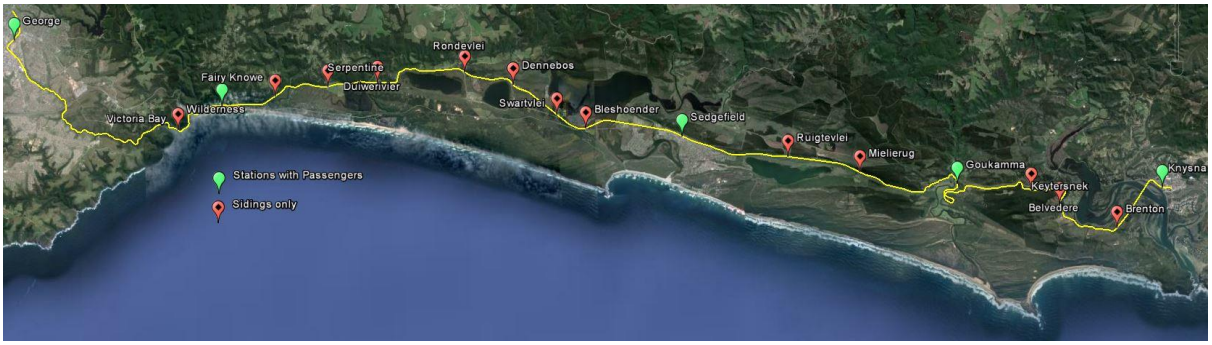
**The Outeniqua Choo Tjoe Route**
**Train Simulator 2016**

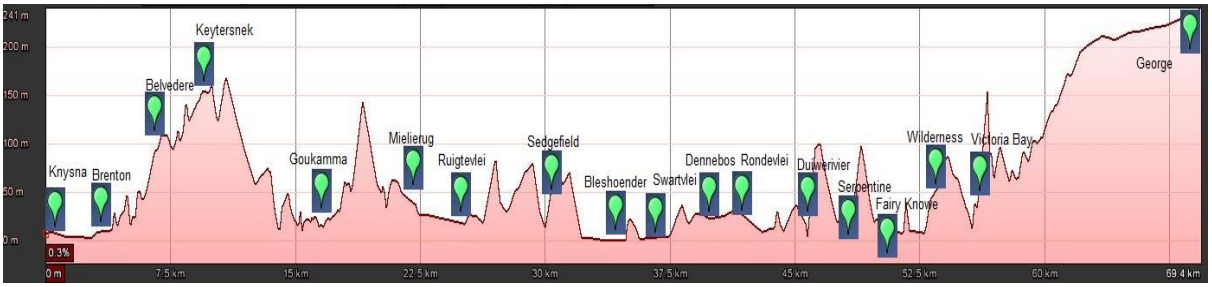


**Touw River crossing**

## 1. Route Map George to Knysna




## 2. Route Elevation George to Knysna




## 3. This route:

Trying to recreate a real route in a simulator is definitely no easy task. Especially when you try to capture the soul of a specific route, it really becomes a daunting undertaking. The Outeniqua Choo Tjoe route holds a special “something” to all of those who had the privilege of travelling this route, locals and tourists from overseas. We have tried within the limitations of a computer simulator to create it as good as we possibly can. Over the years many features of this route have changed and it is difficult to establish which features belong to which era. In this route we have tried to create the route as it was before the damage occurred which rendered this route unusable.
We just hope it can give some satisfaction to people who knew the Outeniqua Choo Tjoe route before its sad demise. Maybe it can live a little bit longer in this way.

## 4. Winter scenarios

Creating a winter scenario with snow on this route in Train Simulator, is not very realistic for this region.
George has an oceanic climate, with warm summers, and mild to chilly winters. It is one of the highest rainfall regions in South Africa. Most rain falls in the winter and spring months, brought by the humid sea winds from the Indian Ocean. The last recorded snowfall was in 1906 and it lasted for only half an hour!

## 5. History

The Outeniqua Choo Tjoe and the branch line running between George and Knysna, offered some of the best scenery in the world as it hugs the coast and winds through indigenous forest vegetation and inland lakes on its 67 kilometre (42 miles) route between the two towns. It has been recognised and acknowledged internationally and also locally, as a major tourist attraction in the Western Cape and was accordingly granted heritage status in 1991, by the local authorities and Transnet, the South African railway authority who own and operated the line.
The construction of the line was approved in 1922 and work on it started in 1924. The line was completed and brought into service in 1928.
Unfortunately, in 2006 floods washed away sections of the railway line and caused a landslide above the line at Kaaimans Pass. In February 2007 the line between George and Knysna sustained further damage as a result of torrential rains. As a branch line repair was not a priority by the authorities. The discontinuance of the service was also in keeping with the Transnet strategy of shifting away from non-core business.
Following a decision by Transnet to suspend passenger services, the Outeniqua Choo Tjoe's licence to transport passengers expired. Surely a very sad day for what has once been a world renowned tourist attraction and a well-known heritage line.

A Dutch group of supporters, involved with preservation, who visited South Africa in 2012, submitted a preliminary report for the re-opening of the line based on their experience with preserved railways in Europe. Another meeting in this regard was held with Transnet officials in 2013. At that meeting Transnet stated that they were investigating the re-opening of the George to Knysna line, which fell within their current strategy of reviewing all branch lines throughout the country. In short this meeting agreed that the re-opening of the line needed to be financially viable for all parties concerned. The attendees at the meeting also agreed that further discussion was necessary and Transnet stated that another meeting would be held in the next few months to which interested stakeholders would be invited.

The Outeniqua Choo Tjoe was declared an officially preserved railway in 1992, carrying about 40,000 passengers per year at the time. A decade later, it carried 115,000 passengers per year, 70% of whom were foreign tourists. The trains were usually pulled by Class 19D steam locomotives, with Vanderbilt-like "torpedo" tenders, although the task is occasionally handled by Class 24 steam engines.

It is only now we've lost something we've always taken for granted, that we realise how much it meant to us. The Outeniqua Choo Tjoe is sorely missed by lovers of historic train journeys here in South Africa and abroad. It ran this route for nearly 78 years and became a vital part of the Garden Route's heritage, making a considerable contribution to Cape Tourism.

## 6. The Route

Leaving George and passing high above the pretty coastal resort and popular surfing beach of Victoria Bay, the Outeniqua Choo Tjoe steamed its way through several tunnels right on the rocky shoreline and over the stunning Kaaimans River Bridge to round the bend and overlook the beautiful Wilderness beach before coming to a brief stop at Wilderness Station.

**George Station**

**Victoria Bay**

**Kaaimans River Bridge**

**Wilderness Station**

The next part of the train ride took the passengers over the Touw River's rail and road bridge and along the Garden Route lakes with tantalising glimpses of luxury homes and holiday resorts intermingled with exquisite indigenous forest and breathtaking lake views, before crossing the largest lake, Swartvlei shortly before coming to a stop at Sedgefield Station.

Sedgefield station had become well-known for its delicious homemade pies at the Whistle Stop Shop and there was just time to buy a few before the train continued on.

**Touw River Rail and Road bridge**


**Sedgefield**

Ahead lay Groenvlei - the only freshwater lake of the lake system. Countryside and farmlands framed in fynbos and coastal vegetation, coniferous plantations and indigenous forest pass by the train window.

**Goukamma Station**

On to Belvedere and the attractive Brenton-on Lake, shoreline suburbs on the Knysna lagoon, until the train crossed the spectacular Knysna estuary before coming to a halt at the Knysna Station right next to the harbour. Passengers then had two hours to walk around or have lunch before they could enjoy the whole scenic journey again. That is going the other way back to George.

**Knysna Station next to the lagoon**

**Knysna Lagoon at sunset**

## 7. A few station names explained

Duiwerivier – “duiwe” is doves. Literally translated Dove River.

Rondevlei –literally “round marsh”. After the nearby lake with the same name.

Dennebos – literally “fir bush”.

Swartvlei – black marsh

Bleshoender – a bird, African Coot or Moorcock

Ruigtevlei – thickly overgrown marsh

Mielierug – maize or mealie, height

Keytersnek – surname Keyter, height

## 8. Rolling Stock

### 8.1 Locomotive

**Class 24**

The **Class 24,** 2-8-4 Berkshire type branch line steam locomotive was designed by Dr. M.M. Loubser, Chief Mechanical Engineer (CME) of the South African Railways (SAR) from 1939 to 1949. The locomotives were built by North British Locomotive Company (NBL) of Glasgow, who delivered one hundred of them in 1949 and 1950. They were withdrawn from service and retired in the mid 1980s. By 2010 preserved Class 24 locomotives included number 3668, which served on the Outeniqua Choo Tjoe tourist line between Knysna and Mosselbaai until the operation was ceased in 2010.

### 8.2 Coaches

**L-32 Suburban Coach**

These metal sheathed wooden commuter coaches disappeared from South African rails during the 1960s and 1970's, gradually getting replaced by all metal coaches with driver-controlled sliding doors.

**O-38 Commuter Coach**

SAR Type O-38, Number range 5917 to 5933, Length over headstocks 63' 5", Height 12' 1 7/16", Width 9' 1 3/4". To seat 98 passengers.

**N7 Guardvan**

Used in conjuction with L-32 and O-38 coaches

## 8.3 Freight Cars

**Class STJ-15**

These wagons appear to have been converted sometime after 1991 from Class ST-3 wagons that entered service between 1979 and 1981. They are bulkhead flat wagons with stanchions to transport logs.

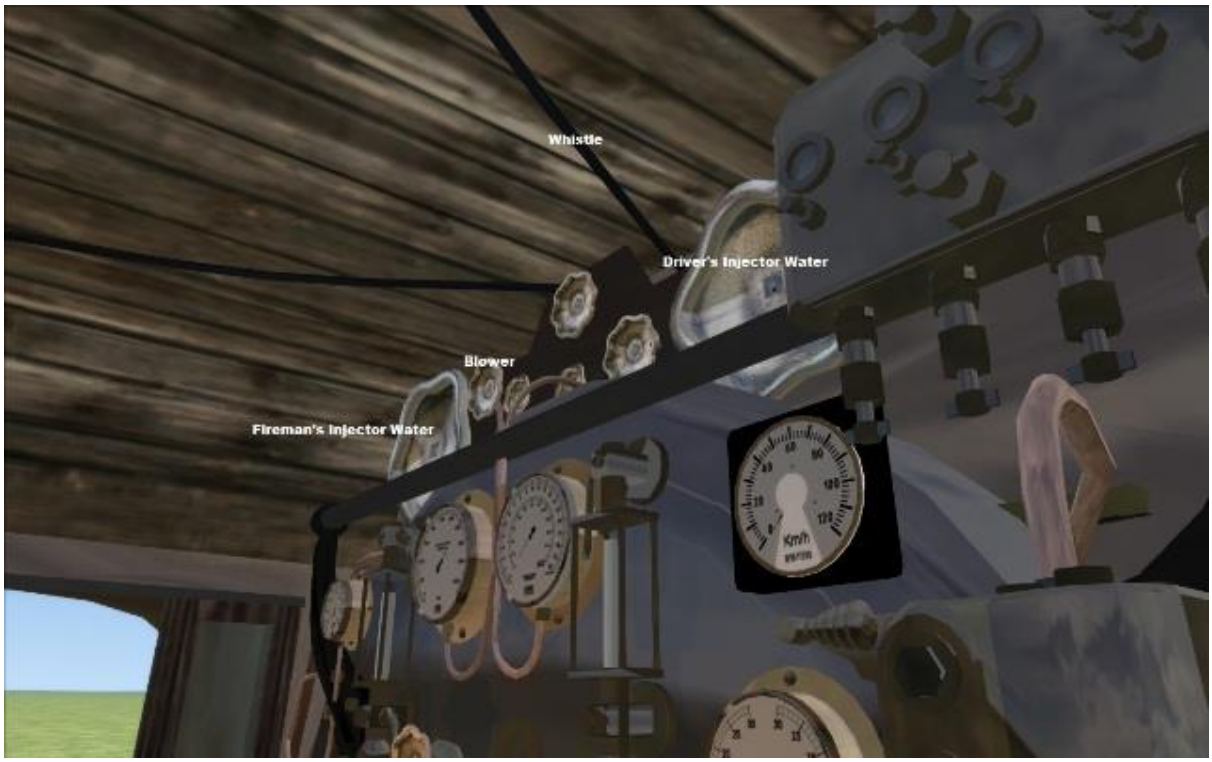
**Class SMJ-2**

Class SM-2 (SMJ-2, SMLJ-2, SM-22, SMJ-22, SMLJ-22) wagons entered service between 1974 and 1979 and were converted from Class FP-5 parcel wagons. They are flat wagons with solid decks and flip-over twist locks designed to transport 8 x 5ft, 4 x 10ft, 2 x 20ft or 1 x 40ft containers. Length over headstocks 12.192m, Length between bogie pivot centres 9.292m, Deck height 1.064m, Width 2.438m, Tare (average) 19,000kg, Load 48,000kg, Deck area 29.7m3

**Class LB-2**

**Class LB-2 garbage wagons.**

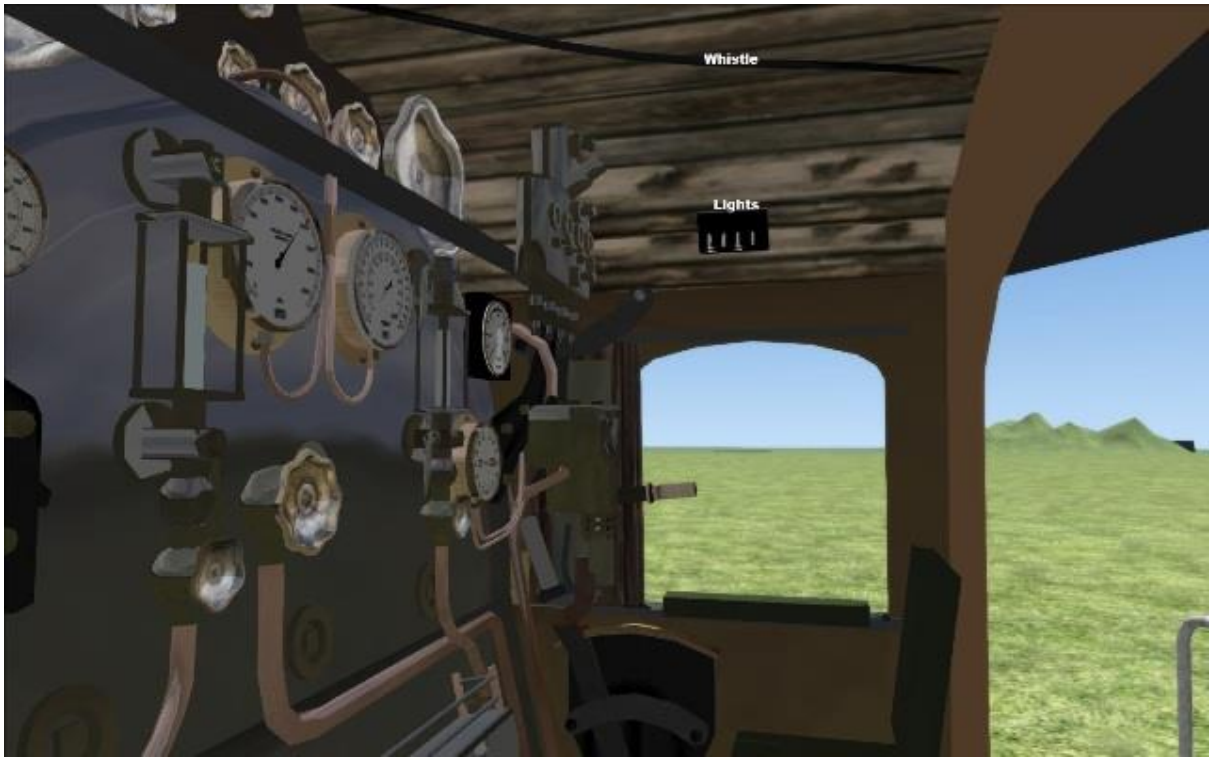
## 9. Class 24 Cab layout





Km/h
Train Brake
Regulator


Sander
Cylinder Cocks
Reverser
Driver Injector water




## 10 Scenarios

10.1. **Free Roam George**: Class 24 available at George.

10.2. **Free Roam Knysna**: Class 24 available at Knysna.

10.3. **Quick Drive** scenarios – various to choose from. Short hops.

10.4. **Career Scenarios**:

10.4.1 A grand morning: Assemble a consist at George to be taken to Knysna later in the day. Duration 25 minutes, Medium.

10.4.2 Choo Tjoe Part 1: Take tourists on a scenic trip from George to Knysna. Duration 150 minutes, Hard.

10.4.3 Choo Tjoe Part 2: Take the same group back to George in the afternoon. Duration 150 minutes, Medium

10.4.4 Pickup Part 1: Pick up rolling stock on the sidings and take it to George. Starting in Knysna, the first part goes as far as Rondevlei. Duration 90 minutes, Medium.

10.4.5 Pickup Part 2: Continue from Rondevlei and end the scenario in George. Duration 75 minutes, Medium.

10.4.6 Grade 7 Excursion: Take a group of Grade 7 learners to George in time for their connecting trip to Oudtshoorn. Duration 80 minutes, Medium.

10.4.7 Stranded: Help stranded passengers at Goukamma to reach Knysna. Duration 45 minutes, Medium.

## 11. Signalling

### 11.1 Showing the speed in kilometre.


### 11.2 Whistle post

### 11.3 Warning Board

Warning Boards are placed at approximately 600m before the entrance to a station or halt. The driver is supposed to sound the whistle, warning the Station Master of his arrival. The driver should be in complete command of his loco at this stage, ready to stop if necessary.

11.4 Waarskuwing (Speed warning)

A yellow sign warning the driver of a “Fixed speed restriction” between two stations or halts (in kilometre). In this case a speed restriction of 40 km/h between Knysna and Brenton.


## 12. Credits

12.1 Route builder Hermann Kühne.

12.2 Rolling stock by Johan Pretorius (Johansteam).

12.3 3DS Modelling for the route by Hermann Kühne and Johan Pretorius.

12.4 Piet Conradie, an enthusiast, for the use of his photos in creating the “Waarskuwing” (speed warning) boards. (11.4)

12.5 DTG and Railworks.