

ARUBA'S ORANJESTAD  
STREETCAR.  
TWILIGHT FOR WESTERN  
EUROPEAN PCCS.  
GRANADA METRO  
FOLLOW-UP.

# HEADLIGHTS 2017



## HEADLIGHTS 2017

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**Cover:** Antwerp PCC train 7151 and  
7080 depart from the loop in front of  
imposing Antwerp Central Station.  
JOHN PAPPAS, MAY 17, 2017

**Right:** Ghent Hermelijn car 6319 on Sint  
Niklaasstraat. JOHN PAPPAS, MAY 17, 2017

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# ARUBA'S ORANJESTAD STREETCAR

By Ron Yee

ALL PHOTOGRAPHY BY  
RON YEE, MAY 2017

Left, blue double-level  
tram, nicknamed  
the "Blue Car," at Plaza  
Chipi-Chipi.

**Aruba has a tourist-oriented tram line in the capital city of Oranjestad.** Running over a 1.7-mile-long route, with loops at both ends of the line and a two-car-long passing siding near the eastern end of the route, it connects the cruise ship terminal area on the western end with the nearby downtown shopping zone. Known formally as the Downtown Oranjestad Streetcar System, the tram line is operated by Arubus, the agency in charge of Aruba's public transport bus system. But, unlike local buses with a \$2.65 fare, riding the Oranjestad Streetcar is free.



### Retro Styling Expertise

All four Aruba cars are designed to look like vintage trams from 100 years ago, sporting authentic touches like brass railings and trim, old-style controls, and lots of hand-crafted wood all around, including wooden flip-back bench seating on the single-deck cars and the lower levels of the double-deck cars.



TIG/m had previous experience building retro-look trams with their original offering of a double-deck, battery-powered trolley for The Grove, an outdoor mall linked to Farmer's Market in the west part of Los Angeles (see the back cover of *Headlights*, January–June 2005).

They followed that up with an open-bench motor and trailer that runs along a third-of-a-mile loop through The Americana at Brand, a hometown-style outdoor shopping and residential complex in Glendale, California.



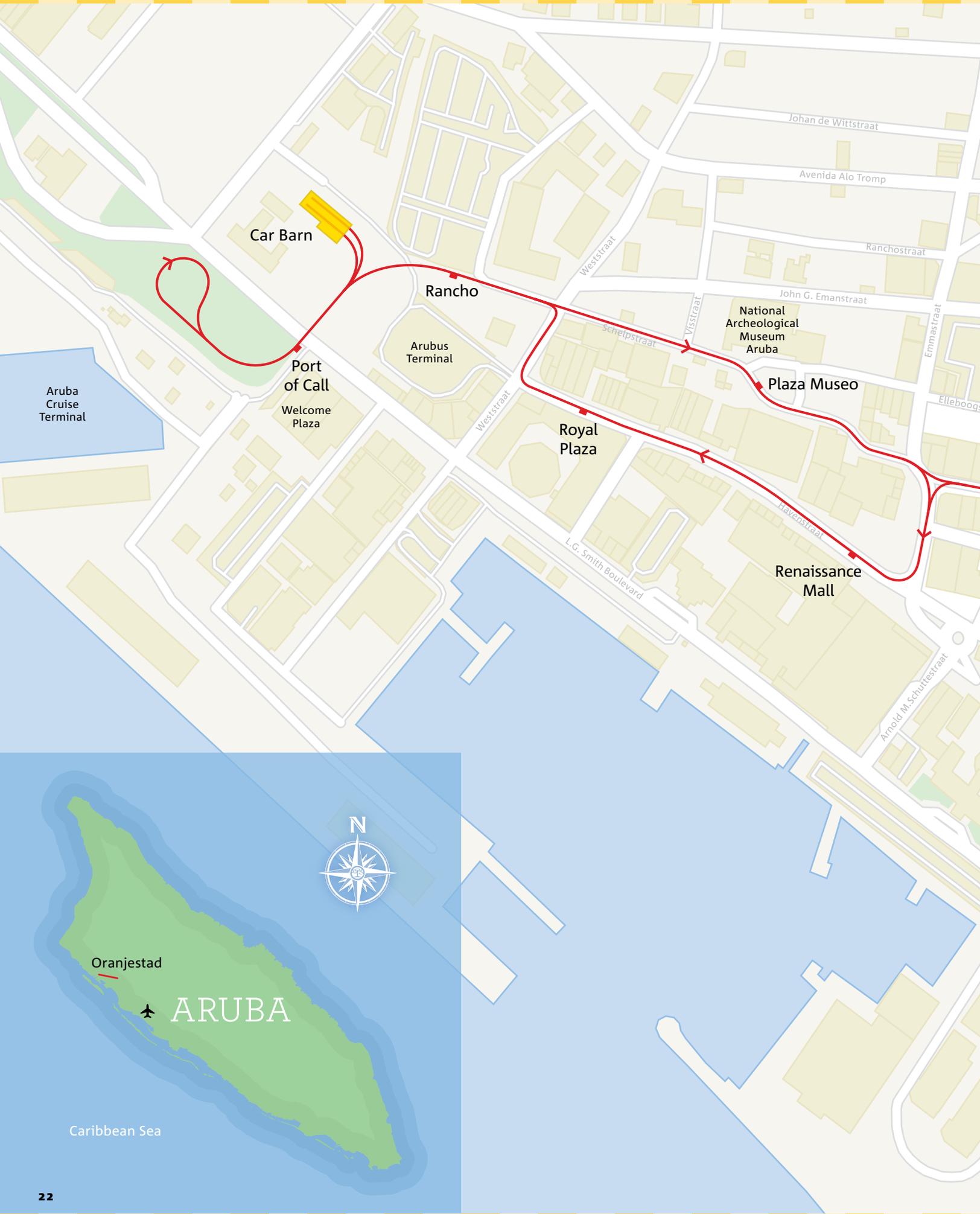
Left, detail of the blue car's custom made solid brass headlight. TIG/M (INSTAGRAM)

Top, red car at Plaza Chipi-Chipi.

Above, red and orange cars at Plaza Bon Bini passing siding.

Right, upper deck of red car.





# ORANJESTAD STREETCAR

MAP DESIGNED AND ILLUSTRATED BY SANDY CAMPBELL





6234

LO  
WALK

34

# TWILIGHT FOR WESTERN EUROPEAN PCCS

By John  
Pappas

ALL PHOTOGRAPHY  
BY JOHN PAPPAS  
EXCEPT AS NOTED

Ghent 34 rests on the  
tracks of the former  
Route 22 at Gentbrugge  
Pirennelaan awaiting its  
trip to the scrapyards.  
ARVO VANDER MERSCH,  
OCTOBER 2017

**Time marches on in the transit industry as it does in the rest of human endeavor.** A scant 80-plus years have now passed since the President's Conference Committee completed their plans for a radically new streetcar which would change carbuilding and many of the long-held ideas on how most components of streetcars should be designed. Eighty-one years have slipped by since the first commercial order was delivered and put in service — 100 cars for Brooklyn & Queens Transit. Yet the PCC is still with us. Two major cities, Boston and San Francisco, still provide regular line service with PCCs. One more city, El Paso, is about to be added back. PCCs can be enjoyed in regular appearances in Dallas, San Diego and Kenosha, Wisconsin. They also operate semi-regularly in Toronto and maybe soon on the Newark City Subway. And that doesn't even count trolley and rail museums where examples are active.





Far left, a view of the complicated junction in the pre-metro subway looking south from Lemmonier Station. Route 51 will turn left here and leave the subway after a short trip from where it entered just south of Albert Station. The tracks turning to the right behind the car lead into Gare du Midi (Brussels'

main railway station) where there is an across-the-platform transfer to the Metro. This scene will radically change in coming years as the subway is upgraded to full metro operation, which will result in shutting down Lemmonier and reducing the number of flat junctions. MAY 18, 2017



In a quiet neighborhood in the Moensberg section just north of the Brussels administrative limits, artic 7905, top, boards passengers at the Van Haelen terminal for its

northbound trip to Stadion, 9.6 miles away. STIB has announced it will order 175 cars this year which will be for expansion, but also to replace the PCCs starting after 2019.

Route 81 short-turn car 7944 has off-loaded passengers at Meir, bottom, a traffic circle next to Parc Astrid, which affords a track layout that allows turning around in either direction. The route continues five stops onward to Marius Renard at the southwest corner of

the city for those who wait for the next car. Scheduled turnbacks are rare. This appeared to be the result of several line delays, not surprising on a 7.5-mile route that crosses the city on the surface with only a short visit to the pre-metro subway to serve the Gare du Midi Station.

STIB 7165 is seen amid track work at Boulevard de Smet and Rue Jules Lahaye on the busy cross-city route 18. JOE SAIITA, APRIL 29, 1993







# Antwerp

De Lijn Antwerp 7001 coming (left) and going (right). The car was rehabbed back to its original look in 2009 and, as of May 2017, continues to run in service. It was delivered in 1960 as part of an order for 61 single-ended PCCs, numbered 2000 to 2060. Unlike the Brussels fleet, it bears the classic La Brugeoise front end design, a modification of the postwar American blueprint, which seems to fit this narrow body style more harmoniously. The fleet was renumbered into the 7000–7100 series in the early 1990s.

A city of commerce and shipping for centuries, Antwerp is also the center of diamond trade. The metro area has a population of close to 800,000. It has a major tram system, second only to Brussels in Belgium. There are 13 routes and around 270 trams on their 50-mile network. Transit operation in the Dutch-speaking Flanders region of Belgium is under the management of De Lijn (The Line) which operates bus and tram systems in several cities through the northern and western part of the country. Besides Antwerp, they operate trams in Ghent and the Coastal Tramway (Kusttram) which runs for 42 miles along the Belgium coast.



Antwerp has the largest remaining fleet of first generation Belgian PCCs. According to De Lijn's 2016 Annual Report, 150 of the original 166 cars were active as of the end of 2016. Since then they have taken delivery of 38 100 percent low-floor LRVs. In the meantime, Antwerp has seen regular expansion of lines and a third pre-metro tram subway opened, but no full metro.



Top left, this is a typically configured Belgian version of PCC controls. Rocker switches substitute for the familiar bakelite gang switches

of the U.S. design and many more controls and warning lights are clustered on a true dash. The familiar three pedal controls remain.

The Korenmarkt (Corn Market), bottom left, is the center of the old city of Ghent and is restricted to trams, bicycles and delivery vehicles. Flemish architecture is in full evidence here. Color-coded destination signs have

continued into the digital era. Route 4 to Moscou ends in the southeast at a rebuilt stub end terminus that was formerly a classic end-of-line loop next to the Belgian Railways main line to Antwerp. MAY 18, 2017



On May 18, when this photo at top right was taken, Routes 21, 22 and 1 operated north on Sint Niklaasstraat, which reaches Saint Nicholas Church on the east side of the Korenmarkt. It is an example of the (almost) impossibly narrow streets that the PCCs negotiated for 46 years. The tracks in the

foreground curve left in order to make a right turn on Cataloniestraat (routes 21 and 22, since merged into a single route 2) and vice versa for route 1. Car 6207 is operating to the route 22 terminus at Dienstencentrum (Service Center) Gentbrugge a short branch which was discontinued on May 20, right after our visit.

Siemens Hermelijn car 6331 passes PCC 6211 on Cataloniestraat, bottom right. Ghent's Hermelijn fleet is bi-directional, five-section and 97'2" in length. Between 2000 and 2007 41 of these cars were delivered. The view is from beside Saint Nicholas Church looking east to Het Belfort van Gent bell tower. Both are route 4 cars whose significant difference in length and passenger carrying capacity must

be compensated with service frequency. The tracks here form a complex junction where it is possible to go either east or west and to return via a narrow southbound street to Sint-Peters Station. Missing is the trolleybus overhead which hung from these span wires for almost 20 years (1990–2009) for route 3. In their place are stub track turnouts for an eventual return of trams to that route. MAY 18, 2017







## Hamburg

Always the non-conformist in German traction circles, Hamburg acquired one car in 1952. It operated for only about five years, but future German-built rolling stock captured a number of the mechanical improvements and some of the body design based on their experience with the car. It was sent to Copenhagen for about three months for a trial and then went on to Brussels where it spent the rest of its career filling in the fleet as the missing 7000. The Copenhagen connection paid off. After retirement from Brussels it was acquired by the Danish Tram Museum where it currently resides.

Restored to its Hamburg appearance, 3060 reposes in the active barn at the Sporvejsmuseet (Danish Tram Museum) in

Skjoldenæsholm, Denmark during an ERA tour in 2008. The car was built with the Brussels-style front end.



These are not PCCs, although possessing an articulated version of the same basic body shell as the 8000s. Built in the 1948–1949 time period eight years before the PCCs, the 7000s — or Stanga Cars, as they are widely known — are streamlined cars with conventional controls and trucks...and air brakes. Most of this fleet remains in service in 2017. Car 7031, right, is seen here at the main railway station, Roma Termini. MAY 22, 2012



# Updates & Acknowledgments

Most of this feature was written in June. To update the story on Antwerp and Ghent to late November, just before press time, we communicated with a source who works for De Lijn. Here is the latest:

- About 50 PCCs from the Antwerp fleet will be removed from service before the end of the year. By estimate that would leave about 90 still in service.
- Although predicted to be gone completely by this past June, as noted in this article, seven of Antwerp's rebuilt PCCs remain in daily use. It is expected this will continue to be the case at least for the immediate future. For those who

may have been inspired by reading this article, this is an ideal reprieve. But it probably won't last much longer.

- Ghent PCC 6226 is stored on the Coastal Tramway in the Knokke Depot, located at the northeast end of the line. The Hague first order car 1006, which ran in service on the Coastal Tramway in past summer seasons, is now stored with other PCCs at a former Belgian airbase in Weelde near the Dutch border.
- Gent will maintain an historic fleet, which includes car 01 and 54. The former was not included in the rehab program and retains its traditional look.

Ghent 6233 and several other cars rest on the tracks of the former Route 22 at Gentbrugge under Highway A14. The cars seen here did not receive the rebuilding.  
ARVO VANDER MERSCH,  
OCTOBER 2017

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The information contained in roster supplements in "PCC From Coast to Coast" by Fred W. Schneider III and Stephen P. Carlson, *Interurbans Special 86* (Interurban Press, 1983), was invaluable in piecing together the production information on western European PCCs. The Belgian fan organization Tram 2000's "Flash 1997" special on French rail transit contained valuable information on Marseille and Saint Etienne.

The June and August 2017 issues of *Tramways and Urban Transit* have comprehensive history of PCCs in Ghent which provide further background on the retirement of their fleet. There is also additional operational detail of the system and its equipment as it existed this past summer.

For those interested in PCC development and history, the trilogy mentioned in the article includes "PCC, The Car that Fought Back," by Fred W. Schneider III and Stephen P. Carlson, *Interurbans Special 64* (Interurban Press, 1980), "PCC From Coast to Coast" by Fred W. Schneider III and Stephen P. Carlson (Interurban Press, 1983), and "An American Original — The PCC Car" by Seymour Kashin and Harre Demoro, *Interurbans Special 104* (Interurban Press, 1986).







# GRANADA METRO FOLLOW-UP

By Randy  
Glucksman

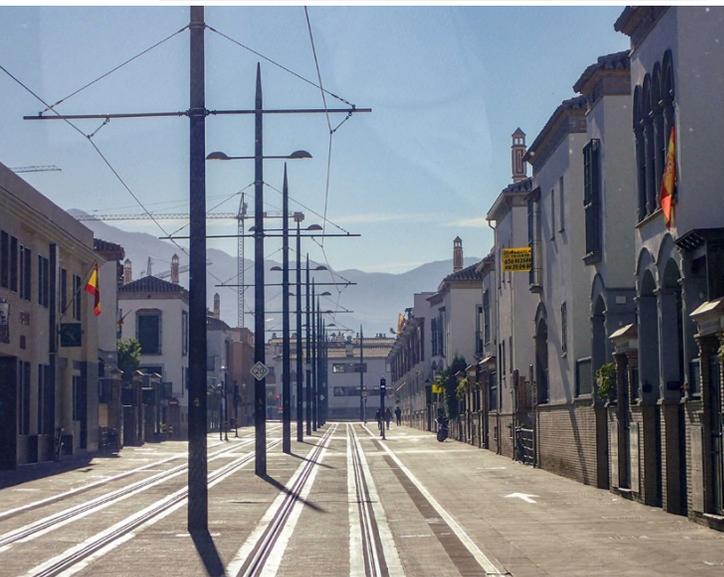
ALL PHOTOGRAPHY BY  
RANDY GLUCKSMAN,  
NOVEMBER 24, 2017

CAF Urbos 308, top, and 305 encounter impressive passenger boarding at Méndez Núñez Station, one of three on the underground portion of the single route.

The Granada Metro has finally opened. Spain's newest light rail line, featured in the 2016 issue of *Headlights*, was originally scheduled to be in service by December 2016 when we went to press, but various delays in testing and governmental approval postponed the opening to September 21, 2017.

Formally known as Metropolitano de Granada, locals refer to the Granada Metro as “El Tram.” Everything about it is new and clean. As with most modern transit systems, all tram stations are wheelchair accessible and equipped with countdown clocks that display the number of minutes before a train will arrive. Escalators shut down when no one is using them, reducing wear and tear and saving on power costs.

Granada Metro operates 15 standard-gauge CAF Urbos-3 five-section cars (numbered 300 to 315), of which 10 were in service on November 24. It appeared that only one intersection did not have signal priority for the tram. A round trip takes just under two hours and one-way tickets cost only 1,35€ (\$1.61 at the time of publication).



With the exception of being five-section compared to the Cincinnati's and Kansas City's Urbos models, the Granada Metro cars, top, are as equally roomy and inviting and feature the same style seats.

The right-of-way is threaded into narrower confines in two areas. The photo on the left above shows an approximate 40-foot street which has limited cars to two narrow lanes on either side of the double track. The photo at

right shows a view along the 1,754 feet of single track on Calle Real de Armilla that is traversed just after leaving Armilla terminal. Several blocks are pedestrianized but are not wide enough for double track.

At right, an example of the clean, easy-to-read strip map kiosks at the Armilla station.

(Opposite page) CAF Urbos 301, top right, arrives at Nuevo Los Carmenes station. The car is northbound on the south side of the city



and is traversing an area of wide boulevards and the early stages of urban growth. The design of the tramway setting is typical of the best French standards, which Spain emulates to a great extent, including the grassed right-of-way.

CAF 308, bottom right, changes ends at the Armilla terminal at the south end of the 9.9-mile starter route. Ahead is about 45 minutes of running to reach the northern terminal at Abolote.





The Hague GTL-8 3118 in suburban Delft with timeless Dutch architecture mixing with major infrastructure upgrades as an aftermath of placing the railway high speed mainline in tunnel underneath the town.