



## HVSIA consists of a consortium of all HVS owners and operators.

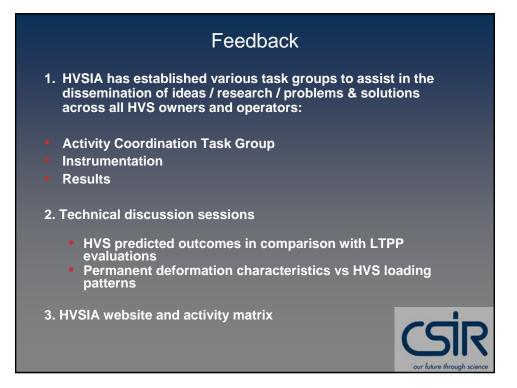
- Meet annually
- 2009 meeting hosted by EDRC at WES
  - (Chaired by Don Alexander)

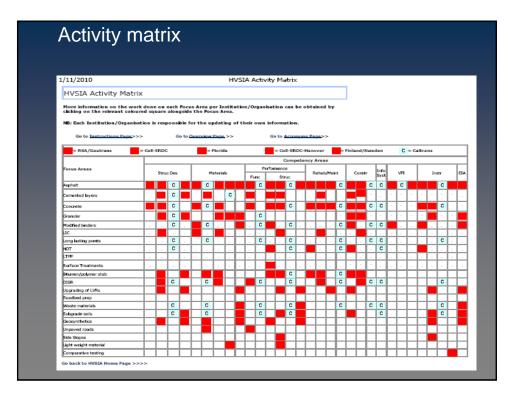
Presentations from all the HVS facilities:

- UCD
- ERDC:
  - Cold regions Research facility
  - Waterways Experimental Station
- Florida
- Sweden

- CSIR, South Africa
  Gauteng, South Africa
  Feedback about progress on the Indian and Chinese HVS programmes







Focus area activities: Concrete pavement testin	g			
Focus Area	Description	Activities	Results	
Concrete				
Reports for Focus area: Concrete pavement test	ing			
Focus Area	Report No	Author(s)	Date of Issue	
Assessing Appropriate Loading Configuration in Accelerated Pavement Testing	Proceedings, 2 nd intl Conference on APT, Minneapolis , MN	Tom Byron, Bouzid Choubane & Mang Tia	September 2004	
Evaluation of Early Strength Requirement of Concrete for Slab Replacement Using APT	Final Report, UF Project No 49104504972-12	Mang Tia, Wasantha Kumara	March 2005	
Analysis of Composite Pavements Under Static and Moving Wheel Loads From a Heavy Vehicle Simulator	Proceedings of Intl. Conference on Best Practices for Ultrathin and Thin Whitetoppings	Wasantha Kumara, Mang Tia, Chung Wu & Bouzid Choubane	April 2005	
Evaluation of Application of Ultrathin Whitetopping in Florida	TRR 1823	Wasantha Kumara, Mang Tia, Chung Wu & Bouzid Choubane	January 2003	

11/2010		HVSIA Instrum	entation Matrix	¢				
HVSIA Instrumentat	ion Matrix							
HV51A Instrumentat	оп мастя							
fore information on the Inst ploured block below.	rumentation and or	Systems per Ins	ititution/Organi	isation can be ol	otained by clicking	on the releva		
	PROGRAMME							
PARAMETER	RSA/ Gautrans	Florida	Caltrans	Finland/ Sweden	CoE-ERDC	CoE-ERDC -Hanover		
Structural	p							
Permanent deformation	dx							
- Surface			С		×	×		
- In-depth		×	С		×	×		
Elastic deflection				×				
- Surface		×	С	×	×	×		
- In-depth		×	С		×	×		
Strain	×		С		×	×		
Stress	×		С		×	×		
Stiffness								
Environmental		<u>.</u>						
Temperature			C		×	×		
Moisture	×	×	С		×	×		
Functional								
Data Acquisition System (DAQ)			C		×	×		
Load			С					



## Significant Outcome

 Pavement Design Catalogue based on all performance data collected from all HVS sites on all materials types

Traffic [E80s]	0.003 to 0.01 FDOT	0.01 to 0.03 <i>Gauteng</i>	0.03 to 0.1 <i>Gauteng</i>	0.1 to 0.3 <i>FDOT</i>	0.3 to 1 Gauteng	1 to 3 <i>VTI</i>	3 to 10 Caltrans
AC surfacing Granular base	30 A 50 A	73 10 10 10 10 10 10 10 10 10 10	0000 0000	50 A 50 A	St Meshered Cards	20 AC(80) 20 O 0 O 0 O 0 O 0 O 0 O 0 O 0 O	90 AG 71 DGAC 0
Layers	100 AC 265 limerock 305 granular WET	30 S 150 weathered granite 620 weathered granite WET	40 AC 150 G4 100 G8 150 G9 200 G9 DRY	100 265 limerock 305 granular AC DRY	30 S 150 weathered granite 620 weathered granite DRY	50 AC 250 G2 Fine sand <b>DRY</b>	90 AG 78 DGAC 349 G2 In situ clay DRY



