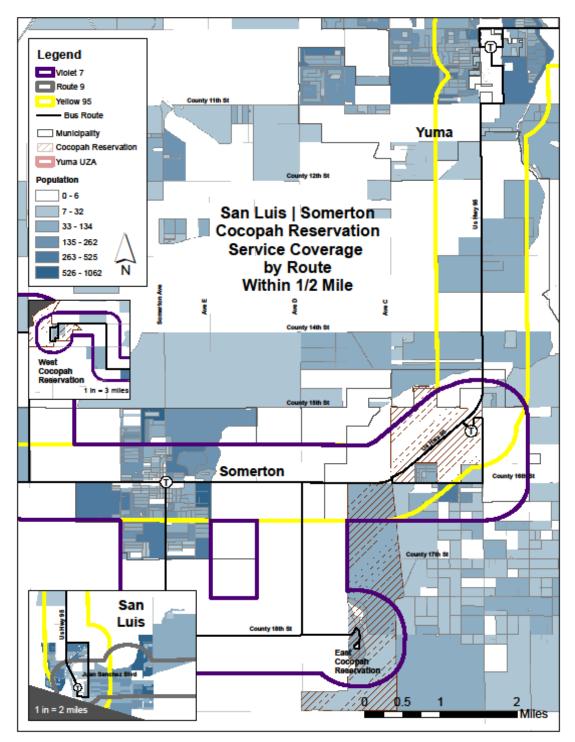
In an efficient approach, transit has a role to provide access and mobility to where people reside, work, and want to go. Access is the ability to reach desired activities and destinations; whereas, mobility refers to physical movement needed to achieve access. In urbanized areas, at least 75% of the population shall be within half a mile or five minute walk from a fixed/flex route. Transit service shall be available where transit dependant persons reside. On pages 10-13, shows the reach of transit compared to population within a haft mile of a route. A majority of residents in urbanized and incorporated areas live near a bus route. At least 77% of the population has a bus route within a half mile reach within the urbanized area, according to an evaluation of 2010 US Census data.

The figure on page 14 illustrates duplicate coverage areas; within haft a mile in several parts of central Yuma, primarily occurring between Ave A and Pacific Ave. Duplicated coverage means an area that has more than one route within walking distance. This is typically favorable for areas with major activity centers or densely populated locations. Three routes (Red 1, Green 4, and Yellow 95) convolutedly traverse nearly the same geographic area in one-way directional loops. Along Avenue A, route Purple 6 overlaps with Red 1, Green 4, and Yellow 95 along 4<sup>th</sup> Ave. One-way loops usually are less legible *(simplicity to remember the transit system layout)* and increase travel time. A rider must typically return to their origin differently than to the destination, thus diminishing legibility. Travel time increases when a rider must traverse much of the route to return to their origin from a destination.

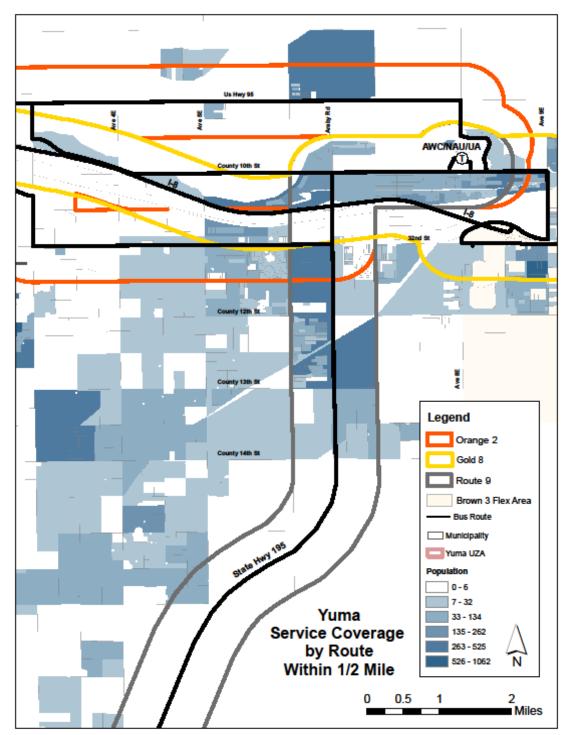
Low-income status is a regularly used indicator of transit dependency. The Federal Transit Administration (FTA) defines a low-income person as a person whose median household income is at or below 150% of the U.S. Department of Health and Human Services (HHS) poverty guidelines. Identified on pages 15 and 16 are low-income areas, using American Community Survey median income data as well as the following 2013 HHS thresholds at 150%: \$17,235 (1 *per* household); \$23,265 (2 *per* household); \$29,295 (3 *per* household); and \$35,325 (4 *per* household).



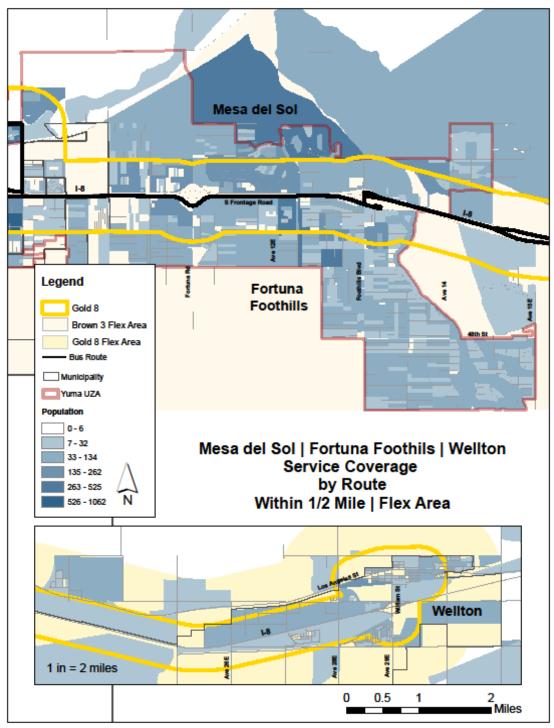
Source: 2010 Census P1, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010



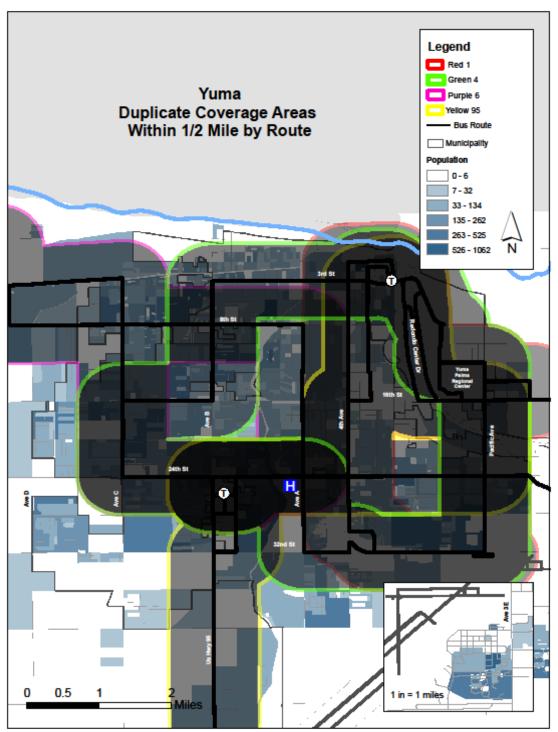
Source: 2010 Census P1, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010



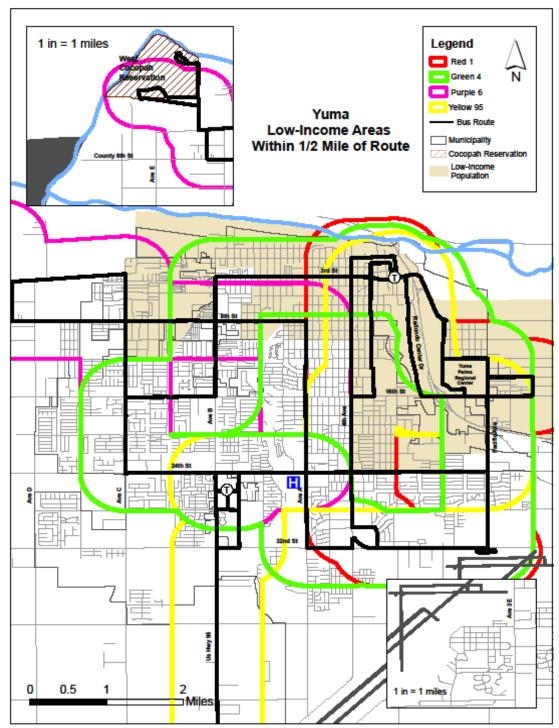
Source: 2010 Census P1, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010



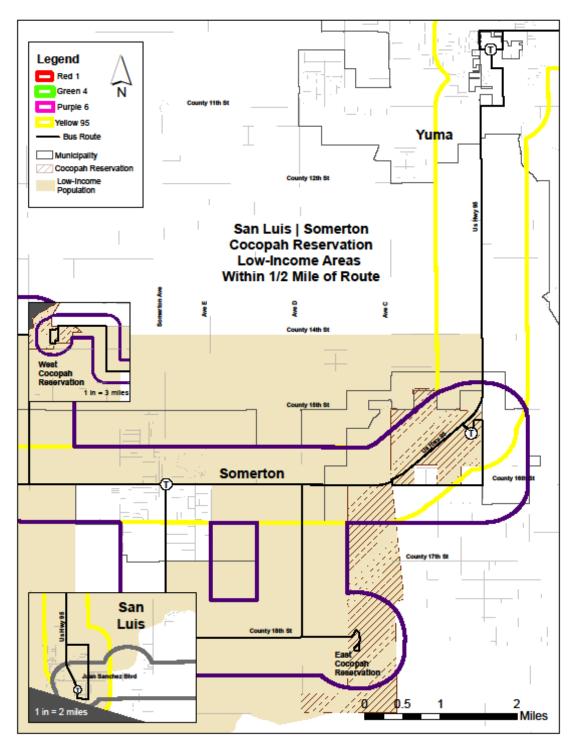
Source: 2010 Census P1, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010



Source: 2010 Census P1, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010



Source: ACS S1903 S1101, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010



Source: ACS \$1903 \$1101, YCAT\_Routes, Yuma County, and Yuma\_UZA\_2010

#### Section 3 – System Performance and Productivity

During FY 2012-2013 YCAT overall carried 381,042 passengers, a 21.80% increase from the previous year, and provided an additional 3,807 revenue hours (scheduled hours of service available to passengers). Additionally, a 21% farebox recovery ratio (proportion of transit operating expenses covered by passenger fares) system wide was achieved. The system wide farebox recovery year-to-date (November 2013) was 20.97% and 196,142 passengers carried a 35,233 increase from last November. Introduced this fiscal year was a pass program for Arizona Western Collage, Northern Arizona University, University of Arizona, Aztec High School, and Yuma Private Industry Council Charter High School students, employees, and facility. This program allows students with valid ID to ride free. The table below provides performance measures used for the system productivity analyses. Subsequent tables present performance of each route using the shown thresholds. New service should meet the established performance standards after the second full fiscal year of operation. Expansion of existing service should meet one-half the above performance standards during the first year. The figure on page 23 compares subsequent fiscal year ridership.

	Performance Measures					
Service Categories	Operating Cost <i>per</i> Hour Not Exceed	Passengers per Revenue Hour Not Fall Below	Subsidy <i>per</i> Passenger Not Exceed	Farebox Recovery Not Fall Below		
Urban Fixed (Route 1, 2/2A, 4, 10, and 95)		10				
Rural Fixed (Route 5, 8A, and 9)		5		20%		
Urban Flex (Route 3 and 6)		4	\$10.00			
Rural Flex (Route 6A, 7, and 8)	\$90.00	3				
Special Service (NightCAT and HolidayCAT)		20				
Shuttles		20				
Demand Response (YCAT OnCall and WelltonCAT) <sup>1</sup>		2.5	\$25.00	5%		
Systemwide	\$70.00	15	\$17.50	20%		

<sup>&</sup>lt;sup>1</sup> Fully replacing Dial-A-Ride, YCAT OnCall is available to ADA customers only.

	Rou	ute Type (	Operatine	g Cost (Do	llars)	
Routes	Service	FY 201	FY 2011-2012		FY 2012-2013	
	Day	Annual	Daily Average	Annual	Daily Average	
	Weekday	\$75,337	\$582	\$139,689	\$557	
Red 1	Saturday	\$9,339	\$352	\$18,365	\$367	
	Total	\$84,679	\$934	\$158,054	\$525	
	Weekday	\$137,778	\$532	\$143,490	\$572	
Orange 2/2A	Saturday	\$28,144	\$531	\$17,499	\$350	
U U	Total	\$165,922	\$1,063	\$160,989	\$535	
	Weekday	-	-	\$56,426	\$459	
Brown 3	Saturday	-	-	\$5,422	\$209	
	Total	-	-	\$61,849	\$415	
	Weekday	\$137,778	\$591	\$143,054	\$557	
Green 4	Saturday	\$28,144	\$572	\$18,435	\$367	
	Total	\$165,922	\$1,163	\$161,489	\$525	
	Weekday	\$11,800	\$738	\$132,569	\$528	
Blue 5	Saturday	\$1,863	\$466	\$18,259	\$365	
	Total	\$13,664	\$1,203	\$150,828	\$501	
	Weekday	\$139,618	\$539	\$110,117	\$439	
Purple 6	Saturday	\$21,918	\$414	-	-	
	Total	\$161,536	\$953	\$110,117	\$439	
	Weekday	\$6,475	-	\$21,660	\$86	
Purple 6A	Saturday	\$8,154	\$308	\$16,150	\$323	
	Total	\$14,629	\$308	\$37,810	\$126	
	Weekday	\$63,540	\$491	\$122,889	\$490	
Violet 7	Saturday	-	-	-	-	
	Total	\$63,540	\$491	\$122,889	\$490	
	Weekday	\$10,536	\$82	\$25,717		
Gold 8	Saturday	\$3,392	\$128	φ20,717	\$102	
Golu o	Total		\$210	- -	-	
		\$13,955 \$25,077		\$25,717 \$50.047	\$102	
0	Weekday	\$25,977	\$201	\$50,047	\$271	
Sliver 9	Saturday	-	-	-	-	
	Total	\$25,977	\$201	\$50,047	\$271	
	Mon-Wed	-	-	\$9,339	\$199	
Turquoise 10	Saturday	-	-	\$5,838	\$225	
	Total	-	-	15,178	208	
	Weekday	\$324,545	\$1,253	\$337,769	\$1,346	
Yellow 95	Saturday	\$72,761	\$2,746	\$47,096	\$942	
	Total	\$397,306	\$3,999	\$384,865	\$1,279	
	Weekday	\$8,762	\$68	\$17,180	\$93	
NightCAT	Total	\$2,822	\$68	\$17,180	\$93	
	December	-	-	\$3,588	\$1,196	
HolidayCAT	Total	-	-	\$3,588	\$1,196	
	Friday	_	_	φ0,000 -	φ1,100 -	
WelltonCAT <sup>2</sup>	Total	-	_			
		-	-	<b>#</b> 407.000		
	Weekday	-	-	\$107,329	\$428	
YCAT OnCall	Saturday	-	-	\$5,876	\$118	
	Total	-	-	\$113,205	\$376	
Systemwide	Weekday	\$942,146	\$5,077	\$1,417,275	\$6,127	
Cysternwide	Saturday	\$173,715	\$5,517	\$152,940	\$3,266	

<sup>&</sup>lt;sup>2</sup> Data was not available for FY 2012-2013.

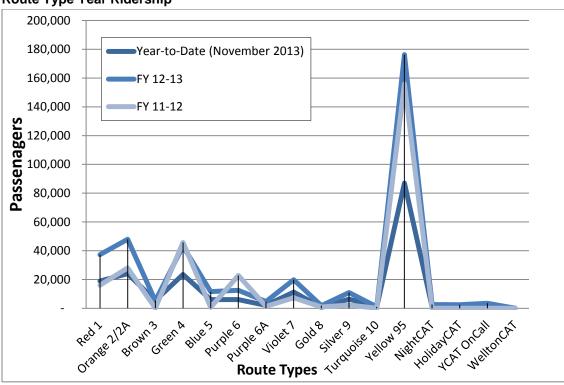
	Route Type Revenue Hours					
Routes	FY 2012		11-2012	FY 201	FY 2012-2013	
Routes	Service Day	Annual	Daily Average	Annual	Daily Average	
	Weekday	1,587	12	3,153	13	
Red 1	Saturday	197	7	415	8	
	Total	1,784	20	3,568	21	
	Weekday	2,701	10	3,239	13	
Orange 2/2A	Saturday	535	10	395	8	
0	Total	3,235	21	3,634	12	
	Weekday	-	-	1,274	10	
Brown 3	Saturday	-	-	122	5	
	Total	-	-	1,396	9	
	Weekday	2,919	11	3,229	13	
Green 4	Saturday	618	12	416	8	
	Total	3,537	23	3,645	12	
	Weekday	249	16	2,993	12	
Blue 5	Saturday	39	10	412	8	
	Total	289	25	3,405	11	
	Weekday	2,705	10	2,486	10	
Purple 6	Saturday	393	15	-	-	
	Total	3,098	25	2,486	10	
	Weekday	137	1	489	2	
Purple 6A	Saturday	172	6	365	7	
	Total	309	7	854	3	
	Weekday	1,283	10	2,774	11	
Violet 7	Saturday	-	-	-	-	
	Total	1,283	10	2,774	11	
	Weekday	223	2	581	2	
Gold 8	Saturday	71	3	-	-	
	Total	294	4	581	2	
	Mon-Thur	547	4	1,130	6	
Sliver 9	Saturday	-	-	-	-	
	Total	547	4	1,130	6	
	Mon-Wed	-	-	211	4	
Turquoise 10	Saturday	-	-	132	5	
•	Total	-	-	343	5	
	Weekday	6,251	24	7,625	30	
Yellow 95	Saturday	1,369	26	1,063	21	
	Total	7,620	50	8,688	29	
	Weekday	185	1	388	2	
NightCAT	Total	185	1	388	2	
	December	-	-	1,548	516	
HolidayCAT	Total	-	-	1,548	516	
$\lambda A = 11 + 2 + 2 + 2 = 3$	Friday	-	-	-	-	
WelltonCAT <sup>3</sup>	Total	-	-	-	-	
	Weekday	-	-	2,115	8	
YCAT OnCall	Saturday	-	-	116	2	
	Total	-	-	2,231	7	
	Weekday	18,787	101	31,687	136	
Systemwide	Saturday	2,930	89	3,436	72	
	Total	22,223	190	35,123	208	
	Total	\$1,115,861	\$10,594	\$1,570,215	\$9,393	

_	Passengers per Revenue Hour					
Routes	FY 2011-2012	FY 2012-2013	Year-to-Date November 2013			
Red 1	9.03	10.46	14.89			
Orange 2/2A	8.67	13.18	20.16			
Brown 3	-	3.76	4.30			
Green 4	12.94	11.84	16.95			
Blue 5	2.37	3.41	4.65			
Purple 6	7.35	5.04	7.00			
Purple 6A	4.41	5.51	6.28			
Violet 7	5.44	7.17	10.51			
Gold 8	3.24	3.15	2.63			
Sliver 9	4.17	9.64	14.73			
Turquoise 10	-	2.99	3.90			
Yellow 95	20.28	20.28	22.40			
NightCAT	-	6.81	3.76			
HolidayCAT	-	13.11	-			
YCAT OnCall	-	1.58	1.95			
WelltonCAT <sup>4</sup>	-	-	3.31			
Systemwide	9.93	10.79	12.96			

	Subsidy per Passenger (Dollars)					
Routes	FY 2011-2012	FY 2012-2013	Year-to-Date			
			November 2013			
Red 1	\$5.28	\$4.22	\$3.30			
Orange 2/2A	\$5.93	\$3.35	\$2.44			
Brown 3	-	\$11.79	\$11.43			
Green 4	\$4.01	\$3.73	\$2.90			
Blue 5	\$20.41	\$12.95	\$10.55			
Purple 6	\$7.10	\$8.76	\$7.01			
Purple 6A	\$10.76	\$8.02	\$7.82			
Violet 7	\$8.76	\$6.15	\$4.67			
Gold 8	\$14.70	\$14.00	\$18.68			
Sliver 9	\$11.43	\$4.58	\$3.33			
Turquoise 10	-	\$14.79	\$12.60			
Yellow 95	\$2.55	\$2.18	\$2.19			
NightCAT	-	\$6.48	\$2.32			
HolidayCAT	-	\$2.31	-			
YCAT OnCall	-	\$32.16	\$25.13			
WelltonCAT <sup>5</sup>	-	-	\$14.83			
Systemwide	\$5.27	\$4.12	\$3.79			

<sup>3</sup> Data was not available for FY 2012-2013.
<sup>4</sup> Data was not available for FY 2012-2013.
<sup>5</sup> Data was not available for FY 2012-2013.

	Farebox Recovery (%)					
Routes	FY 2011-2012	FY 2012-2013	Year-to-Date November 2013			
Red 1	12.59%	15.50%	19.04%			
Orange 2/2A	9.74%	7.00%	6.49%			
Brown 3	-	6.67%	6.59%			
Green 4	17.69%	16.30%	18.68%			
Blue 5	5.08%	9.61%	11.18%			
Purple 6	3.68%	7.50%	8.33%			
Purple 6A	2.63%	5.12%	3.35%			
Violet 7	3.47%	2.64%	2.92%			
Gold 8	11.62%	9.22%	4.60%			
Sliver 9	1.04%	1.28%	3.56%			
Turquoise 10	-	10.83%	11.18%			
Yellow 95	52.65%	58.30%	55.24%			
NightCAT	-	.20%	.38%			
HolidayCAT	-	37.80%	-			
YCAT OnCall	-	4.02%	3.65%			
WelltonCAT <sup>6</sup>	-	-	11.90%			
Systemwide	18.85%	20.99%	20.97%			



#### Route Type Year Ridership

 $<sup>^{\</sup>rm 6}$  Data was not available for FY 2012-2013.

Routes	FY 2011-20		1-2012	FY 2012-2013	
	Service Day	Annual	Daily Average	Annual	Daily Average
	Weekday	14,868	115	33,923	134
Red 1	Saturday	1,239	47	3,416	67
	Total	16,107	162	37,339	201
	Weekday	26,347	102	46,330	184
Orange 2/2A	Saturday	1,689	32	1,579	31
U	Total	28,036	134	47,909	215
	Weekday	-	-	4,970	21
Brown 3	Saturday	-	-	323	6
	Total	-	-	5,293	28
	Weekday	41,605	161	39,753	396
Green 4	Saturday	4,162	79	3,412	67
	Total	45,767	239	43,165	463
	Weekday	617	39	10,368	41
Blue 5	Saturday	47	12	1,229	24
	Total	664	50	11,597	65
	Weekday	20,075	78	12,517	50
Purple 6	Saturday	2,751	104	-	-
	Total	23,493	181	12,517	50
	Weekday	-	-	2,261	9
Purple 6A	Saturday	742	6	2,439	48
	Total	742	6	4,700	57
	Weekday	7,251	56	19,886	79
Violet 7	Saturday	31	1	-	-
	Total	7,282	57	19,886	79
	Weekday	803	6	1,831	7
Gold 8	Saturday	150	6	-	-
	Total	953	12	1,831	7
	Weekday	2,281	18	10,892	58
Sliver 9	Saturday	-	-	-	-
	Total	2,281	18	10,892	58
	Mon-Wed	-	-	725	6
Turquoise 10	Saturday	-	-	302	6
•	Total	-	-	1027	12
	Weekday	138,489	535	159,498	632
Yellow 95	Saturday	17,473	330	16,716	316
	Total	155,962	864	176,214	948
NightCAT	Weekday	814	6	2,639	13
NightCAT	Total	814	6	2,639	13
	Friday	-	-	71	1
WelltonCAT	Total	-	-	71	1
	Friday	-	-	534	534
HolidayCAT	Sat-Sun	-	-	824	412
,,,	Total	-	-	1358	315
	Weekday	-	-	3,313	13
YCAT OnCall	Saturday	-	-	255	5
	Total	-	-	3,568	12
	Weekday	264,712	1,164	349,511	2,178
Systemwide	Saturday	31,528	672	30,495	982
Systemwide	Total	296,240	1,836	380,006	3,160

Route	Route Type Total Ridership Difference FY 2011-2012 FY 2012-2013
Red 1	21,232
Orange 2/2A	19,873
Brown 3	5,196
Green 4	(2,602)
Blue 5	10,933
Purple 6 <sup>7</sup>	(10,976)
Purple 6A	3,958
Violet 7	12,604
Gold 8	878
Sliver 9	8,611
Yellow 95	20,252
WelltonCAT <sup>8</sup>	71
NightCAT	2,639
HolidayCAT <sup>9</sup>	1,358
YCAT OnCall <sup>10</sup>	3,568
Systemwide	84,580

Among three routes, both Passengers per Revenue Hour and Subsidy *per* passenger goals were not met for FY 2012-2013 (Routes Brown 3, Blue 5, and, Turquoise 10). Routes Brown 3 and Blue 5 were marginally below the goal. Route Blue 5, Gold 8, and Turquoise 10 had a Subsidy per Passenger roughly \$3.00 or greater goal. Initial service began in than the January 2013 for route Brown 3 and Turquoise 10; therefore, an additional year of data is needed for analysis. Compared to the previous year, route Purple 6 had a \$1.61 increase in Subsidy per Passenger while other routes had a decrease. During FY 2012-2013, Operating Cost per Hour (\$48.48 systemwide) was \$7.84 less than the previous year and \$4.62 less than FY 2013-2014.

A majority of routes have averaged \$1.15 decrease in Subsidy *per* Passenger, year-todate, compared to FY 2012-2013. YCAT OnCall and route Blue 5 presently have attained this performance goal. Route Brown 3 exceeds the Subsidy *per* Passenger goal by \$1.43 year-to-date. Compared to FY 2012-2013, year-to-date, routes Gold 8 and NightCat have seen an increase in Subsidy *per* Passenger. An extra trip was added to NightCat Currently, routes Brown 3 and Blue 5 have achieved the goal for Passengers *per* Revenue Hour. Additionally, different performance goals have been developed for Turquoise 10: 2.5 Passengers *per* Revenue Hour and \$27.34 Subsidy *per* Passenger. Route Turquoise 10 has presently attained these measures.

#### Section 4 – Convenience

The time spent while traveling becomes an added factor in deciding whether transit works well for a person. This is particularly true for the total time it takes to complete a trip. When making a transit trip, transfers can become an element of the collective travel time. YCAT has a performance standard that affirms: *YCIPTA shall provide timed transfer at all transfer hubs in urbanized areas.* A timed transfer is a point or location where two or more bus routes come together at the same time to provide favorable wait time between connections. The greater the wait time, the longer it takes the person to complete their trip. On the next page, the table shows general wait time between transfers among seven transit agencies comparable to YCAT.

<sup>&</sup>lt;sup>7</sup> Service to East/West Cocopah Reservation discontinued.

<sup>&</sup>lt;sup>8</sup> Initial service began April 2013.

<sup>&</sup>lt;sup>9</sup> Initial service was only during the month of December 2012.

<sup>&</sup>lt;sup>10</sup> Fully replacing Dial-A-Ride, YCAT OnCall is available to ADA customers only.

Among the sampled transit systems, generally, the longest wait time is 15 minutes for a transfer. The tables to the right show the arrival and departure times for each route at the Downtown Yuma Transit Center and West Yuma Transit Hub. The table presents instances when the wait time between transfers is greater than the longest wait time of 15 minutes, among the sampled

transit systems. Times highlighted in Red emphasize when a connection exceeds the wait time with a core route (Red 1, Orange 2/2A, Green 4, and Yellow 95). Times highlighted in yellow indicate infrequent connections within 15 minutes at particular times during the day and/or with selected routes.

Route Yellow 95 doesn't have a clock-face schedule. A clock-face schedule means a route runs on a consistent headway (scheduled time interval between revenue vehicles operating in the same direction on a route) every X minutes and that X is set to a value such that the pattern repeats every hour. The lack of a clock-face schedule can contribute to the lack of connectivity with other routes. For instance, Yellow 95 previously had 60 minute frequency providing a clock-face schedule and connectivity at the Downtown Yuma Transit Center. The current 45 minute frequency has allowed for connectivity at the West Yuma Transfer Hub at select times.

#### Section 5 – Customer and Public Satisfaction The transit service provider and YCIPTA strive

to offer YCAT customers and the public a pleasant experience. In-order to help the

Sampled Transit Systems City / Transit Provider	Typical Wait Time (Minutes)
Wenatchee, WA / Link Transit	5
Longview, TX / Longview Transit	5
Pueblo, CO / Pueblo Transit	7
El Centro, CA / Imperial Valley Transit	10
Great Falls, MT / Great Falls Transit District	10
Napa, CA / VINE Transit	12
Medford, OR / Rogue Valley Transportation District	15

Downtown Yuma Transit Center					
Route	Arrival	Departure			
RUUIE	Time	Time			
Red 1	:25	:30			
Orange 2/2A	:25	:30			
Green 4	:25	:30			
Blue 5	:00	:00			
Gold 8	:05	:30			
Turquoise 10	:29	:10			
	:39	:20			
Yellow 95	:10	:15			
	:55	:00			
	:40	:45			
	:25	:30			

West Yuma Transfer Hub						
Route	Arrival	Departure				
Noule	Time	Time				
Red 1	:48	:48				
Green 4	:03	:03				
Purple 6	:41	:45				
Purple 6A	:21	:33				
Yellow 95 North	:52	:52				
	:37	:37				
	:22	:22				
	:07	:07				
Yellow 95 South	:50	:50				
	:35	:35				
	:20	:20				
	:05	:05				

organization to meet and exceed community expectations, *complaints per 1,000 passengers shall not exceed systemwide 0.000150.* During FY 2012-2013, 127 complaints were documented or .33 *per* 1,000 passengers. Several complaints pertained to operator attitude/conduct, careless driving, and passed by. Operator attitude/conduct complaints generally related to weak skills in customer interaction, unwilling to answer questions, and an instance when a bus operator would not deploy

the ramp. Careless driving complaints usually entailed driving over the speed limit, not using turn signals, and careless lane changes.

#### Section 6 – Reliability

To ensure our customers have a dependable transit service and adequate deployment of equipment and drivers, YCIPTA strives for high on-time performance. *Trips on-time shall not fall below ninety percent for all four classes of the service and ninety- five percent systemwide.* On-time performance data wasn't collected during FY 2011-2012 and 2012-2013. Present data can help formulate inferences about the previous year. The table on the next page shows the number of trips that contributed to a cumulative on-time performance less than 90% on a particular day. On time performance became problematic during the month of November, routes Red 1 and Blue 5 were significantly affected. Monitoring of these routes is ongoing to fully address reduced reliability. Monthly cumulative on-time performance has generally been 98.5%.

The compilation of occurrences shows route Yellow 95, with the lowest on-time performance for four consecutive months. Typically, these occurrences transpire on the first Monday and Tuesday as well as the first two weeks of the month. Common causes of delay were passenger boardings/disembarkings, mechanical problems, and traffic. A majority of southbound boardings occur at the Downtown Yuma Transit Center, West Yuma Transfer Hub (Walmart/Avenue B), while disembarkings take place within Somerton and San Luis. The greatest numbers of northbound boardings occur in San Luis, while disembarkings takes place at the Downtown Yuma Transit Center.

	Number of Late Trips ( > 15 Minutes Fixed Route) ( > 30 Minutes OnCall)					
Route	Post June 2013 Changes				Post October 2013 Changes	
	July	August	September	October	November	
Red 1	-	3	-	3	75	
Orange 2/2A	-	-	-	-	2	
Brown 3	-	-	-	-	-	
Green 4	-	-	-	-	-	
Blue 5	2	1	2	11	181	
Purple 6/6A	1	-	-	-	16	
Violet 7	-	-	-	-	-	
Gold 8	2	1	2	2	7	
Silver 9	1	1 <sup>11</sup>	3	8	7	
Turquoise 10	2	3	2	1	4	
Yellow 95	30	22	24	8	100	
NightCAT	1	-	-	-	-	
YCAT OnCall	-	-	19	-	10	

Equipment dependability can affect service functionality, thus *total miles between roadcalls shall not fall below 6,000 miles*. An increase in roadcalls occurred during FY 2012-2013. Total miles between roadcalls was 6,930 miles compared to 59,054 miles

<sup>&</sup>lt;sup>11</sup> Missed Trip

the previous year and 13,888 miles year-to-date (November 2013). Accidents are detrimental to safety, property, and availability of needed equipment for transit service, thus *revenue miles between collisions shall not fall below 127,500 miles*. An increase in accidents also occurred during this fiscal year. The total miles between accidents were 74,796 miles compared to 205,679 miles during FY 2011-2012 and 36,712 miles year-to-date (November 2013).

#### **Conclusion and Recommendations**

YCAT continues to meet and exceed expectations in ridership, achievement of performance measures, and maintaining a 20% systemwide farebox recovery. Ridership increased 21.80 percent during FY 2012-2013 from the previous year. Additionally, a 21% farebox recovery systemwide was achieved. The system wide farebox recovery year-to-date (November 2013) is 21% and 196,142 passengers carried a 35,233 increase from last November. At least 77% of the population has a bus route within a half mile reach, within the urbanized area, according to an evaluation of 2010 US Census data. This report has identified YCAT routes and network functionality for continued improvements in convenience, productivity, and reliability.

During FY 2012-2013, Operating Cost *per* Hour (\$48.48 systemwide) was \$7.84 cents less than the previous year and four dollars and sixty-two cents less than FY 2013-2014. A majority of routes have averaged \$1.15 decrease in Subsidy *per* Passenger, year-to-date (November), compared to FY 2012-2013. Route Brown 3 continues to exceed this measure, by \$1.43 year-to-date. Compared to FY 2012-2013, routes Gold 8 and NightCAT have seen an increase in Subsidy *per* Passenger. These routes and services are not duplicated. Continued monitoring of productivity, as well as study feasibility of changing the fare structure of these routes or returning NightCat to two trips, is suggested.

Among sampled transit systems, generally, the longest wait time is 15 minutes for a connection with other routes. Routes Blue 5, Purple 6/6A, Gold 8, Turquoise 10, and in some cases, Yellow 95, often do not connect with core routes (Red 1, Orange 2/2A, Green 4, and Yellow 95) within 15 minutes. The current network design presents a feasible opportunity for route Blue 5 to connect with core routes. Leaving 31 minutes later from the Downtown Yuma Transit Center, route Blue 5 can attain a wait time less than fifteen minutes, for connections at the Downtown Yuma Transit Center. To complete this recommendation, the five minute layover point should be changed to the Downtown Yuma Transit Center instead of Paradise Casino as long as impacts to employee arrival/departure times are not impacted at Paradise Casino and Quechan Casino Resort.

Route Yellow 95 previously had a 60 minute frequency similar to other routes in the network. The change in frequency (45 minutes) increased the wait time between transfers at the Downtown Yuma Transit Center, while attempting to increase capacity. Currently, three buses are utilized to maintain the 45 minute frequency. Returning Yellow 95 to 60 minute frequency, would improve connectivity with Orange 2/2A, an important transfer for many riders. This would diminish northbound connections with route Red 1 and Green 4 at the West Yuma Transfer Hub. A third bus could be used to

ease overcrowding at particular times during the day. Preserving the existing network design, further analyses of these service alternatives is suggested.

In several parts of central Yuma, primarily between Avenue A and Pacific Avenue, duplicate coverage areas occur within half to mile. Three routes (Red 1, Green 4, and Yellow 95) convolutedly traverse nearly the same geographic area in one-way directional loops. One-way loops generally increase travel time. Travel time increases when a rider must traverse much of the route to return to their origin from a destination. Furthermore, a rider typically must return to their origin differently than to the destination. Combining and removing sections of these routes, at 60 minute frequency, would allow for two-way service, and offer a majority of residents within a five minute walking distance a bus route. This alternative could improve access to core service areas; allow for timed transfers as well as reduce travel time; and enhance the usefulness of transit, the preferred recommendation.

On-time performance (90 percent) became problematic during the month of November 2013, route Red 1 and Blue 5 were significantly affected. Monthly cumulative on-time performance has generally been at-least 98.5%. The compilation of occurrences shows route Yellow 95 with the lowest on-time performance for four consecutive months. Typically, these occurrences (Yellow 95) transpire on the first Monday and Tuesday, as well as the first two weeks of the month. Potential solutions include: converting Yellow 95 to two routes at Cocopah Casino or provide additional service between main origin and destination points; change the Red 1 airport stop be served on request; and change the Blue 5 Algodones stop to select trips. YCIPTA staff suggestes to continue monitoring and categorize on-time performance issues, because this data wasn't collected during previous years.