Walking speeds in older Irish adults: implications for transport policy

Dr Orna Donoghue
Walking speed depends on:

- Muscle strength
- Balance
- Reaction time
- Vision and hearing
- History of falls
- Fear of falling
- Psychological factors
- Cognitive function
6 seconds
Start to cross
Continue but do not start
1.2 metres per second
Walking speed declines with age

Walking speed (m/s)

Age group (years)

Usual walking speed (men)

Usual walking speed (women)

Dual task walking speed (men)

Dual task walking speed (women)
1 in 3 adults over 65 do not have enough time to cross the road

% walking slower than 1.2 m/s

Age group (years)

Men
Women
3 in 4 adults over 65
do not have enough time to cross the road

% walking slower than 1.2 m/s

Age group (years)

Men Women

50-54 55-59 60-64 65-69 70-74 75-79 80+

0 10 20 30 40 50 60 70 80 90 100
How many people does this affect?

1 in 3 of the over 65s (Irish)
180,000

1 in 3 of the over 65s (tourists)
200,000
What can be done about this?

PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME
How many people will be able to cross if the duration of the amber light is increased?

![Graph showing the percentage of people unable to cross the road at different age groups and crossing speeds.]
How much additional time is needed to allow Irish adults enough time to cross the road?
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![Graph showing the relationship between additional time required (seconds) and road width (m) for different age groups. The graph includes two lines: one for 70 years and one for 60 years. The x-axis represents road width in meters, ranging from 6 to 14, and the y-axis represents additional time required in seconds, ranging from 0 to 8. The graph illustrates that as road width increases, the additional time required also increases, and the lines for 70 and 60 years diverge, indicating different requirements for each age group.](image-url)
How much additional time is needed to allow Irish adults enough time to cross the road?

![Graph showing the additional time required (seconds) for different road widths (m) for 75, 70, and 60 years old adults. The graph indicates an increase in the required time as the road width increases.]
How much additional time is needed to allow Irish adults enough time to cross the road?

![Graph showing the relationship between additional time required (seconds) and road width (m) for different age groups (80 years, 75 years, 70 years, and 60 years).]
How much additional time is needed to allow Irish adults enough time to cross the road?

- 85 years
- 80 years
- 75 years
- 70 years
- 60 years
Recommendations

- Pedestrian light settings should meet the guidelines & provide consistent messages in theory and in practice
  - Dublin City Council
    - Increased duration of amber light on >30 crossings
    - Introduced new policies
    - Data driven tool to assess impact of changes to the light settings

- Multidisciplinary approach to assess the wider impact on traffic flow, driver behaviours and feasibility of changes in pedestrian light settings
  - Demonstration/feasibility projects

- Education and awareness campaign
  - What the pedestrian light signals mean
  - Distractions when crossing the road
  - Pedestrian behaviour