Management by objectives for road safety work in Sweden

Anna Vadeby, PhD
Researcher in traffic safety
VTI, Swedish National Road and Transport Research Institute
Outline

Background
• Road safety organisation and Vision Zero

Process towards a new management model and interim targets 2020
• Stakeholder collaboration
• Goals and Performance indicators
• Annual follow up

Critical success factors

Results from the follow up April 2013
Road Safety Organisation

Ministry of Enterprise, Energy and Communications has strategic responsibility

Swedish Transport Administration (STA) has overall operational responsibility

Swedish Transport Agency has responsibility for legislation

Group for National Road Safety Co-operation
  • (STA, Police, Local Governments and NGOs, …)
Background – Vision Zero

The overall road safety philosophy in Sweden, established through a parliamentary resolution in October 1997

Relies on two basic approaches:
1. care of human life and health is considered to be more important than anything else
2. the responsibility should be shared by the road users and the system designers

The design of the system should take into account how much force a body can tolerate and still survive

The long term goal is that no one should be killed or seriously injured in road traffic

- First interim target 2007 (max 270 road deaths)
Development of fatalities -2007

Number of fatalities from 1996 to 2007, showing an actual trend and an old milestone.
Findings from evaluation of road safety work towards the interim target 2007

1. Involvement and undertaking - missing
2. Connection to own operation – low
3. Annual follow up – unclear
Process towards a new management model and interim targets 2020

1. Multi-stakeholder approach
   Collaboration where everybody shares the same goal

2. Connection to own operation
   Several interim targets and monitoring of Road Safety Performance Indicators for better evaluation

3. Annual follow up of results
1. Multi-stakeholder approach – Cooperation at conception

Group lead by STA, regular meetings 7 – 8 times/year.

- The Swedish Transport Administration
- The Swedish Transport Agency
- Ministry of Enterprise, Energy & Communications
- The National Police Board
- Sweden’s municipalities and county councils
- Toyota Sweden AB
- Folksam
- The National Society for Road Safety
- Swedish Work Environment Authority

- Swedish Taxi Association, Swedish Bus & Coach Federation and Swedish Association of Road Haulage Companies
2. Connection to own operation
Monitoring road safety developments

Stakeholder measurements

- Management system
  - Example: ISO standard

Measures

- Speed cameras

RSPI:s

- % of traffic complying with speed limits

Consequence

- Number of deaths in traffic
Interim targets

Target year 2020
- Possibility för minor revisions yearly
- Reviews 2012 and 2016
- Adapted to other political objectives (climate targets, economic policy, EU-target)

Interim target for fatalities and serious injuries
- Maximum 220 deaths the year 2020 (under revision)
- The number of seriously injured should be reduced by 25 % during the same time period.
Performance Indicators
- updated 2013, after a review 2012

1. Speed compliance, state roads
2. Speed compliance, municipal streets
3. Sober drivers
4. Seat belt use
5. Helmet use (bicycle, moped)
6. Safe passenger cars
7. Safe PTWs (ABS)
8. Safe state roads
9. Safe municipality streets – pedestrian passages across streets
10. Maintenance of cycle paths and pedestrian walkways
Indicators with greatest potential to reduce the number of deaths

- Speed compliance, state roads
- Speed compliance, municipal streets
- Safe passenger cars
- Safe state roads
3. Annual Follow-Up

Annual result conferences (April)

• Development towards the interim targets
• Written report from the Group of analysts
• Result are made public through these conferences
• Participants at high management level
• Presentation of stakeholder activities
• Some years: Comments/suggestions from international road safety experts
Group of analysts

Group consisting of members from:

- Swedish Transport Administration
- Swedish Transport Agency
- Swedish National Road and Transport Research Institute (VTI)

Mission:

- Follow up and analyse the development of performance indicators.
- Propose necessary adjustments
- Present results at the annual result conference
Critical success factors

Need for decisions and commitment on a state authority level

Several measures can only be decided by state authorities
- Sufficient funds for necessary measures
- Bicycle law for all
- Review of current driver training, etc.

Stakeholder cooperation, ensures a professional handling of strategic decisions in the field of road safety.

Management by objectives relies on the fact that all relevant parties make commitments and set their own goals. Shared responsibility
Annual follow up April 2013: Development of fatalities -2012
# Performance indicators and their targets, - 2012

<table>
<thead>
<tr>
<th>Road Safety Performance Indicator</th>
<th>Starting position</th>
<th>2012</th>
<th>Goal 2020</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of killed</td>
<td>440</td>
<td>286</td>
<td>220</td>
<td>In line with required trend</td>
</tr>
<tr>
<td>Number of seriously injured</td>
<td>5 500</td>
<td>4 400</td>
<td>4 100</td>
<td>NOT in line with required trend</td>
</tr>
<tr>
<td>Speed compliance, state roads</td>
<td>43 %</td>
<td>46 %</td>
<td>80 %</td>
<td>First year of measurement</td>
</tr>
<tr>
<td>Speed compliance, municipality roads</td>
<td>63 %</td>
<td>63 %</td>
<td>80 %</td>
<td>First year of measurement</td>
</tr>
<tr>
<td>Sober drivers</td>
<td>99,71 %</td>
<td>99,77 %</td>
<td>99,90 %</td>
<td></td>
</tr>
<tr>
<td>Seat belt wearing (front seat)</td>
<td>96 %</td>
<td>98 %</td>
<td>99 %</td>
<td></td>
</tr>
<tr>
<td>Helmet wearing, cyclists</td>
<td>27 %</td>
<td>33 %</td>
<td>70 %</td>
<td></td>
</tr>
<tr>
<td>Helmet wearing, mopedists</td>
<td>96 %</td>
<td>96 %</td>
<td>99 %</td>
<td>First year of measurement</td>
</tr>
<tr>
<td>Safe passenger cars (5 star Euro NCAP)</td>
<td>20 %</td>
<td>46 %</td>
<td>80 %</td>
<td></td>
</tr>
<tr>
<td>Safe PTWs (ABS)</td>
<td>9 %</td>
<td>28 %</td>
<td>70 %</td>
<td></td>
</tr>
<tr>
<td>Safe state roads</td>
<td>50 %</td>
<td>71 %</td>
<td>75 %</td>
<td></td>
</tr>
<tr>
<td>Safe pedestrian passages</td>
<td>Ca 25 %</td>
<td>–</td>
<td>–</td>
<td>To be decided</td>
</tr>
<tr>
<td>Share of municipalities with good maintenance of bicycle/walk paths</td>
<td>-</td>
<td>–</td>
<td>To be decided</td>
<td>-</td>
</tr>
</tbody>
</table>
Thank you for listening!

Questions:
annavadeby@vti.se
ylva.berg@trafikverket.se