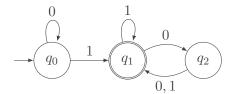
# **Graph labellings**

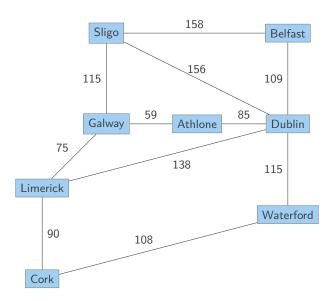
ian.mcloughlin@gmit.ie

## **Example: vertex labelling**

# **Example: edge labelling**



### **Example: weighted graph**



#### **Definitions**

**Vertex labelling:** map from V to a set L.

**Edge labelling:** map from E to a set L.

**Vertex colouring:** map from V to a set L so that no two adjacent elements of V are mapped to the same element of L.

Weighted graph: edge labelled graph where L is a set with an ordering.