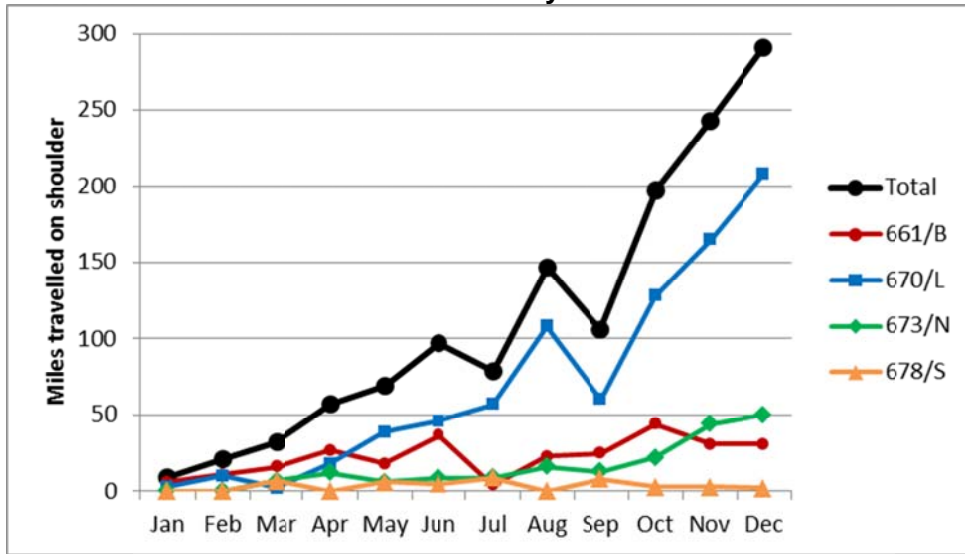


FY 2012 Review of Bus-on-Shoulder Operations
 Johnson County Transit
 January 10, 2013

Shoulder Use

In the first year of operation, a total of 472 buses used the shoulders of I-35, travelling approximately 1,348 miles on the shoulder. All four **Xpress** routes have used the shoulder, and shoulder use increased dramatically since beginning the service. Buses on **Route 670/L** used the shoulder more than any other route by a large margin. Additionally, no BoS-related safety incidents have been reported in the first year of operation.

Shoulder Use by Route



Shoulder Use by Route

Month	# Buses	# of Segments (approximate miles)				
		Total	661/B	670/L	673/N	678/S
Jan	7	9	6	3	0	0
Feb	8	21	11	10	0	0
Mar	13	32	16	2	7	7
Apr	24	57	27	18	12	0
May	27	69	18	39	6	6
Jun	39	97	37	46	9	5
Jul	38	79	4	57	9	9
Aug	53	147	23	108	16	0
Sep	47	106	25	60	13	8
Oct	60	197	44	128	22	3
Nov	75	243	31	165	44	3
Dec	81	291	31	208	50	2
Total	472	1348	273	844	188	43
Percent of Total			20.3%	62.6%	13.9%	3.2%
Segments per bus		2.9				

Ridership

Ridership on the four **Xpress** routes in FY 2012 increased by 10.4 percent compared to FY 2011, higher than the solid ridership growth of 8.3 percent for **The JO** system as a whole. **Route 673/N** exhibited the largest growth in FY 2012 while **Route 678/S** was the only route to decrease in ridership (this route has only two morning and two afternoon trips and thus has limited ability to expand ridership).

Ridership Trends by Route

Route	FY 2011	FY 2012	% Change
661/B - Olathe Xpress	68,112	71,064	4.3%
670/L - Gardner-OP Xpress	38,556	44,862	16.4%
671/LN *	2,164	0	-100.0%
673/N - South OP Xpress	29,733	39,126	31.6%
678/S - Shawnee Xpress	18,040	17,867	-1.0%
Xpress Total	156,605	172,919	10.4%
The JO Other Routes	362,916	389,471	7.3%
The JO Total (includes Xpress)	519,521	562,390	8.3%

* 671/LN was eliminated at the end of FY 2011, with trips added to 670/L and 673/N

Operating Details

Use of the shoulder occurred much more on southbound trips than on northbound trips. The three southbound segments between Antioch and 75th Street were the segments where BoS was utilized the most during FY 2012.

Shoulder Use by Trip

Segment	Southbound	Northbound
I-635 to Lamar	99	57
Antioch to I-635	126	66
Johnson to Antioch	192	57
67th to Johnson	252	37
75th to 67th	222	38
US-69 to 75th	108	25
87th to US-69	24	13
95th to 87th	14	1
Total	1037	294

JCT's analysis of BoS usage also reveals that of the ten trips that used the shoulder the most, nine of these were southbound trips. However, the trip that used the shoulder the most was a northbound **Route 670/L** trip that operates on I-35 between 7:51 a.m. and 8:14 a.m.

Shoulder Use by Trip

Run	Direction	Segments	Highway Segment of Trip (Scheduled Timepoints)			
			Start Location & Time		End Location & Time	
670105	Northbound	181	Oak Park Mall P&R	7:51 AM	12th & Washington, KCMO	8:14 AM
670252	Southbound	172	Union Station, KCMO	4:20 PM	Oak Park Mall P&R	4:48 PM
670255	Southbound	158	Union Station, KCMO	5:56 PM	Oak Park Mall P&R	6:22 PM
673252	Southbound	123	Union Station, KCMO	4:54 PM	137th & Antioch P&R	5:31 PM
661255	Southbound	109	12th & Grand, KCMO	4:43 PM	Strang Line P&R	5:16 PM
670253	Southbound	104	12th & Grand, KCMO	4:08 PM	Oak Park Mall P&R	4:37 PM
670251	Southbound	71	Union Station, KCMO	3:56 PM	Oak Park Mall P&R	4:23 PM
670254	Southbound	66	Union Station, KCMO	5:25 PM	Oak Park Mall P&R	5:55 PM
661256	Southbound	53	Union Station, KCMO	4:56 PM	Strang Line P&R	5:29 PM
661252	Southbound	46	Union Station, KCMO	3:56 PM	Strang Line P&R	4:25 PM

Travel time savings is limited due to the relatively short segment where BoS is allowed and the ability to travel only 10 miles per hour faster than mainline traffic. Based on these factors, JCT estimates that an average of 2.56 minutes is saved each time a bus is able to use the shoulder for at least a two-mile segment. While this assessment is subject to a number of assumptions and data limitations, it does demonstrate that many buses that use the shoulder are able to reduce the impact of traffic congestion on travel time.

Transit Stations

To improve access to **The JO Xpress** routes, construction is underway on new transit stations at five popular Park & Ride lots served by these routes.

- Strang Line Park & Ride (Heartland Church)
- Great Mall Park & Ride
- Sheridan & Kenwood Park & Ride (Mid-America Nazarene University)
- 137th & Antioch Park & Ride (Palazzo 16 Theatre)
- 151st & Antioch Park & Ride (Blue Valley Baptist Church)

As of January 2013, concrete work has been completed at each location, with installation of site furniture (shelter, route information kiosks, real-time electronic signs, etc.) to take place in February 2013.

Xpress Station Construction Photos

