

TRB Mobility and Innovation

Presenting Microtransit
in SJRTD

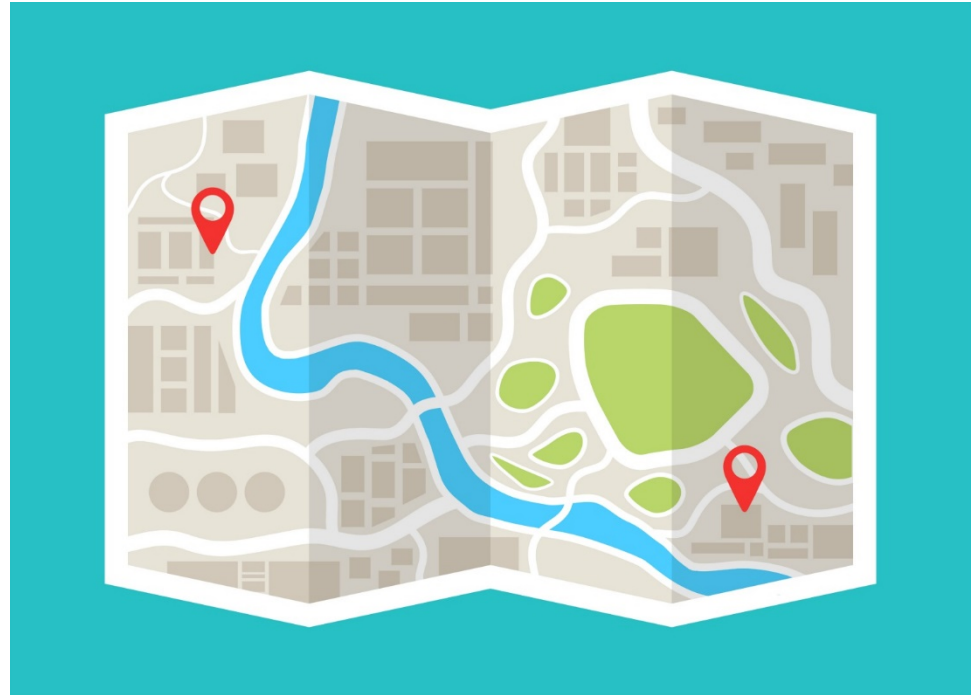
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Roadmap

- The company.
- The client.
- The process.
- The challenge.
- The solution.
- The results



Ecolane Company Overview

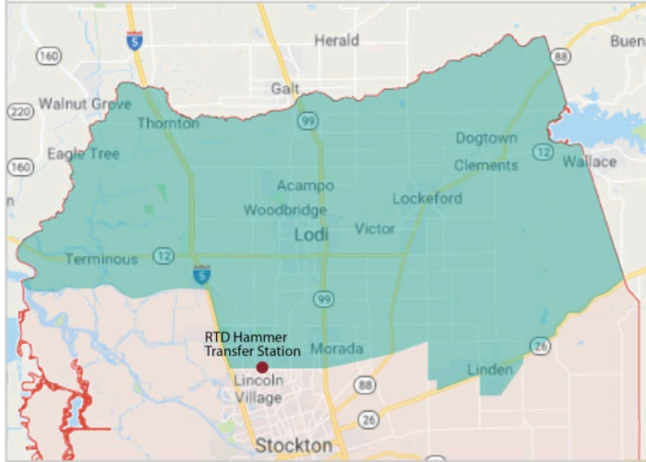
- ✓ 100% web-based, built for the web
- ✓ 190+ clients, **all use Android MDTs**
- ✓ Largest client over 4000 trips per day
- ✓ 232,536 Unique Riders in 2018
- ✓ 11,512,919 trips completed in 2018
- ✓ 136,551,039 Total Passenger Miles in 2018

The Client

1. San Joaquin Regional Transportation District (SJRTD).
2. Unique restrictions.
3. Desired better connectivity with passengers

For a limited time, go anywhere in the service area below!*

**Trips must originate and end in the RTD Van Go! service area.*



RTD Van Go! Service Area as of 10/1/18
Includes Clements, Woodbridge, Linden, Lodi, Lockeford, and North Stockton.
More areas will be added soon.

7 days a week, 8:00 a.m. – 5:00 p.m.

The Challenge

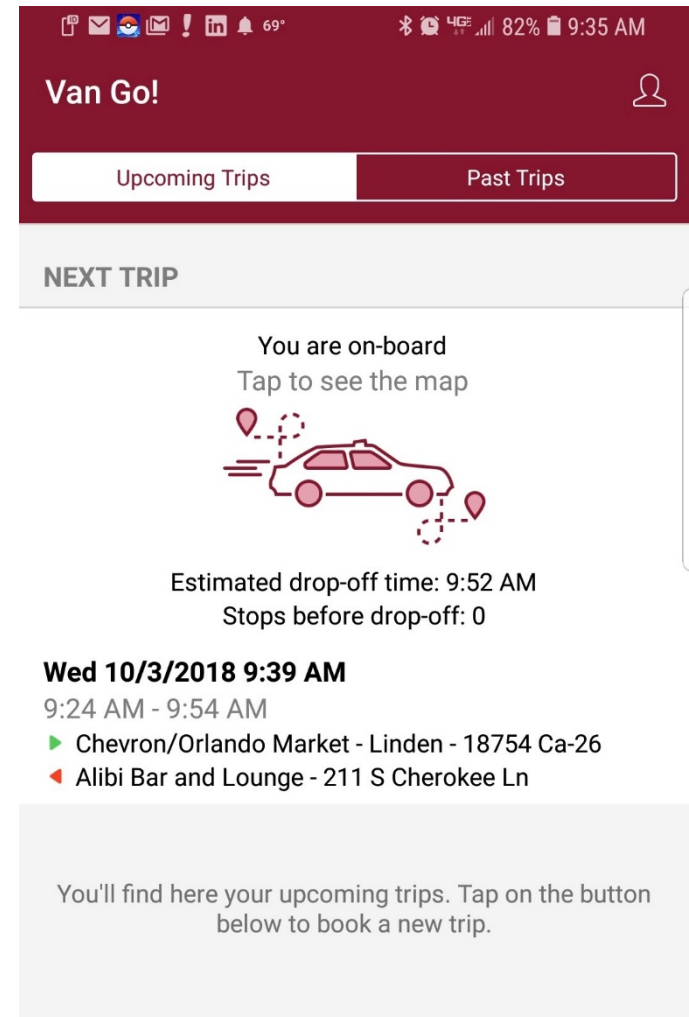
- ✓ Get people to regional transfer facilities and provide local service to shopping and employment.
- ✓ Deploy a full featured branded APP that provides self-registration, reservations, push notifications and cancellations.
- ✓ Needed a single solution for General Public and Dial-a-Ride service to provide greater community mobility.



The Solution: Phase I

On-demand project for general public and people with disabilities.

- ✓ Publish Van Go! mobile app to Play and APP Stores
- ✓ Empower customers to fully manage their mobility needs including: register, book, modify, and cancel transportation requests from their mobile device
- ✓ Proactively communicate service through push notifications and on-the-way vehicle map tracking
- ✓ Define service criteria and rider quality rules used in both advanced and on-demand real-time scheduling



The Solution: Phase I

Real-time:

- ✓ Optimization for on-demand and advanced scheduling
- ✓ Solution capable of scheduling trips for people with disabilities on the fly
- ✓ Fully automated end-to-end scheduling

Facilitate a broad range of payment options like credit card, cash and diminishing balances transactions.

The screenshot shows a mobile application interface for scheduling a trip. At the top, there's a status bar with various icons and the time 4:25 PM. Below that is a dark red header with a back arrow and the text 'New Trip'. The main form area is white with rounded corners and contains several sections: 1. Two buttons: 'LEAVE AT' (dark red) and 'ARRIVE BY' (white with dark red border). 2. A date field with a calendar icon, showing 'October 3'. 3. A time field with a clock icon, showing '08:00 AM'. 4. A 'Pick-up location' field. 5. A 'Drop-off location' field. 6. A 'Purpose' field with a dropdown menu currently set to 'General'. 7. A 'Personal Assistant' toggle switch, which is currently turned off. 8. Two rows for passenger counts: 'Other Passengers' and 'Children', both with a maximum of 12. Each row has a minus button, a text input field showing '0', and a plus button. 9. A summary section with 'Price' (dash), 'Additional Passenger(s)' (dash), and 'Balance Amount' (USD 0.00). 10. A large dark red button labeled 'Calculate Fare'. At the bottom, there's a navigation bar with a home icon, a square icon, and a back arrow.

Trip Details

Order#	Reservation time	Agent ID	Trip type	Service type	Provider (status)	Status	Shared	Archived
539	Mon 01 Oct 2018 11:47	mobile	Normal	Unrestricted	- (none)	Complete	Yes (3)	Mon 10/01/18 16:30

Map	Location	Location phone	Requested time	Negotiated time	Estimated time	Vehicle arrived	Vehicle departed	Stop duration (min)	Date
Pick-up	Carls B - Shopping area, 4500 W Barrett St, Lodi, CA 95242		12:20 Pacific (-60/60)	12:41 Pacific	12:41 (12:26/12:56) Pacific	12:57 Pacific	12:57 Pacific	0	10/01/18 (Mon) Pacific
Drop-off	Wal-Mart, 2002 W Ballentine Ln, Lodi, CA 95242		-	-	13:06 (12:26/13:25) Pacific	13:10 Pacific	13:10 Pacific	0	10/01/18 (Mon) Pacific

Group	Travel alone	Device	Vehicle req.	PCA	Companions	Children	Other pass.	Cust. phone	Recip. phone	SMS notification	IVR callout	IVR notification
-	No		None	No	-	-	-	-	-	No	No	No

Funding source	Purpose	Sponsor	Billing code	Full fare code	Client co-pay code	Sponsor share code	Additional psgrs code	Full fare	Funding share	Sponsor share	Final client co-pay	Additional passenger fare
MOD PHASE 1	General	-	5_flat_fee	5.00 Flat	5.00 Flat	-	5.00 Flat	\$5.00	\$0.00	\$0.00	\$5.00	\$0.00

Fare type	Fare quantity	Additional fare type	Additional fare quantity	External payment method	Final client received	Final add. psgrs received	Balance used for client	Balance used for add. psgrs	Ext. payment for client	Ext. payment for add. psgrs
External	1	-	-	Visa ***5926 (12/19)	\$0.00	\$0.00	\$0.00	\$0.00	\$5.00	\$0.00

Paid fare type	Paid fare quantity	External payment method
External	1	Visa ***5926 (12/19)

Event history [-]						
Timestamp	Type	Event	Event details	Run	Prev. run	Agent ID
10/01/18 11:47:17	7	Trip was ordered	Trip status changed to "Ordered"	-	-	mobile
10/01/18 11:47:17	9	Trip combined	Trip status changed from "Ordered" to "Open (assigned to run)"	FLAG CITY	-	mobile
10/01/18 11:47:52	4	Trip dispatched to run	Trip status changed from "Open (assigned to run)" to "Allocated"	FLAG CITY	-	D:6907, V:MOD 6, R:FLAG CITY
10/01/18 12:57:33	2	Trip started	Trip status changed from "Allocated" to "Active"	FLAG CITY	-	D:6907, V:MOD 6, R:FLAG CITY
10/01/18 12:57:33	26	External payment started	External payment pending	-	-	D:6907, V:MOD 6, R:FLAG CITY
10/01/18 12:57:33	1	Fare changed	Fare changed from none to "External"	FLAG CITY	-	D:6907, V:MOD 6, R:FLAG CITY
10/01/18 12:57:38	27	External payment ready	External payment ready. Result: Success	-	-	AUTOMATION-EPM_THREAD
10/01/18 13:10:27	3	Trip ended	Trip status changed from "Active" to "Complete"	FLAG CITY	-	D:6907, V:MOD 6, R:FLAG CITY

Leave comment [+]

Scheduling results									
Duration	Length	Run	Fare distance	Run ID	Run company	Vehicle ID	Vehicle license	Vehicle phone	
Ideal	14 min	5.19 miles	FLAG CITY	5.19 miles	Update	FLAG CITY	SJRTD	MOD 6	
Combined	26 min	5.19 miles							
Actual	13 min	5.19 miles							

Target runs: No target runs specified

Trip Details

Order#	Reservation time	Agent ID	Trip type	Service type	Provider (status)	Status	Shared	Archived
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Map	Location	Location phone	Requested time	Negotiated time	Estimated time	Vehicle arrived	Vehicle departed	Stop duration (min)	Date
Pick-up	Carls Jr. Shopping area, 4500 W. Belmont St., Lodi, CA 95242		12:20 Pacific (-60/60)	12:41 Pacific	12:41 (12:26/12:56) Pacific	12:57 Pacific	12:57 Pacific	0	10/01/18 (Mon) Pacific
Drop-off	Wal-Mart, 2002 W. Belmont St., Lodi, CA 95242		-	-	13:06 (12:26/13:25) Pacific	13:10 Pacific	13:10 Pacific	0	10/01/18 (Mon) Pacific

Group	Travel alone	Device	Vehicle req.	PCA	Companions	Children	Other pass.	Cust. phone	Recip. phone	SMS notification	IVR callout	IVR notification
-	No		None	No	-	-	-	-	-	No	No	No

Funding source	Purpose	Sponsor	Billing code	Full fare code	Client co-pay code	Sponsor share code	Additional psgrs code	Full fare	Funding share	Sponsor share	Final client co-pay	Additional passenger fare
MOD PHASE 1	General	-	5_flat_fee	5.00 Flat	5.00 Flat	-	5.00 Flat	\$5.00	\$0.00	\$0.00	\$5.00	\$0.00

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Leave comment [±]

Scheduling results	Duration	Length	Run	Fare distance	Run ID	Run company	Vehicle ID	Vehicle license	Vehicle phone
Ideal	14 min	5.19 miles	FLAG CITY	5.19 miles <input type="button" value="Update"/>	FLAG CITY	SJRTD	MOD 6		
Combined	26 min	5.19 miles							
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Drop-off	Wal-Mart, 2002 W Hollister Ln, Lodi, CA 95242		-	-	13:06 (12:26/13:25) Pacific	13:10 Pacific	13:10 Pacific	0	10/01/18 (Mon) Pacific

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Target runs: No target runs specified

Data, Oct. 1, 2018-April 1, 2019

Category	Number
Total Passenger Trips	20,566
List of Distinct Clients	1060
Daily average increase in trips	Up by 11%
Percentage of same day trips	89%
The average advanced booking time	84 minutes
Median advance booking time	34 minutes

NTD Ridership Activity Summary Report



Number of unlinked passenger trips excludes cancels, no-shows and trips without run.

Date range: 10/01/2018 - 04/01/2019 Counted passenger types: clients, assistants, children, family members, companions, other passengers.

		Oct	Nov	Dec	Jan	Feb	Mar	Apr	Total
SJRTD	Unlinked Passenger Trips, Weekdays	38	194	240	294	404	773	66	2,009
	Unlinked Passenger Trips, Saturdays	0	16	31	43	45	151	0	286
	Unlinked Passenger Trips, Sundays	4	11	37	30	45	136	0	263
	Unlinked Passenger Trips, Total	42	221	308	367	494	1,060	66	2,558
	Vehicle Revenue Hours (Est)	319	503	600	540	708	1,053	60	3,782
	Vehicle Revenue Hours (Act)	63	240	414	358	461	790	47	2,372
	Vehicle Revenue Miles (Est)	702	4,023	6,931	5,650	6,148	9,020	520	32,993
	Vehicle Revenue Miles (Act)	657	2,899	4,927	4,946	5,660	9,877	583	29,548
	Distinct Runs	7	8	8	8	8	30	26	30
	VOMS	6	6	6	6	6	12	12	12
	Regular Service Days	23	22	21	23	20	21	1	131
	Saturdays	4	4	5	4	4	5	0	26
Sundays	4	4	5	4	4	5	0	26	

The Results

- ✓ Delivered trips in under 15 minutes.
- ✓ Crossing multiple service areas with ease.
- ✓ Allowed for more mobility of all.



The Results Continued

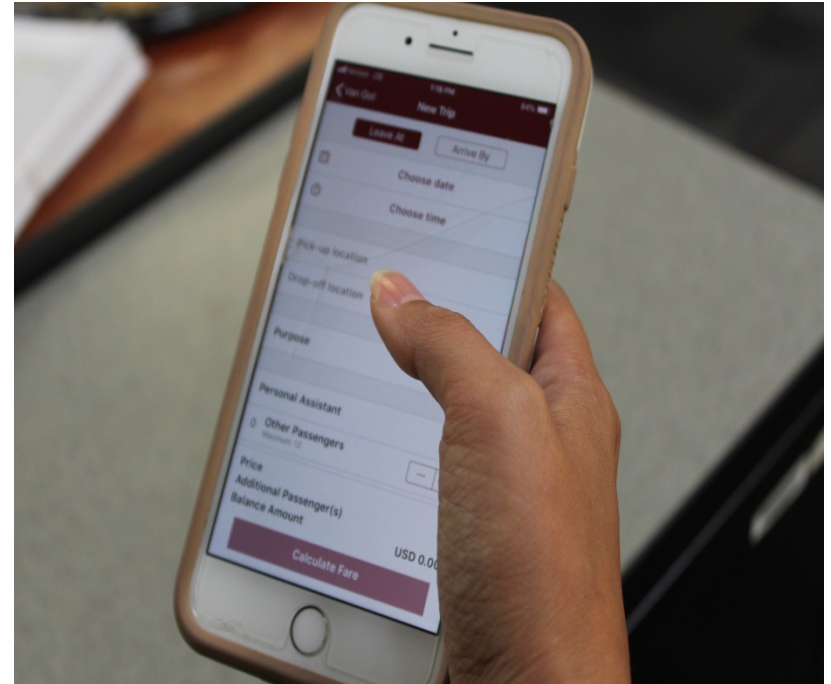
“Tailor-made trips are a click or call away with RTD Van Go! Residents start where they are and go where they want, fast. Unlike some other transportation options, RTD Van Go! will even pick up passengers in rural San Joaquin County.”

-Donna DeMartino, CEO, SJRTD



Implications for the Future

- ✓ Riders will continue to look for more autonomy.
- ✓ Connecting with rider now means connecting with their technology.
- ✓ Agencies must stay up to date or risk losing riders.
- ✓ VanGO continues to grow and continues to monitor and adapt to the MaaS and MoD markets.



Recap

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- The client.
- The process.
- The challenge.
- The solution.
- The results.



THANK YOU.

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Automation Consultant

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