

Accepted Manuscript

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PII: S1618-8667(18)30312-1
DOI: <https://doi.org/10.1016/j.ufug.2018.08.017>
Reference: UFUG 26208

To appear in:

Received date: 15-5-2018
Revised date: 22-8-2018
Accepted date: 24-8-2018

Please cite this article as: Sikorski P, Wińska-Krysiak M, Chormański J, Krauze K, Kubacka K, Sikorska D, Low-maintenance green tram tracks as a socially acceptable solution to greening a city, *Urban Forestry and amp; Urban Greening* (2018), <https://doi.org/10.1016/j.ufug.2018.08.017>

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Low-maintenance green tram tracks as a socially acceptable solution to greening a city

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Highlights

- Low-maintenance green tramways are socially highly acceptable
- City residents perceive green tramways better from a distance than from a close-up
- Vegetation composition of tram tracks undergoes significant changes seasonally and over the course of the year

Keywords: green infrastructure, tram tracks, urban green, extensive management, spontaneous vegetation

1. Introduction

Spatial expansion of cities and increasing number of city dwellers result in an increased demand for efficient transportation (Henze and Model, 2006, Kappis and Schreiter, 2014). There have been many debates on how to reduce the environmental impacts of travelling and ensure a healthy environment for city dwellers (Nieuwenhuijsen, 2016). Common suggestions include increasing urban density (compact cities), reducing travel distance to make cities walkable and cycleable and using more public transport. Such sustainable urban development shortens distances between locations, resulting in a reduced use of energy and other resources and a reduction in emissions (Banister, 2010). Sustainable urban mobility is therefore one of the current priorities for European policy-makers, supporting projects aimed at improving transportation infrastructure (UN-HABITAT, 2016). Policies to develop sustainable transportation systems have led to increases in the numbers of trams and tramlines in many countries (UN-HABITAT, 2016, Henze and Model, 2006, Banister, 2010, Kappis and Schreiter, 2014).

Despite various means of expanding transportation in Europe, many cities continue to develop their tramway systems as one of the most sustainable solutions. Modern tramways are comfortable for

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