



Estimating Local Road Safety Targets

Presented to: Traffic Management Workshop 2007

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Background

- **Road Safety to 2010**
 - <300 fatalities and
 - <4,500 hospitalisations
 - per annum by 2010
- **Mike Brazil:**
 - *How do I know if my [local road] network is actually playing its part [in achieving Road Safety 2010], and*
 - *What [reduction] should I be aiming at locally?*



Problems

- **RS 2010 defined by Health outcomes**
- **Monitored regionally**
- **Health data doesn't include location**
- **Multiple RCAs in most regions**

- **Not that well understood by network "managers"**
- **To easy to blame other RCAs in a region**

- **Lack of local "ownership"**



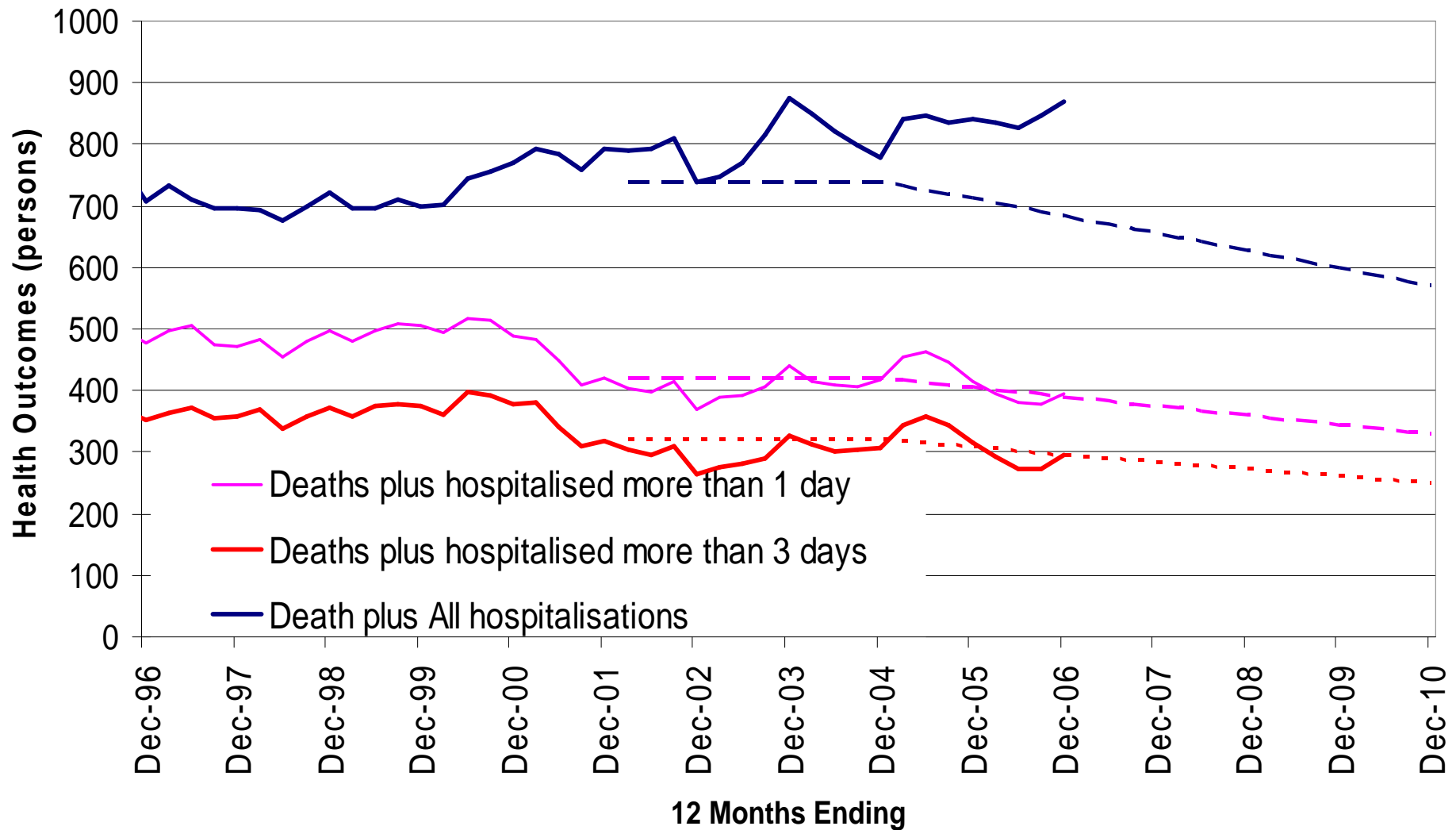
Solution

- **Estimate an equivalent local crash target**
- **Based on:**
 - Relationship between regional health outcomes and regional crashes
 - The respective contribution of each RCA to regional crashes
 - The regional RS2010 health targets

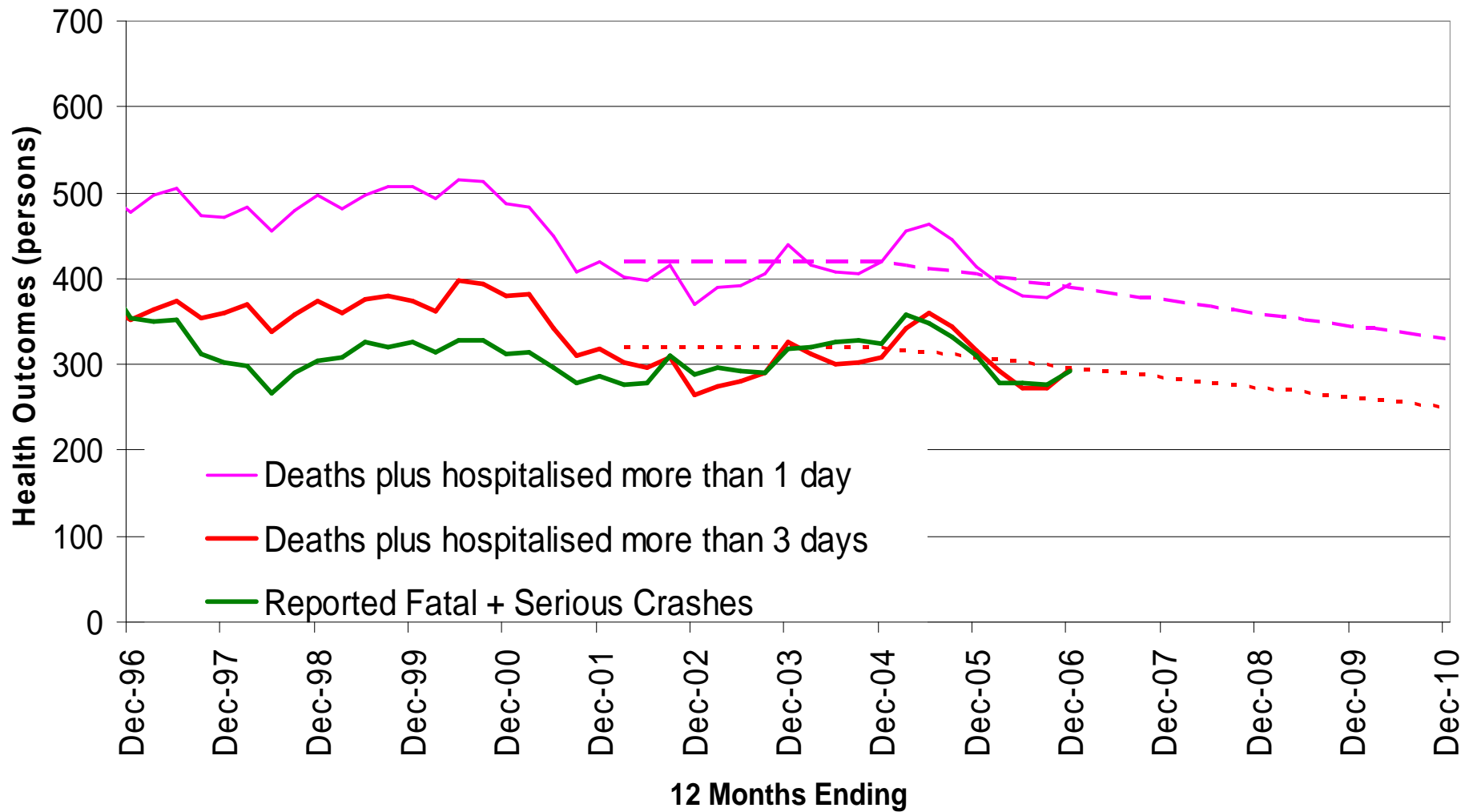


| Region | Deaths | Deaths plus Hospitalisations | Deaths plus Hospitalisations for over 1 day | Deaths plus Hospitalisations for over 3 days |
|--------------------|-----------|------------------------------|---|--|
| Northland | 22 | 340 | 150 | 100 |
| Auckland | 49 | 1640 | 690 | 490 |
| Waikato | 57 | 570 | 330 | 250 |
| Bay of Plenty | 29 | 380 | 210 | 130 |
| Gisborne | 3 | 50 | 30 | 20 |
| Hawkes Bay | 14 | 190 | 110 | 70 |
| Taranaki | 11 | 100 | 60 | 40 |
| Manawatu/Wanganui | 28 | 300 | 190 | 130 |
| Wellington | 20 | 240 | 150 | 90 |
| Nelson Marlborough | 9 | 110 | 60 | 40 |
| West Coast | 7 | 70 | 30 | 20 |
| Canterbury | 31 | 530 | 300 | 210 |
| Otago | 13 | 190 | 110 | 80 |
| Southland | 7 | 110 | 70 | 40 |

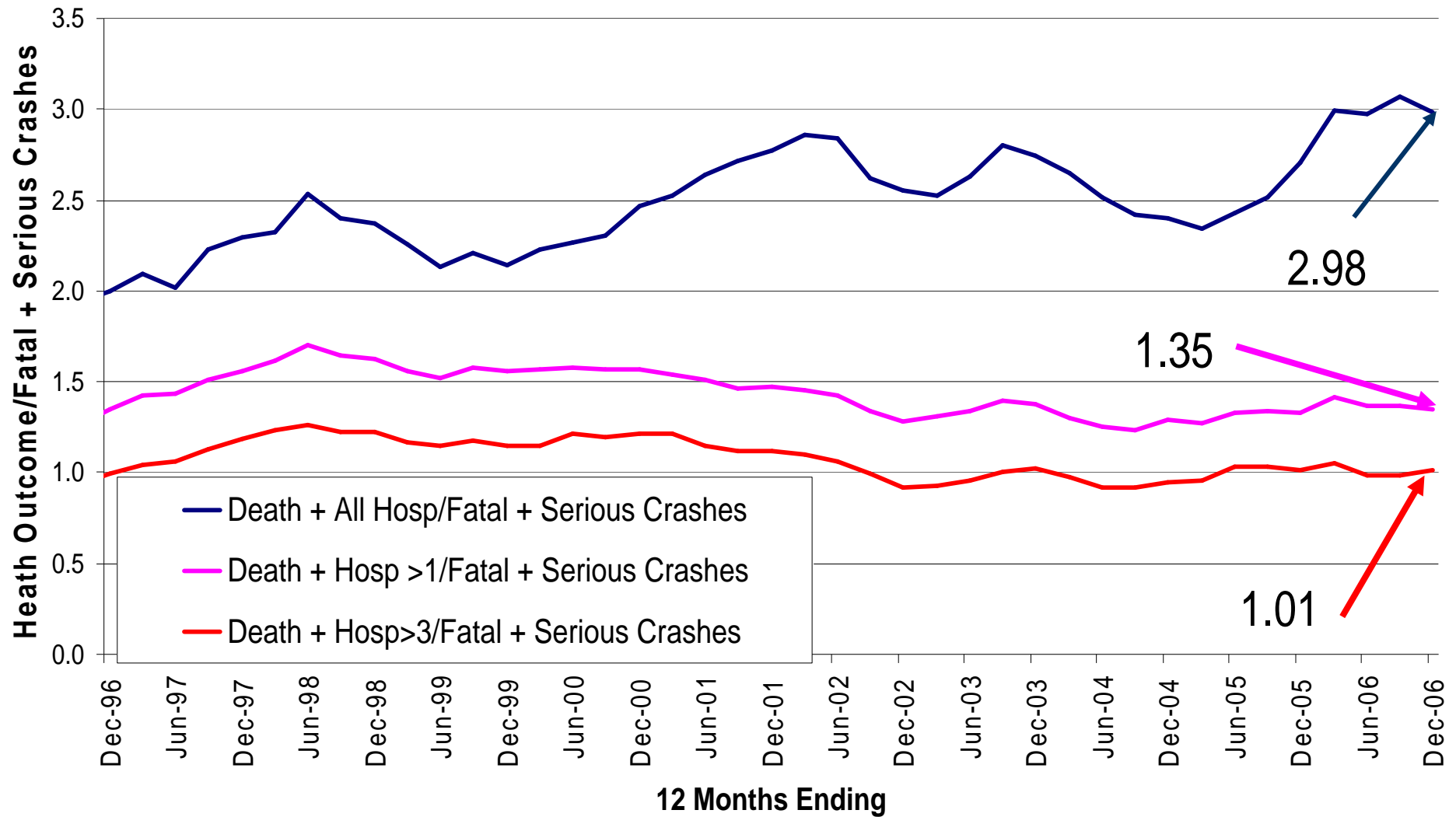
Health Outcomes Waikato Region



Waikato Region



Waikato Health Outcome/Crashes



2010 Waikato Crash Targets

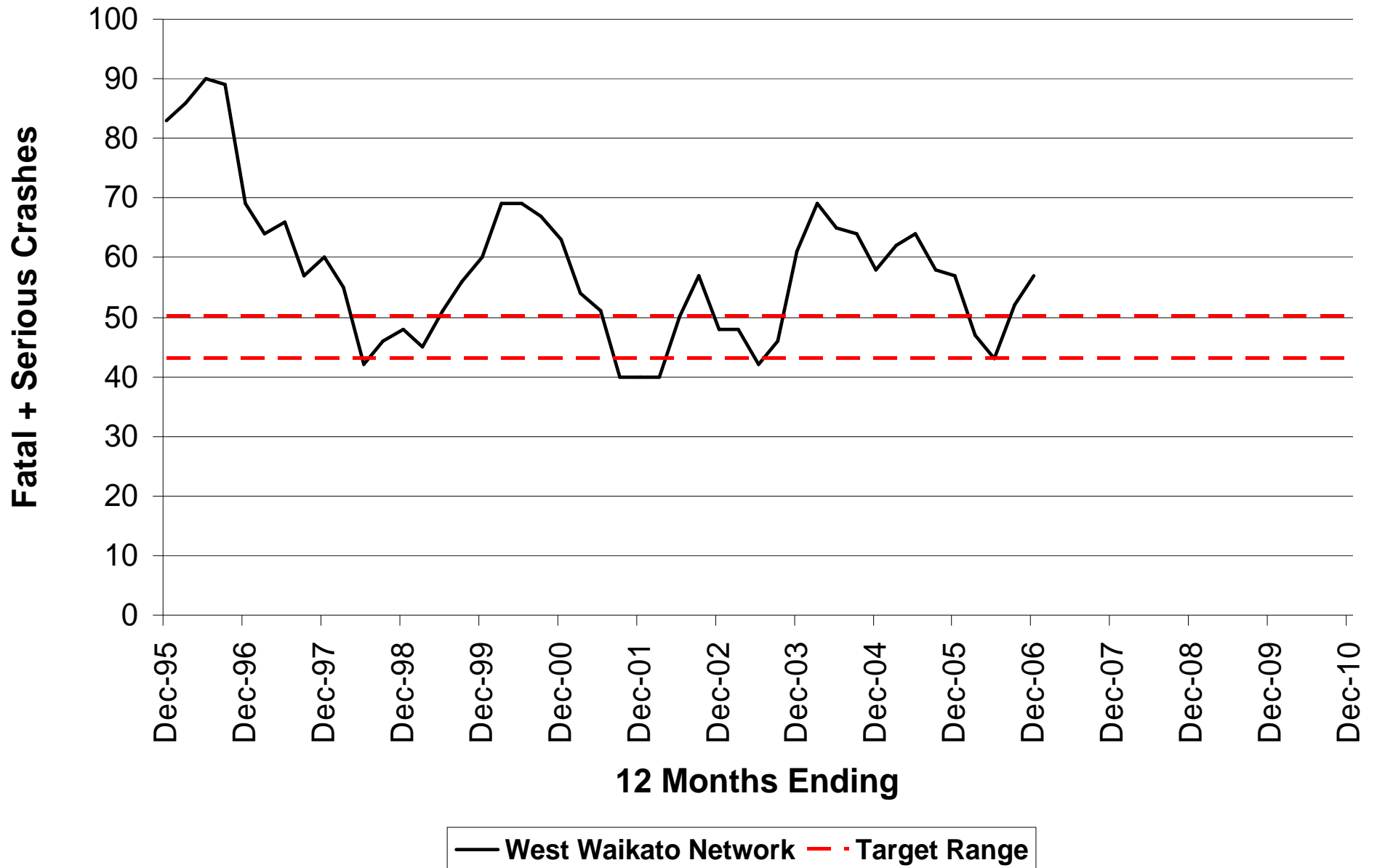
- **Death + Hospitalisation**
 - $570/2.98 = 191$ Fatal + Serious Injury Crashes
- **Death + Hospitalisation > 1 day**
 - $330/1.35 = 245$ Fatal + Serious Injury Crashes
- **Death + Hospitalisation > 3 day**
 - $250/1.01 = 247$ Fatal + Serious Injury Crashes
- **Lets Call It **246** Fatal and Serious Crashes**



Local Crash Targets

- Simply the proportion of the Region when 2010 was set

| Network | 2000 | 1999-2001 | 2000 | 1999-2001 |
|------------------|------|-----------|------|-----------|
| Central Waikato | 13% | 15% | 33 | 37 |
| East Waikato | 18% | 15% | 43 | 37 |
| West Waikato | 20% | 18% | 50 | 43 |
| | | | | |
| Hamilton City | 9% | 10% | 23 | 25 |
| Taupo District | 3% | 3% | 7 | 8 |
| Waikato District | 9% | 8% | 21 | 19 |
| Waipa District | 4% | 5% | 10 | 12 |
| | | | | |



Summary

- **Possible to estimate a local 2010 target**
- **Why**
 - Monitor performance
 - Identify gap ($7 / 0.38 = 19$)
 - Drive programmes
 - Focus on F + S sites
 - New thinking
- **Issues**
 - Changes over time
 - Can be in terms of persons (fatalities and serious injuries)

