



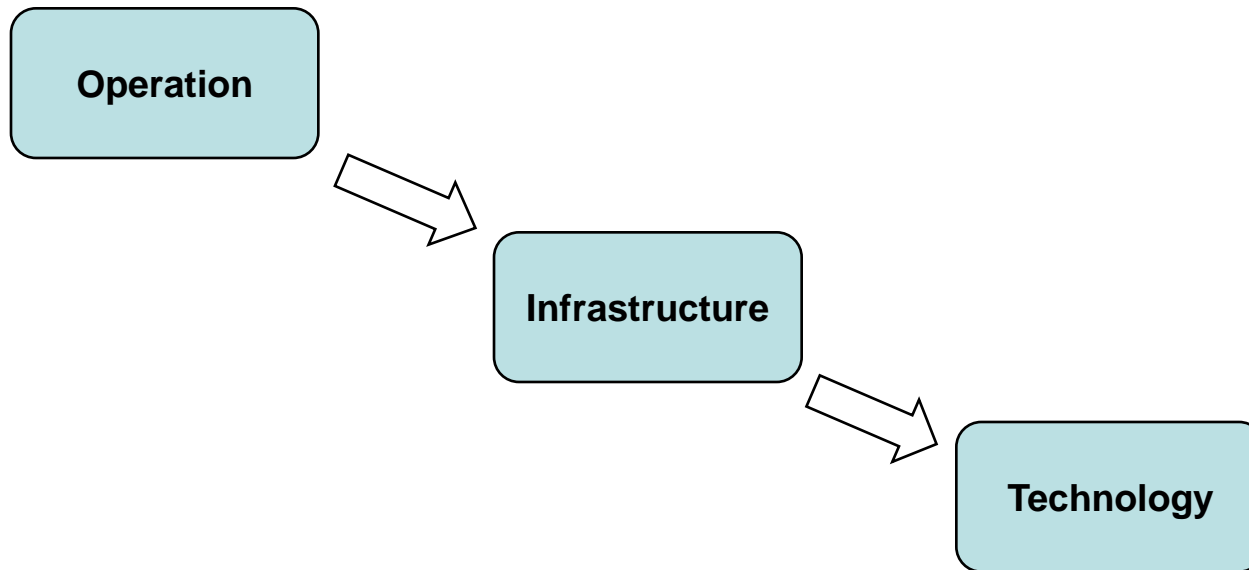
**OPERATIONAL SAFETY RISK**



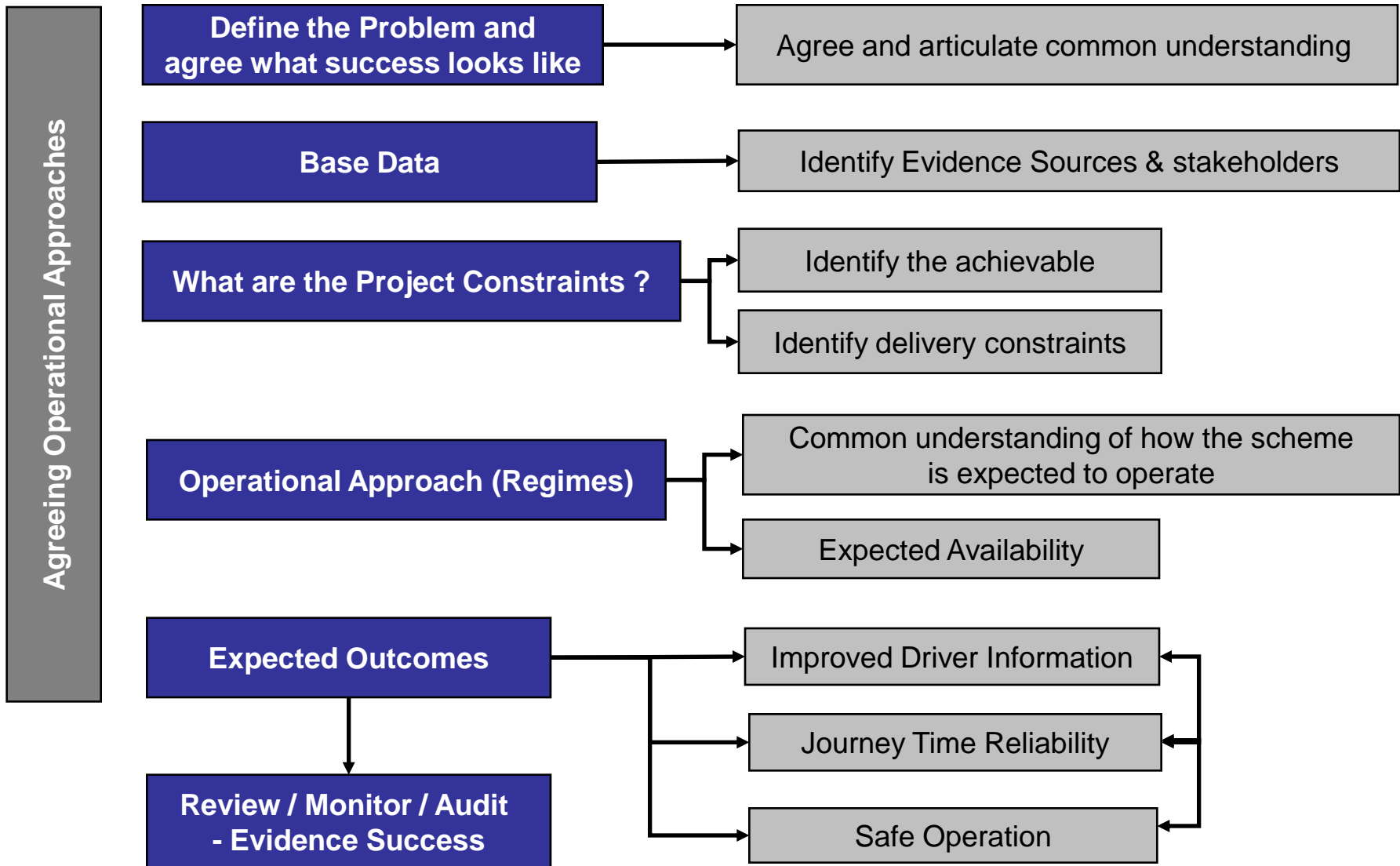
- Ltd experience of similar schemes
- Acceptance of operational principles
- Maintenance / controlled access to infrastructure
- System fail safe
- Road User Education
- Emergency Services Access

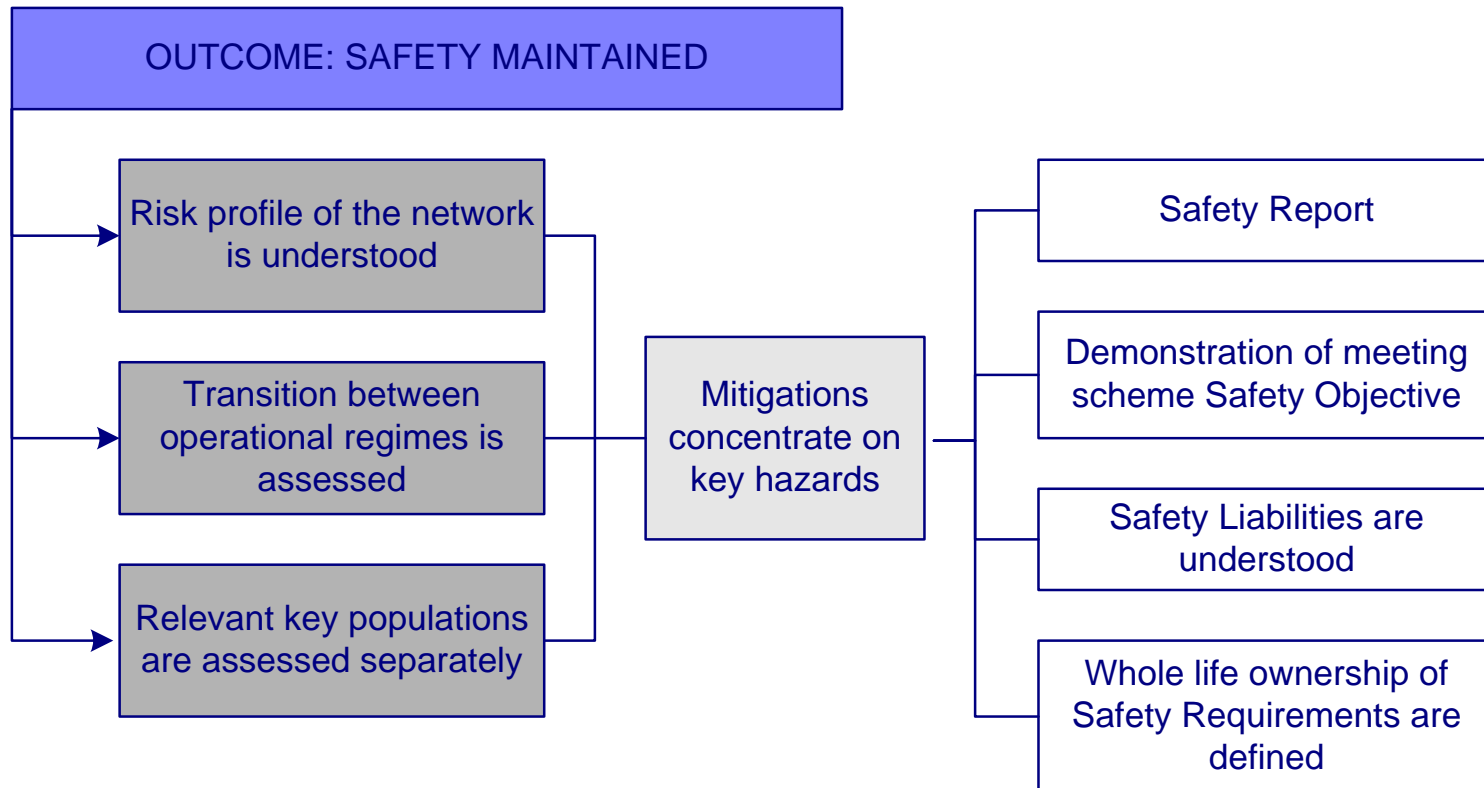


## Approach to Dynamic Road Management

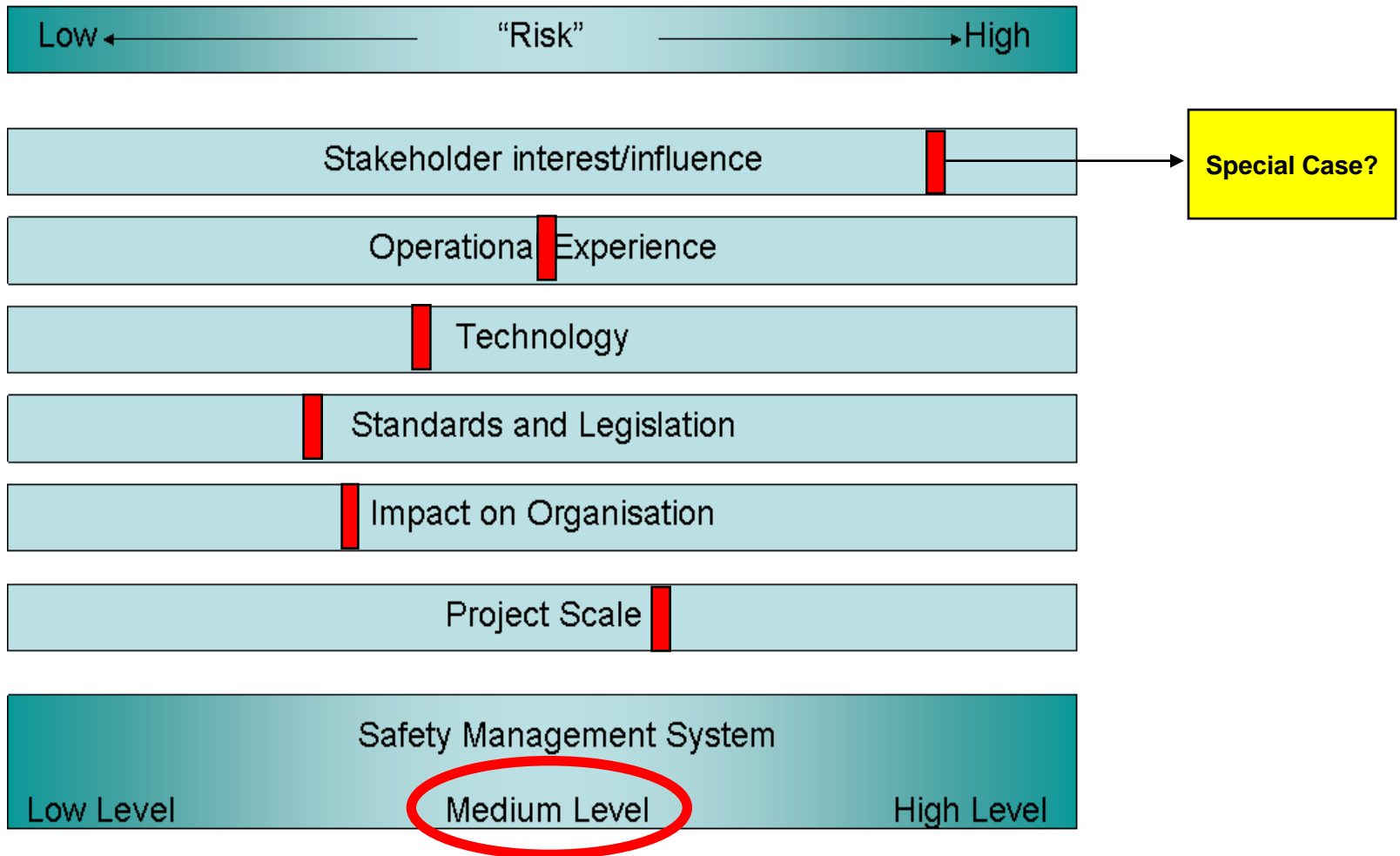


# DEFINE SUCCESS





# Safety Management System (SMS) - Selection



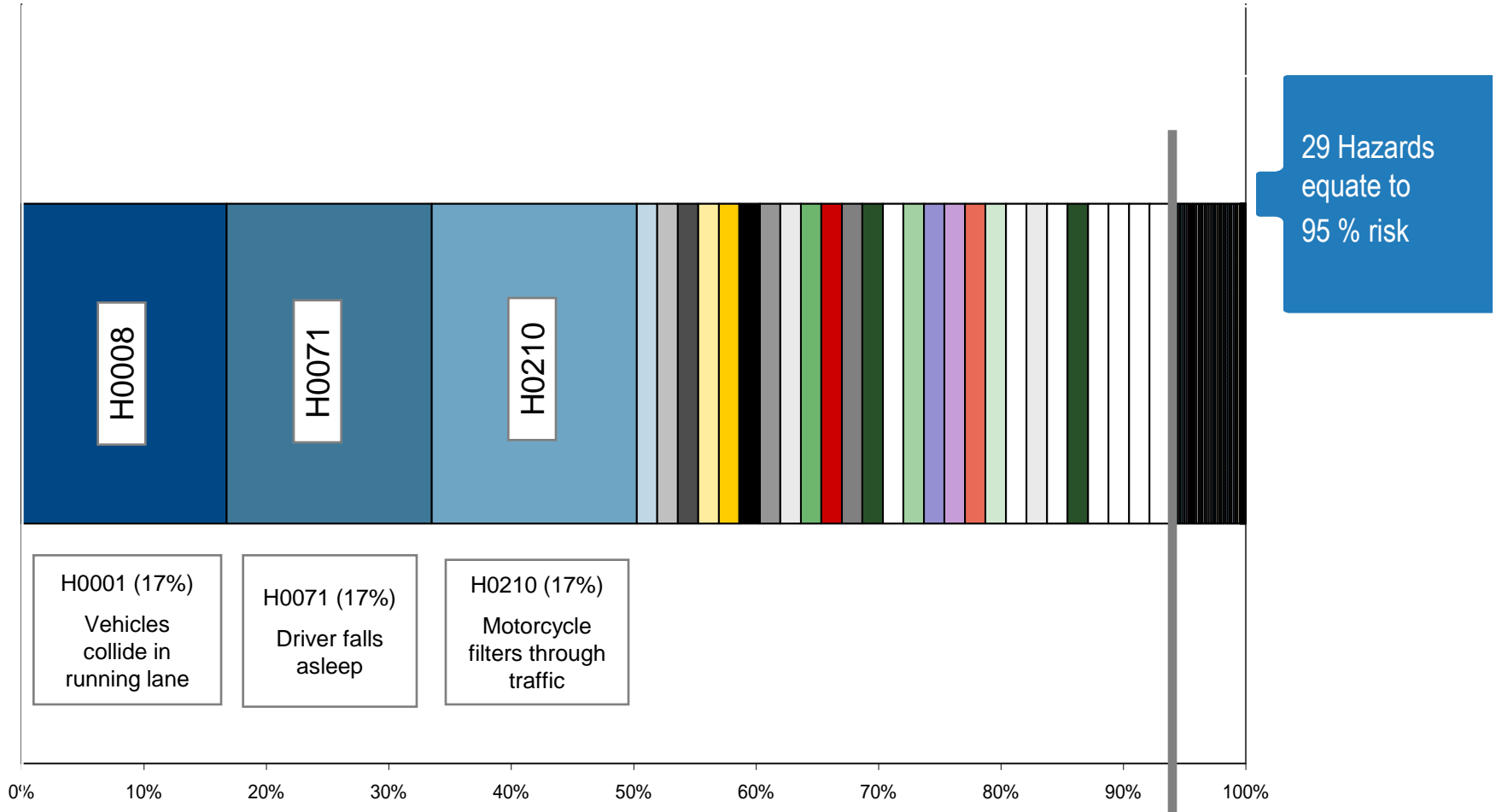
### Key Safety Lifecycle Stages



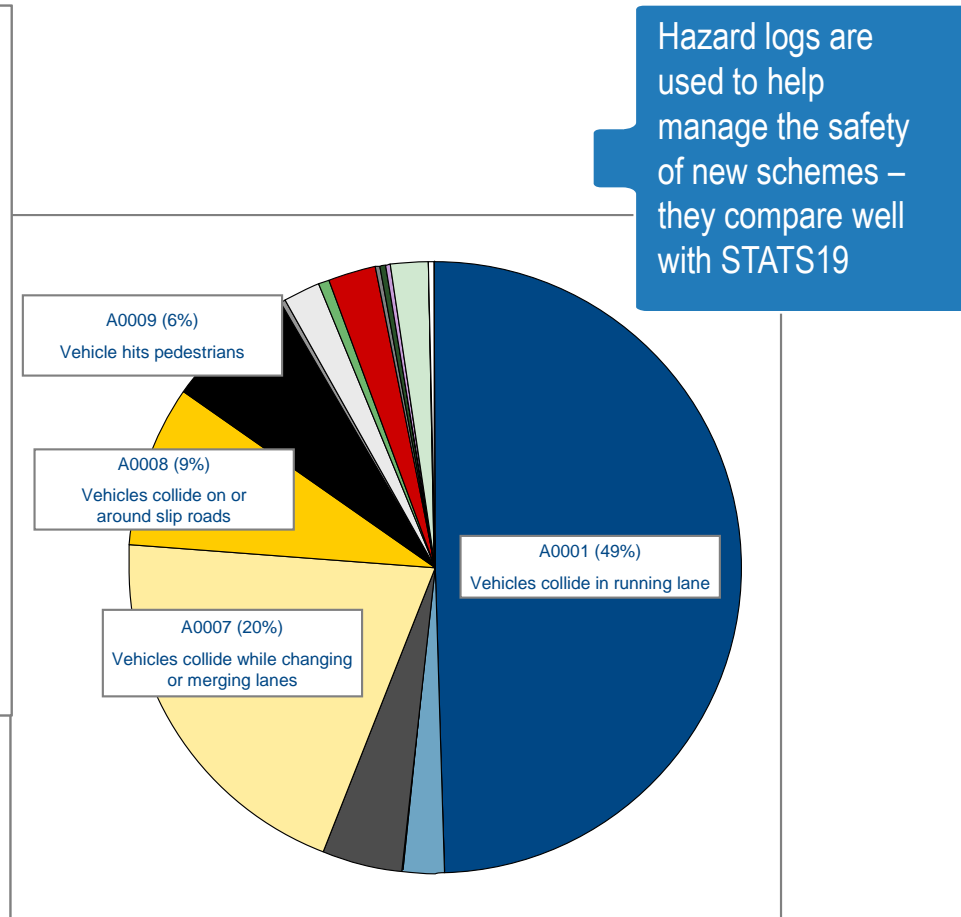
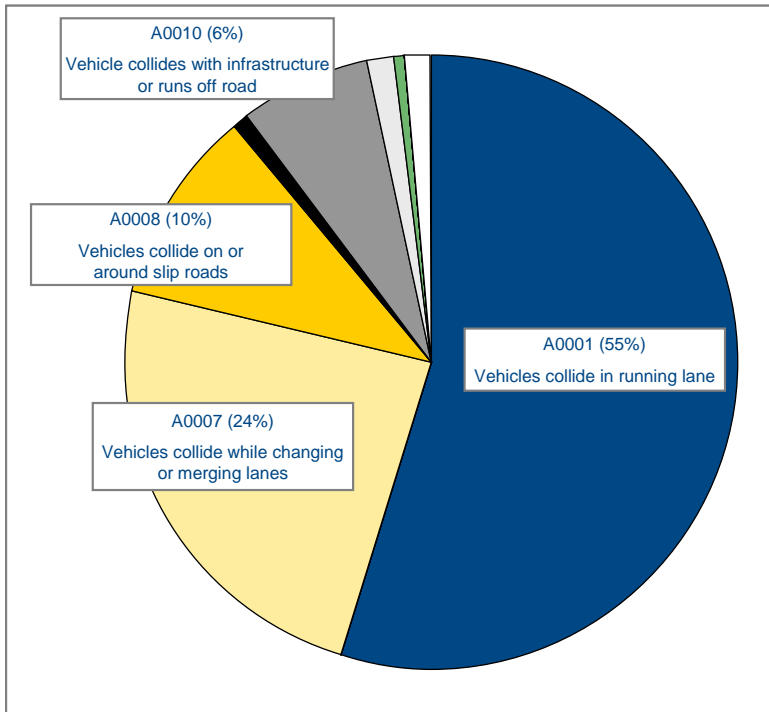
### Project Lifecycle



- Use of a Project wide hazard log
- Hazard Control Review Committee
- Risk assessment methodology
- Management of all hazards
- Analysis of hazards that are new, increased or decreased
- A specification of design and operational requirements needed to control safety







Hazard logs are used to help manage the safety of new schemes – they compare well with STATS19

# MANAGED MOTORWAYS - HAZARD LOG

**Detail**

You are in [Hazards](#) | [View Hazard](#)

**Summary**


Id: H129  
 Name: Vehicle stops in running lane  
 Description: This hazard applies to any stoppage in a running lane.  
 Class:  
 Type: EVENT  
 Status: core

[Edit](#) [Delete](#) [Change Log](#)

**Related Hazard Score**

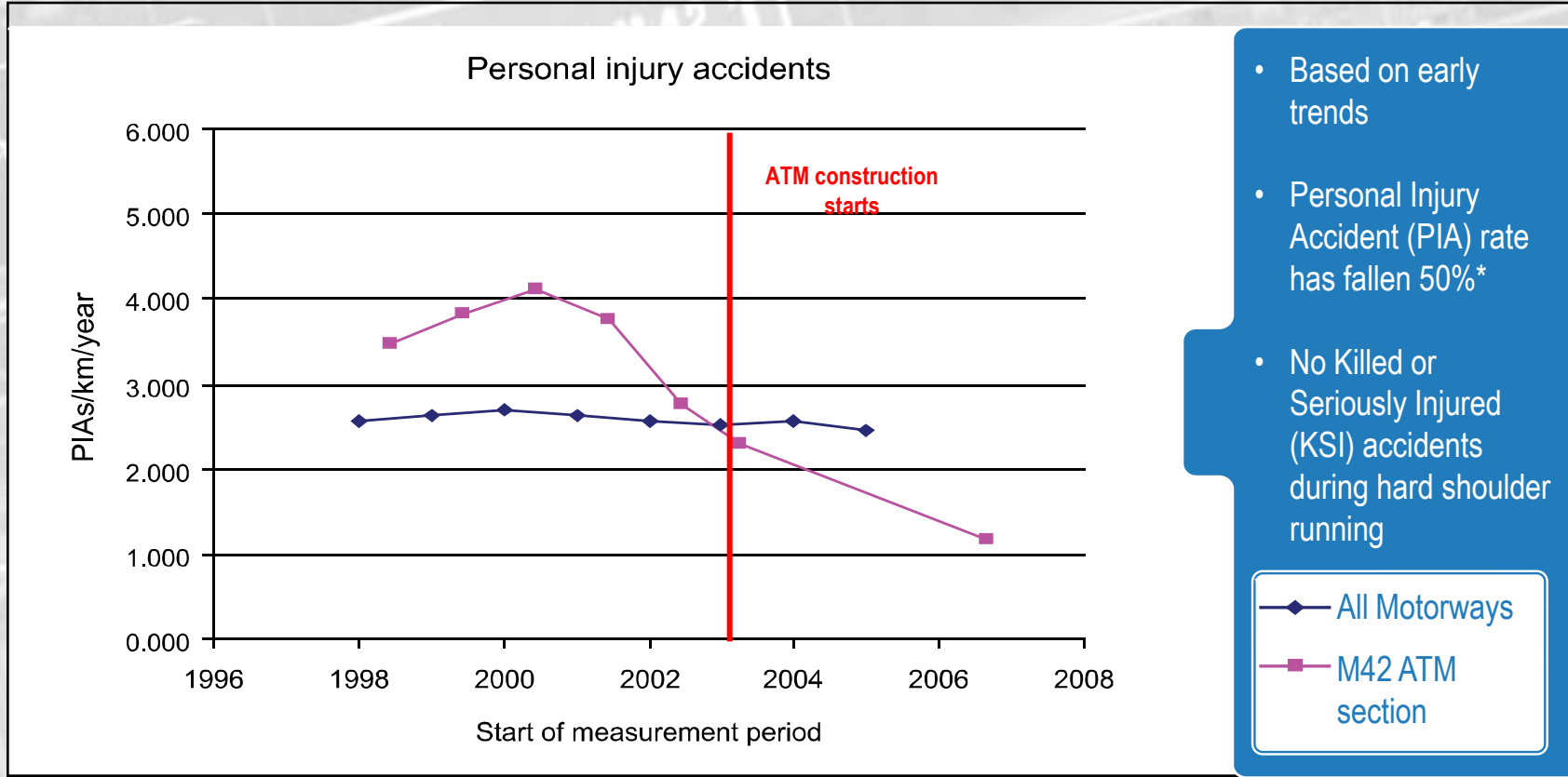
Hazard Id	Frequency	Collision Probability	Severity	Comparative Risk To Baseline	Risk Score Before	Risk Score After	Score Status	Is New	Is Removed	Ch. Id
H129		2	2.0				open	false	false	7

**Related Incidents**











Id	Incident	Relationship Status	Change Id	
I18	Vehicles collide in running lane	proposed	10	

- For Managed Motorways, a hazard log is provided, pre-populated with the incidents, hazards and causes that are known to be associated with MM schemes
- Pre-populated with the probability that hazards lead to an accident and severity of accidents
- Project specific responsibility to complete the entry of required information into the hazard log – including project-specific frequency of hazards





# SUMMARY

-  **Start by understanding the problem**
-  **Define what success looks like**
-  **Understand how the network will operate**
-  **Safety is key and drives the design**
-  **Stakeholders can make or break it**
-  **Minimise points of failure**
-  **Whole life design**
-  **Monitor and review – create the evidence base - inform and shape the future**

# Create an Intuitive Environment and Anticipatory Behaviour



**Active Traffic  
Management**

**Follow  
overhead  
instructions**