Freight transport makes up 16% of all road vehicle activity in UK cities, with lorries and vans performing 30% of their total activity in urban areas. Traffic congestion in central London could worsen by 60% by 2030 with van traffic alone projected to increase by 20% across the capital. In this talk, I will describe an ongoing research project titled FTC2050: Freight Traffic Control 2050 (http://www.ftc2050.com) that investigates the collective transport and energy impacts of current ‘business-as-usual’ carrier activities in London. The aim is to improve carrier collection and delivery schedules by investigating the potential of new business models for reducing localised transport impacts. I will describe the practical challenges faced by our industrial partners, and present our modelling and optimisation work to address these challenges, along with some findings.