

Report of Lappeenranta city bus cycle: Lappeenranta Route 1

Authors:

Paula Immonen,

Juha Pyrhönen,

Pia Lindh

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Lappeenranta city bus cycle

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Speed data were recorded from a city bus operating the Lappeenranta Route 1 (University–City Centre–Mustola/Kiiskinmäki) in Lappeenranta, Finland. The speed profile of the bus is illustrated in Fig. 1.

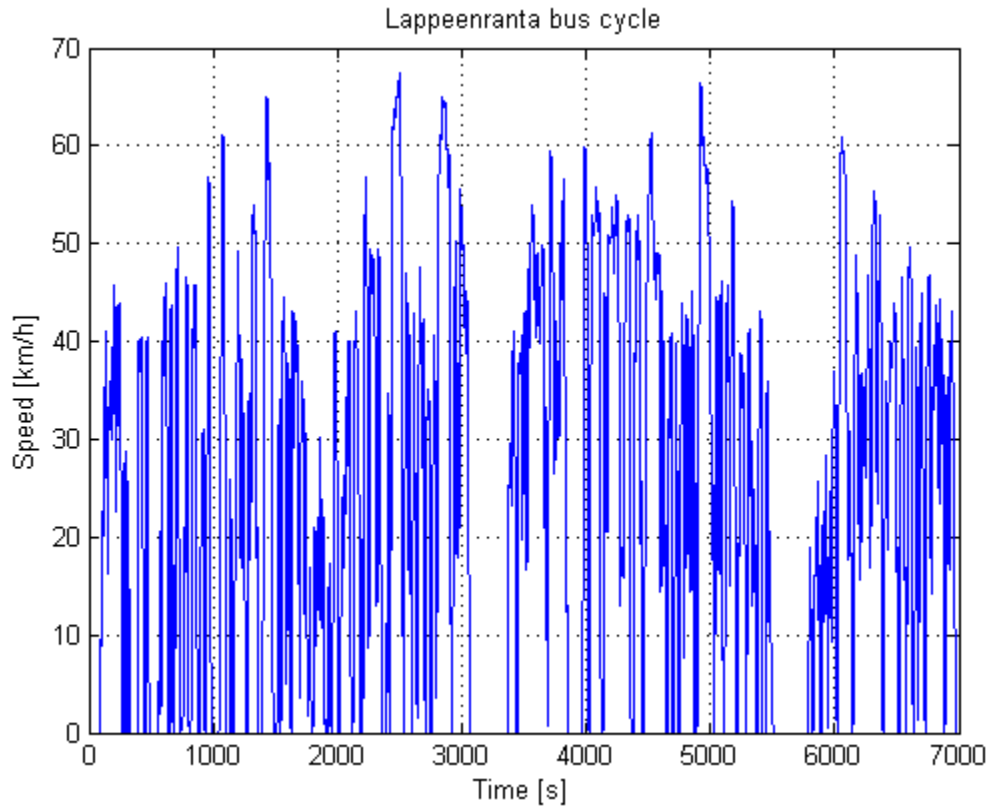


Fig. 1. Speed as a function of time recorded on the Route 1 in Lappeenranta, Finland.

Figure 2 illustrates the height profile of the Route 1 in Lappeenranta.

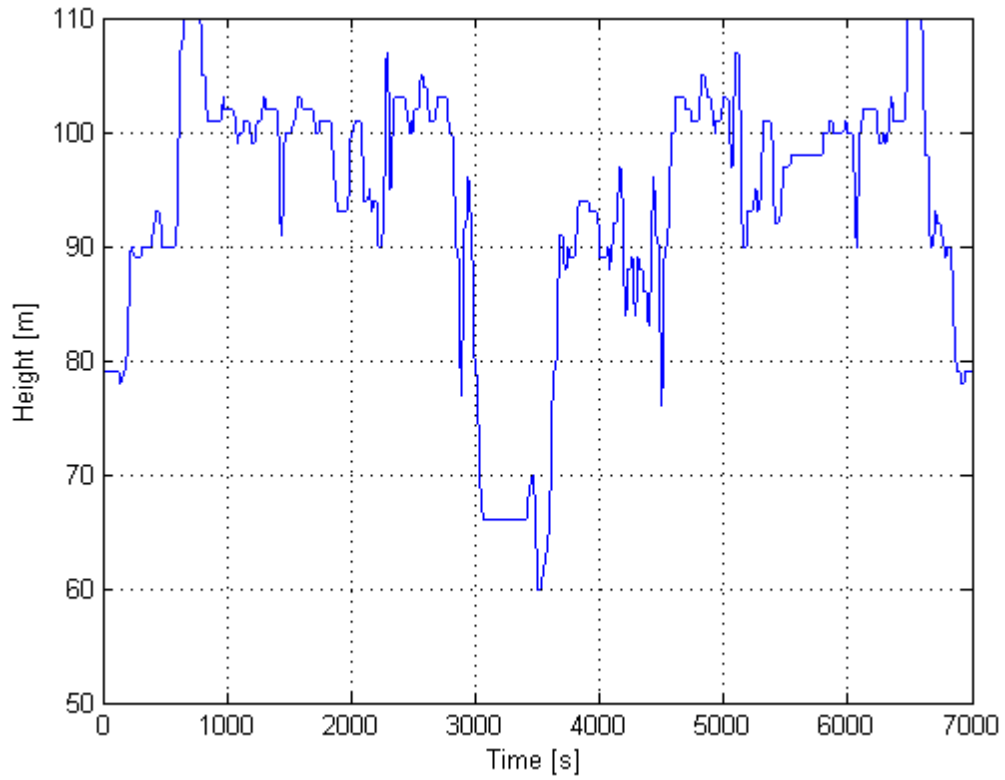


Fig. 2. Height as a function of time recorded on the Route 1 in Lappeenranta, Finland.

The gradient of the drive cycle was defined by the height measured from the drive cycle as a function of time (Fig. 3).

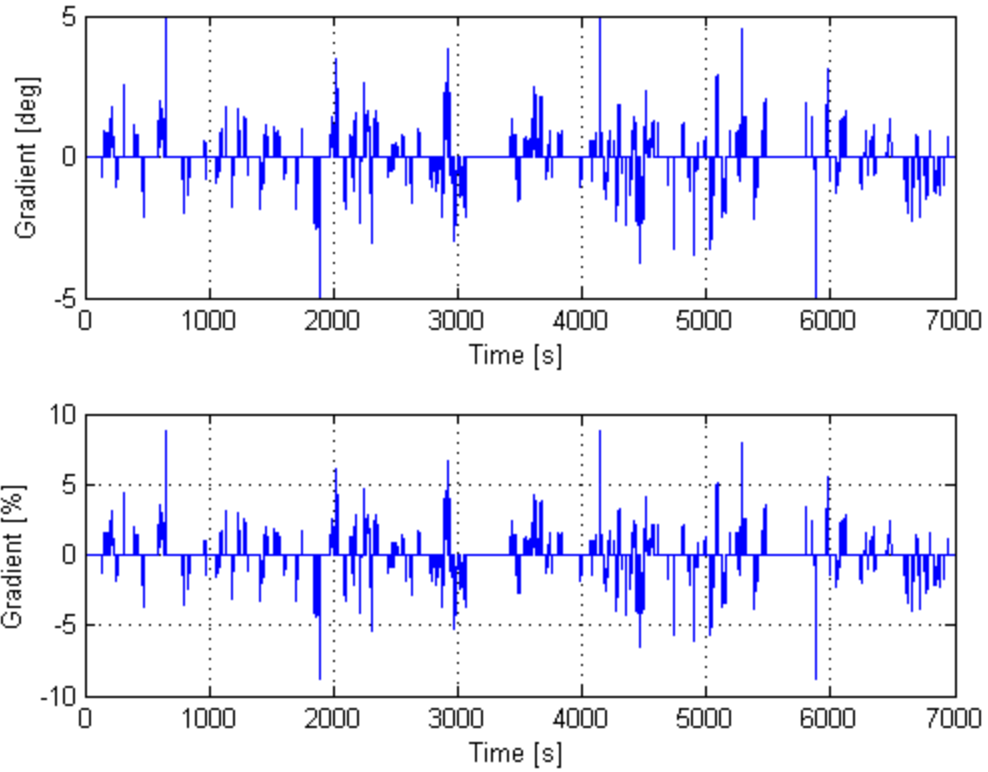


Fig. 3. Gradient of the drive cycle as a function of time recorded on the Route 1 in Lappeenranta, Finland.

Data on the Route 1 bus cycle:

- Duration: 7000 s (1 h 56 min 40 s)
- Distance: 47 km
- Average speed: 24 km/h
- Average speed while driving: 43 km/h
- Maximum speed: 68 km/h
- No-load: 22 % (1511 s)

Figure 4 shows the map of the Route 1 from the University via City Centre to Mustola/Kiiskinmäki.

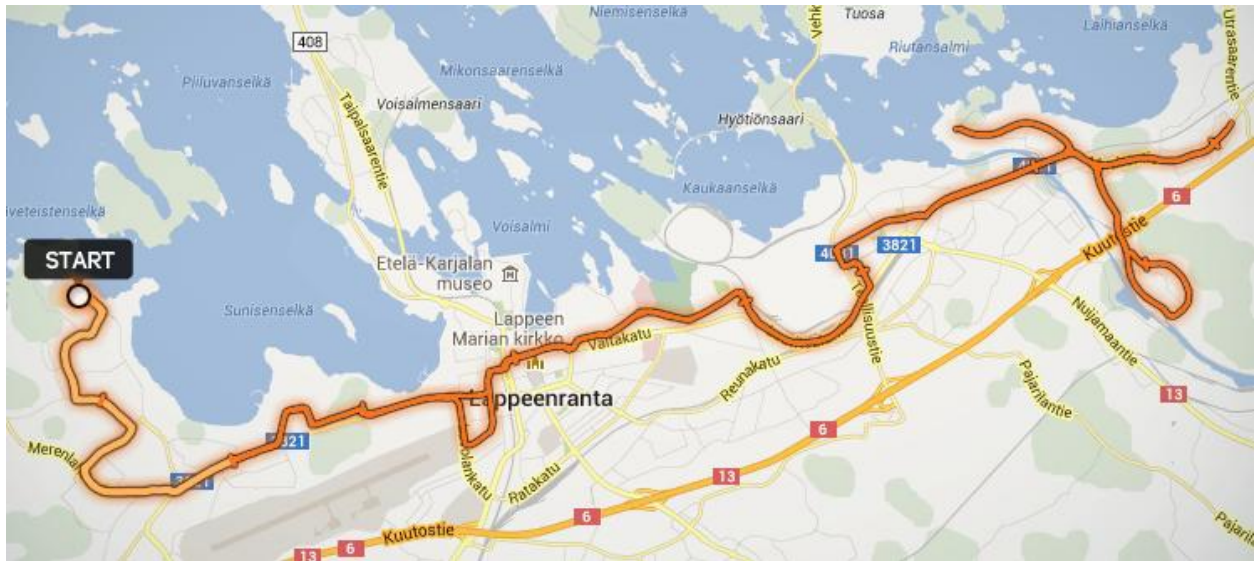


Fig. 4 Map of the Route 1.

The data from the route were recorded by Paula Immonen, Juha Pyrhönen and Pia Lindh in October 2013.