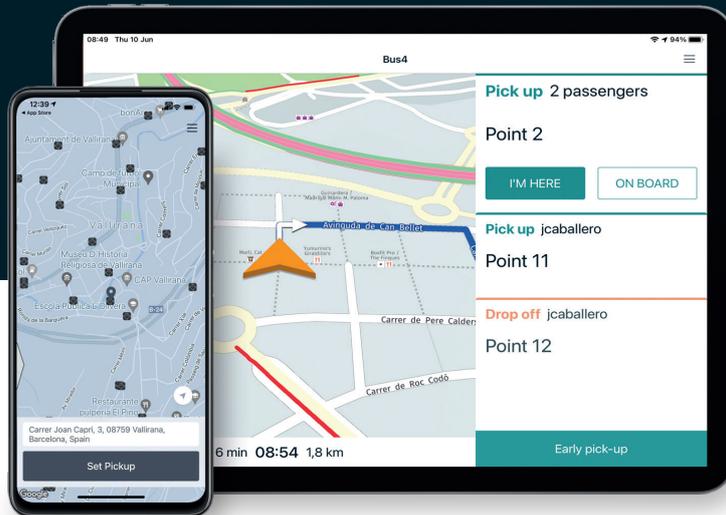


# Small Towns



## Vallirana: a small town with big mobility challenges

Life in Vallirana, a commuter town near Barcelona, comes with its own particular challenges. Infrequent public transport has left many of the town's scattered population underserved and isolated. For some, a round trip to shops and essential services in the center can require military planning and half a day to complete. No wonder so many residents are dependent on their cars or others to get around.

Bus operator Soler i Sauret is battling on, doing their best to optimize services and cover as much ground as possible following funding cuts. But trying to keep everyone happy is pleasing no one, least of all the lone overworked bus driver. Patchy coverage and long wait times have led to a vicious circle of falling demand, revenue and supply that shows no sign of improving. Clearly, traditional transport planning isn't working for Vallirana.

This was the situation when Shotl was called in to radically rethink suburban mobility for the town. **The challenge was how to get Vallirana moving again without spending more.**



### ✓ Vallirana residents

Can now get around more quickly and conveniently without having to rely on private vehicles. Older and younger generations can also travel independently.



### ✓ Bus operator

Soler i Sauret has grown its business volume, gained better data and insights into user behavior, and become a pioneering, innovative service provider.



### ✓ Vallirana Town Council

Has improved transit services and quality of life for its citizens, and made Vallirana a cleaner, greener, more attractive place to live, at no extra cost.



### ✓ The local community

Has successfully adopted smart city mobility and technology. Younger generations are learning that it's possible to live in outlying towns without owning a car.

## Solution

Shotl switched Vallirana's bus lines to a combination of fixed-route-and-schedule at peak times and flexible on-demand the rest of the time. During on-demand hours, users can request pick-up and drop-off at any of the new stops that now cover the entire residential area, so nobody gets left behind.

We provided Soler i Sauret with a Passenger App, Driver App, Central Control Console, driver training, marketing materials and support. They provided the vehicle, driver and driver's tablet and promoted services locally. Vallirana Town Council funded the service and provided a back-up phone line and staffed help points around town.

### ✔ Passenger App

allows users to book and pay for rides, get real-time pick-up and drop-off updates, and a personalized, flexible service that adapts to their needs, not the other way round.

### ✔ Driver App

alerts drivers to new bookings in real-time and directs them to dynamic pick-up and drop-off points. The Driver App can also be used to control on-board capacity.

### ✔ Algorithms

constantly optimize all passenger bookings and vehicles routes to provide the best possible service for all users.

### ✔ Dashboard

allows transport operators to set service parameters, monitor operations in real time via the Control Panel and get detailed data and analytics on user behavior, taking the guesswork out of getting it right.

With a widely distributed and underserved population, Vallirana was the perfect place to implement flexible, on-demand shuttles. We achieved a vastly improved service covering a wider area and got residents travelling faster, further and more frequently, at times that suit them. And all without raising costs.

Our on-demand service continues to grow in popularity and we're now looking into adding a second on-demand vehicle.

**Vallirana has made a fundamental shift away from traditional transport planning, choosing to focus instead on an active demand-led approach which allows for greater overall transparency and efficiency.**

## Results

- The new on-demand service was well received, with user numbers growing rapidly to hit 190 after 6 weeks, by which point most bookings were being made via App.
- Increased passenger numbers meant increased operational costs, but rising revenue more than covered this. So we reduced public spending overall.
- Providing first-mile, last-mile connections to Vallirana-Barcelona transit means more commuters can now leave their cars at home.
- Analysis of user data revealed many residents walk downhill into town and take public transport back. So more people travelling means more people getting healthy exercise.



**Decrease in cost of service per passenger:**  
11.35€, down from 16.11€



**Increase in passengers per day:**  
70 up from 20



**Higher coverage within the same area:**  
from 55 to 88 stops



**User satisfaction rating**



**Decrease in wait times:**  
13 minutes, down from 75-90



**After 36 months of Service**



Real time



Pre booking



Door to door



Data Analytics



Payments & ticketing



PRM



AV



Maas API



White label



Package Delivery