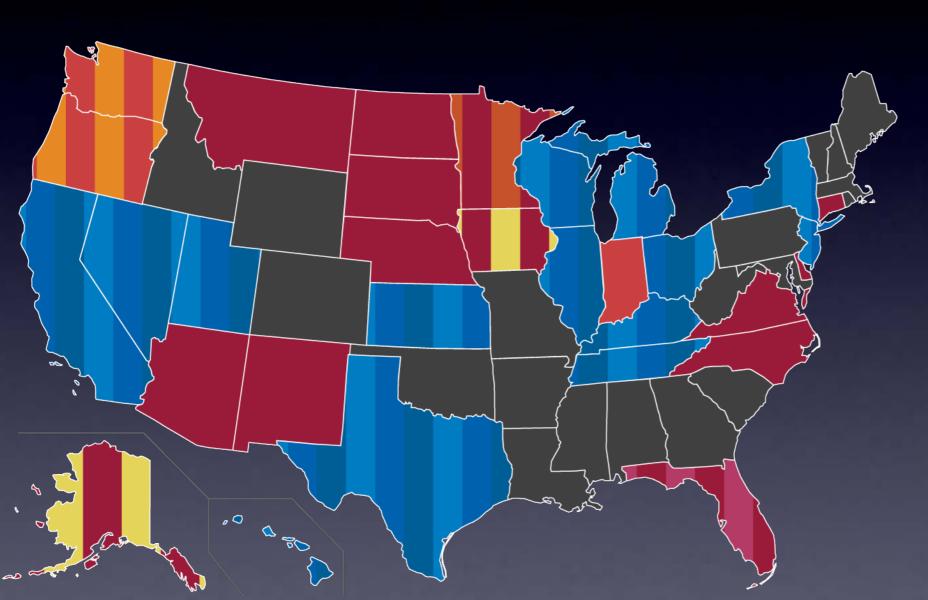


Mandli Communications, Inc.

Mandli's Experience



Alaska Asset Extraction Photolog

Arizona Photolog

California Photolog Pavement LiDAR

Connecticut Photolog

Delaware Photolog

Florida Pavement Photolog

Hawaii Asset Extraction Photolog Pavement LiDAR

Illinois
Asset Extraction
Photolog
Pavement

Indiana Bridge Collection

lowa Asset Extraction Photolog

Kansas Asset Photolog Bridge Collection

Kentucky Asset Extraction Photolog Pavement Bridge Collection

Michigan Asset Extraction Photolog Pavement

Minnesota Photolog Montana Photolog Nebraska

Nevada Asset Extraction Photolog Pavement LiDAR Bridge Collection

Photolog

New Jersey
Asset Extraction
Photolog

New Mexico

New York Asset Extraction Photolog Pavement Bridge Collection

Retroreflectivity

N. Carolina Photolog

N. Dakota Photolog Ohio

Asset Extraction Photolog Bridge Collection

Oregon LIDAR Bridges S. Dakota

Photolog

Tennessee
Asset Extraction
Photolog
Pavement
LIDAR
Retroreflectivity
Bridge Collection

Texas
Asset Extraction
Photolog
LiDAR
Retroreflectivity
Bridge Collection

Utah Asset Extraction Photolog Pavement

Virginia Photolog

Washington LiDAR Bridge Collection

Wisconsin Asset Extraction Photolog Pavement LiDAR Bridge Collection

> LEGEND ASSET EXTRACTION

PHOTOLOG

PAVEMENT

Lidar

RETRO-REFLECTIVITY

BRIDGES

3 OR MORE SERVICES

(video place holder)





LCM

S







- High resolution transverse profiling system
- Acquires 4 meter width images with 3D profiles of lanes
- Deliverable at FHWA HPMS standard
- Collected rutting, distress (linear, cracking, and area cracking), and slope of road
- Integrated LCMS data with LiDAR data

Project Scope





- Route driven from South Dakota to Wisconsin
- All data collected around 62 mph
- Slight configuration of data by Mandli to turn it into deliverable format
- Did calibrations everyday
- All data sets and deliverables had assigned GPS
- About 876 total miles traveled



Deliverables





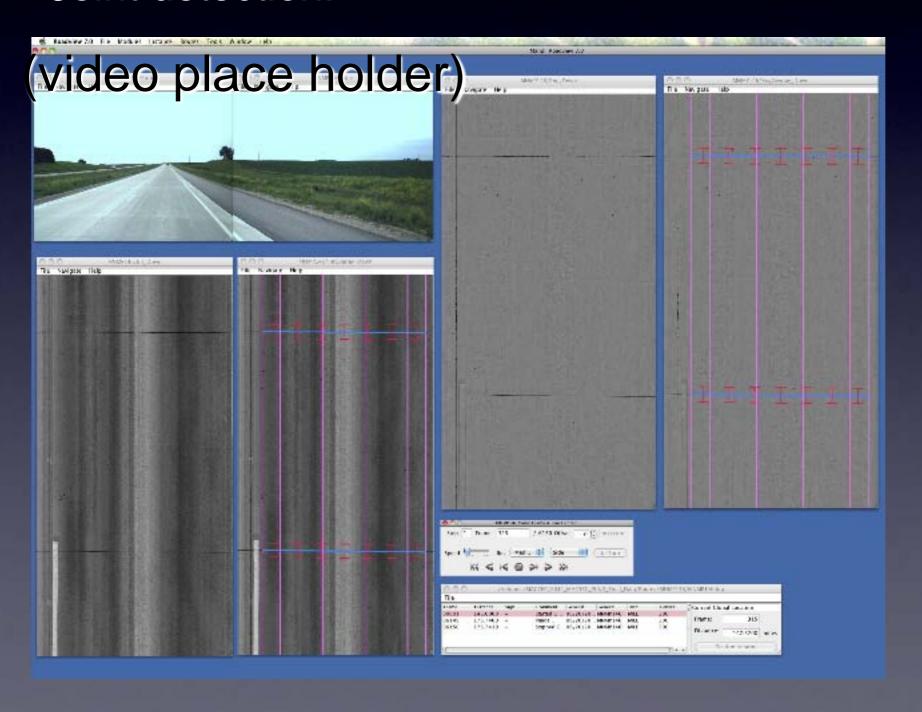
- Rutting
- Road Joints
- Transverse cracks
- Slope of road
- Consistent, repeatable data

Deliverables





Joint detection:

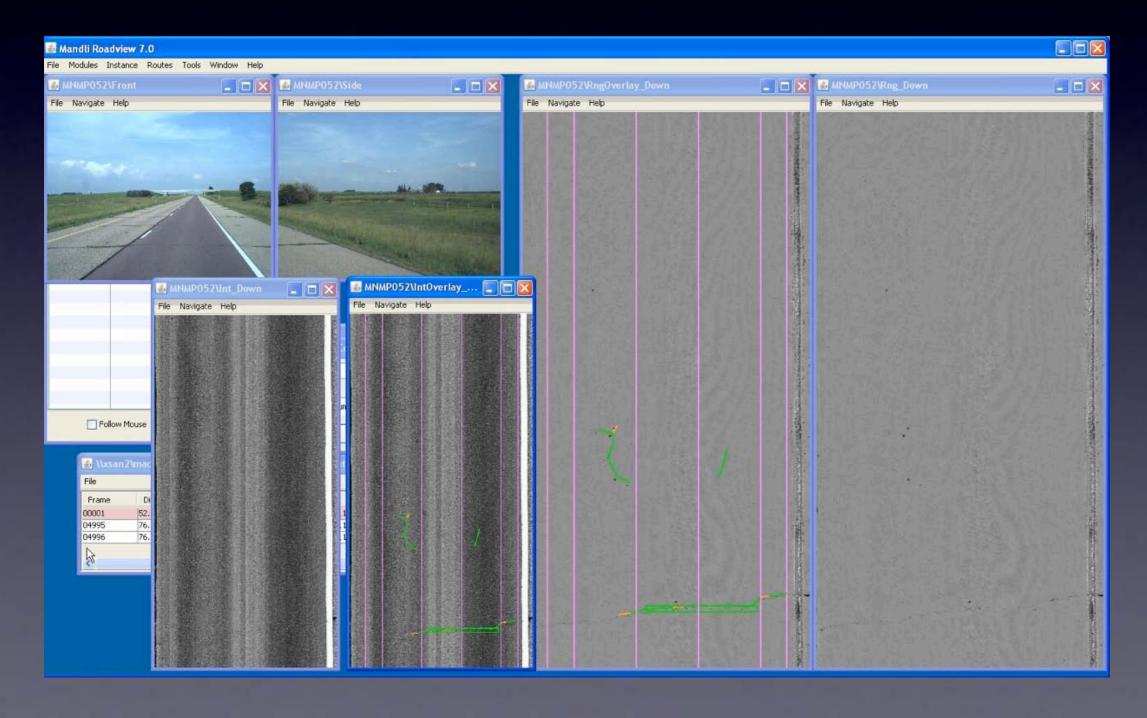








Transverse crack detection:

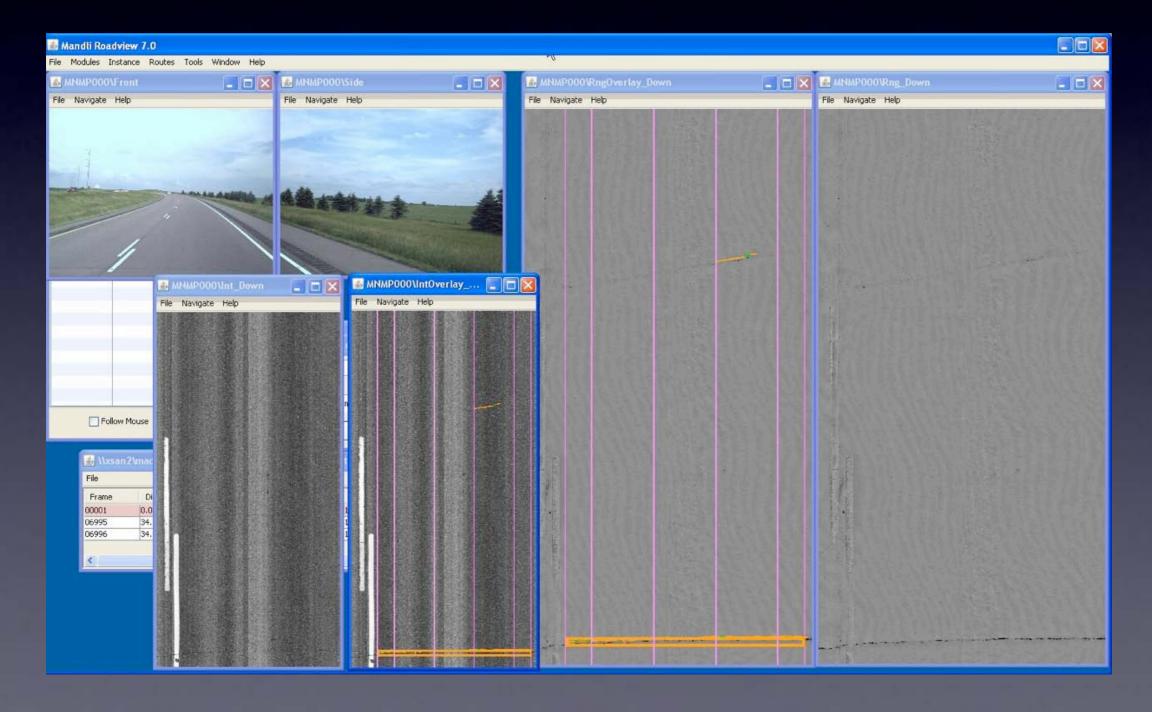








Transverse crack detection:

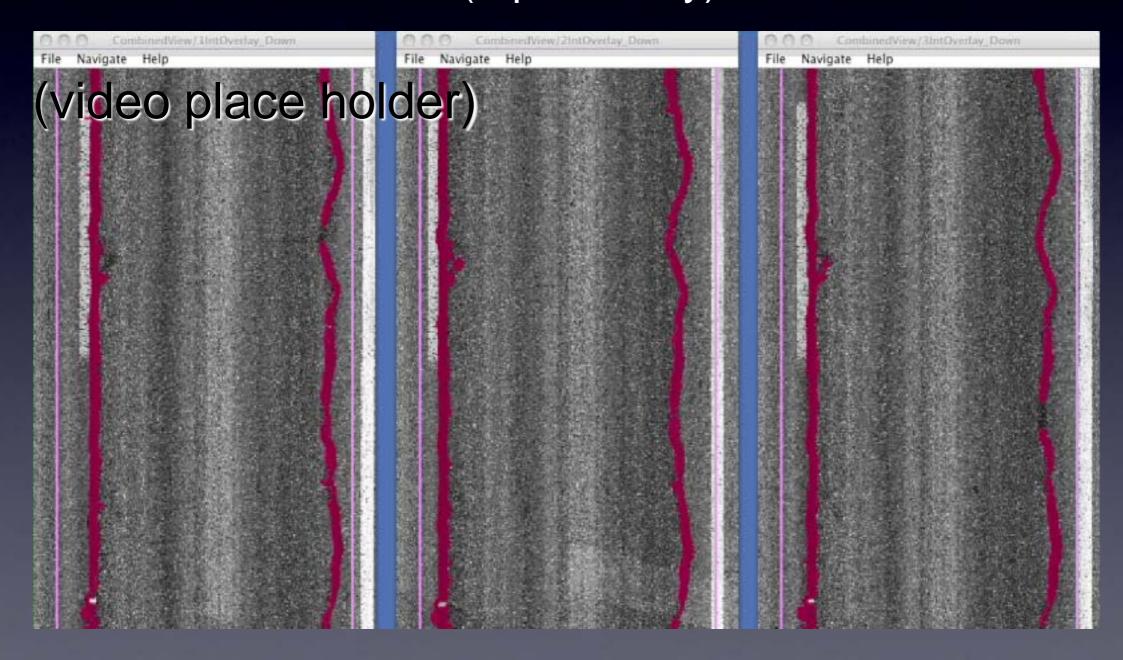


Deliverables





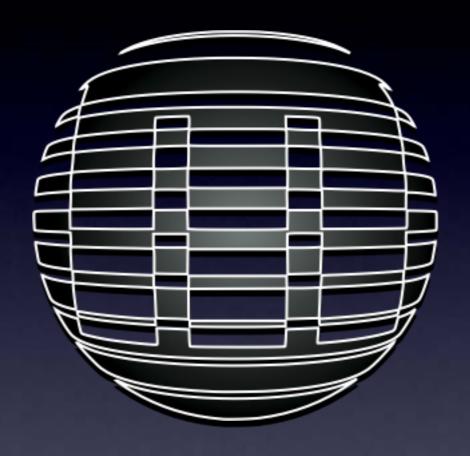
Consistent data sets: (repeatability)



Future Development



- Macrotexture
- Seal Cracks
- IRI
- Won't ever be able to do Patching



Thank You!