LTPP SPS Traffic Pooled Fund Study

Opportunities & Challenges

A States Perspective

Introduction

- Rich Rogers – Who is he?
  - USAF & TxDOT
    - 22 years – pavement arena
    - 7 years - collecting, analyzing & reporting traffic
- Opportunity is here – Are you ready?

Background

- For the past twenty years, most state highway agencies have been trying to do more and more with less and less
- There are some opportunities that can help you get more to do more

Challenges

- Are resources getting harder to come by and demands for traffic data ever increasing?
- There is a big difference between calibration and evaluating the performance of WIM and VC equipment
- Do we know the quality of the WIM and VC systems that we have?
- HPMS has placed emphasis on continuous VC & no longer requires random WIM site selection

Challenges - continued

- Urban area air quality issues has greatly increased the need for quality VC information to evaluate conformity
- How important is WIM and VC data for LTPP SPS 1,2,5 & 6 pavement performance analysis?
- How important is pavement condition at WIM and VC system sites?

Challenges - continued

- We will not be able to afford the collection of quality WIM and VC traffic throughout our highway system, but we can determine what sites are needed to get the most for our limited dollars
- What traffic is needed to support AASHTO 2002 pavement design?
- We need to know the quality of the traffic we are collecting if we are to improve the quality of our traffic forecasts

Opportunities

- 100% Federal SPR dollar$ are eligible for the Traffic Pooled Fund Study that includes:
  - Performance evaluation of WIM and VC systems (consistently applied across the nation, LTPP lane only)
  - Construction of PCC pavement section (up to two lanes and shoulders)
  - Data Collection (all lanes)

Opportunities - continued

- Other highway agency dollar$ can be used in the Traffic Pooled Fund Study for:
  - Performance evaluation of WIM & VC systems
    - In non LTPP lanes
    - Comparison of additional WIM systems
  - Procurement, installation & maintenance of WIM system sensors in non LTPP lanes

Opportunities - continued

- The importance, to pavement designers of research quality WIM and VC traffic to support:
  - LTPP pavement performance analysis
  - AASHTO 2002 Pavement Design

Opportunities - continued

- The LTPP Traffic Pooled Fund Study will demonstrate:
  - The importance of pavement smoothness and pavement condition
  - Why WIM & VC system calibration is not enough– we need to measure the system performance
  - Ways to improve WIM & VC system performance

Opportunities - continued

- Further LTPP analysis can demonstrate:
  - How much WIM & VC traffic is needed to reliably predict pavement performance
  - The benefit of knowing the reliability of the traffic has on our ability to improve traffic forecasts

We have the justification

& the tools

let’s take the steps

Steps

- Get the support of pavements staff
- Fund the initial WIM site performance evaluations ($15,000 per site)
- Construct PCC sections & establish utilities (if needed
- Fund or install WIM system (if needed, $75,000)
- Fund follow up WIM site performance evaluations