INTELLIGENT COMPACTION TECHNOLOGY

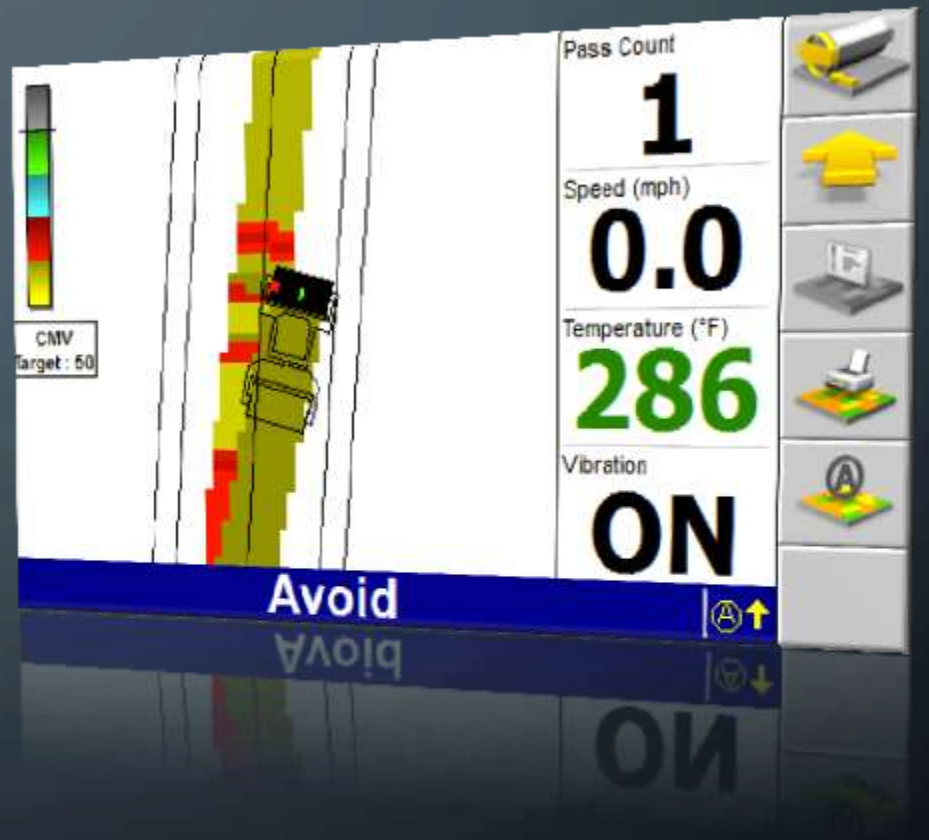
STIFFNESS | TEMPERATURE | POSITION

NELSON HAYS – ACCUPOINT INC

ACCUPOINT INC.

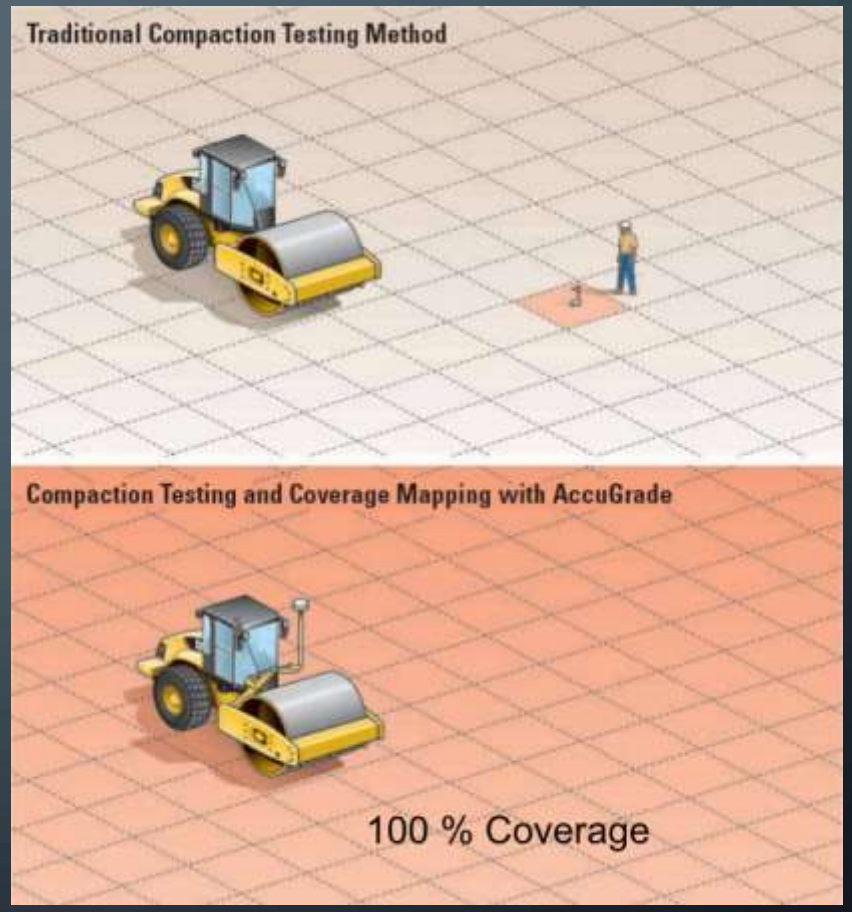
IC OVERVIEW

- Goals
- Requirements
- Equipment
- Personnel
- Reference Material



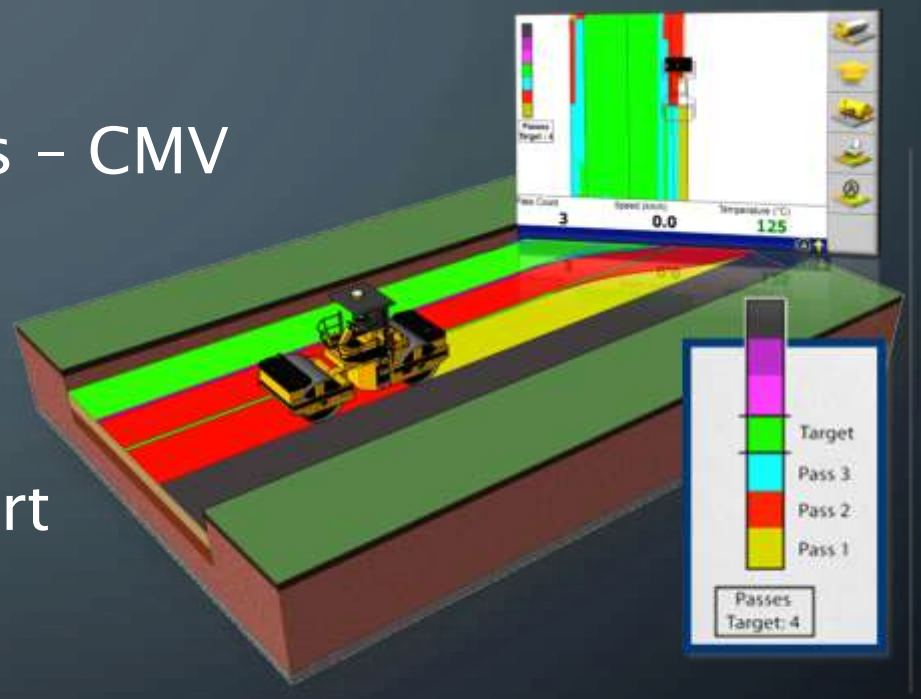
IC GOALS – ASPHALT

- Durable
  - Optimal Density
- Consistent
  - Within Working Temperature
- Verifiable
  - 100% Coverage Map



IC REQUIREMENTS

- Accelerometer Sensor for Stiffness – CMV
- Temperature Sensors – Infrared
- Accurate Position – GPS
- Software Interface – Manage, report



3D POSITIONING TECHNOLOGIES

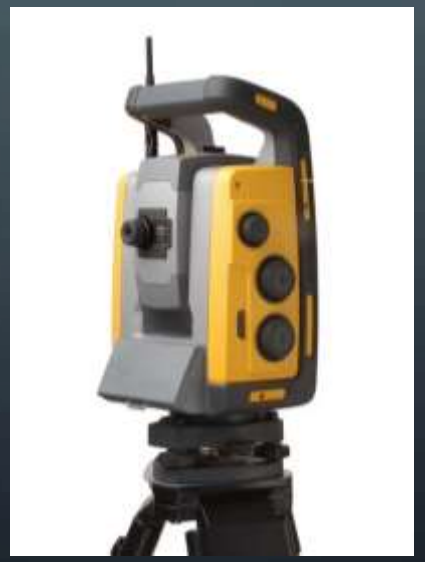
GNSS – Global Navigation Satellite System (Commonly called ‘GPS’)

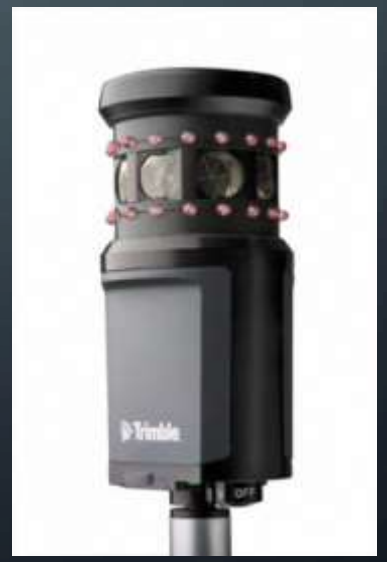
- Satellite Positioning w/ terrestrial corrections
- RTK – Accurate to .03’ (.36”) Horizontal, .05’ (.6”) Vertica

3D POSITIONING TECHNOLOGIES

UTS – Universal Total Station

- 1” Optical Instruments
- Accurate to less than .026’ (.31”) at 1000’ from instrument



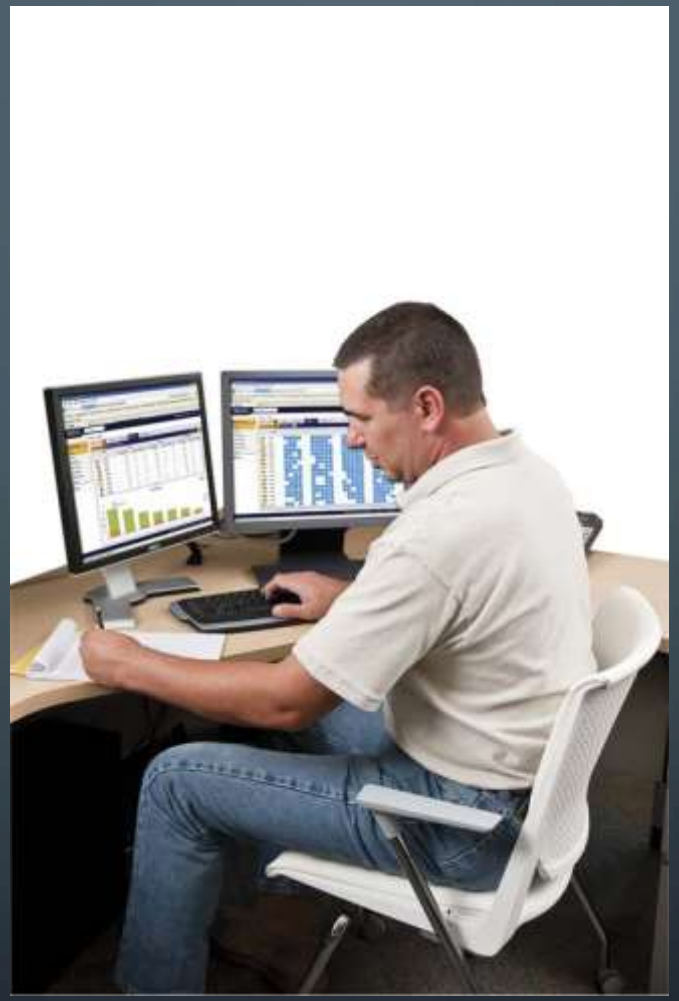


IC ROLLERS

- Soil – Stiffness feedback, Map unknown existing material
- Asphalt – Pass Count, Temperature Maps

PERSONNEL

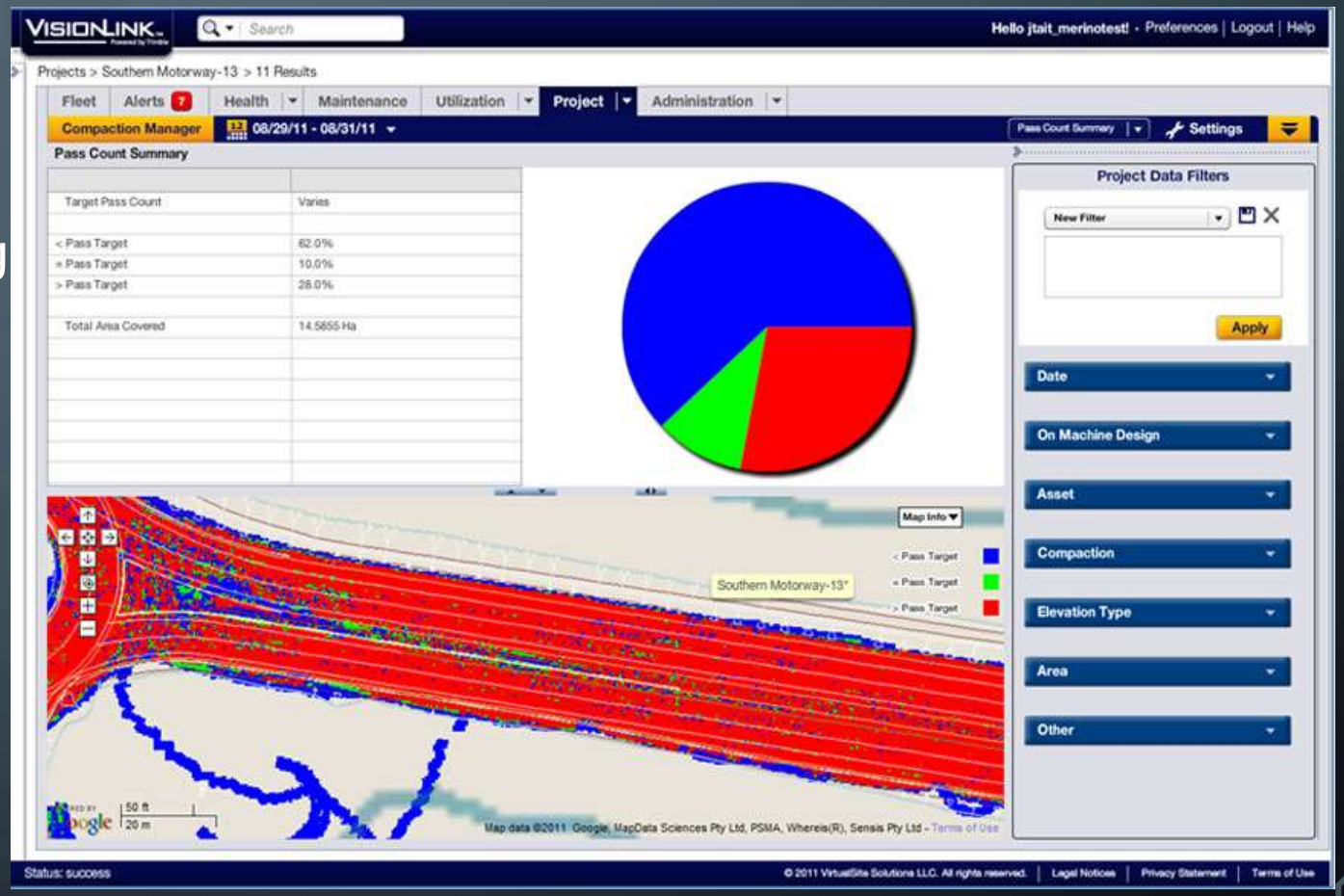
- QC Manager
- QC Technician
- Roller Operator(s)



REPORTING

VisionLink Software

- Near-Real-Time Monitoring
- Time-Stamped
- Compaction Meter Values
- Temperature Map
- Coverage Map
- Exports to Veda



REFERENCE MATERIAL

- www.intelligentcompaction.com/
- www.trimble.com/gps_tutorial/

ACCUPOINT INC.
Construction Technology Solutions

Thank You

Nelson Hays

nelson@accupoint.com

907.570.6466