

# ／ SRT (SEISMIC REFRACTION TOMOGRAPHY)

An Active Source Surface Wave Technique for Measuring Compressional Wave Velocity ( $V_p$ )

## ADVANTAGES

- ／ Non intrusive: no boreholes required, all equipment is deployed on the surface
- ／ High resolution lateral variability in profiles
- ／ Portable and versatile: equipment can be deployed in most areas of open ground
- ／ Sensitive to velocity inversions

## SPECIFICATIONS

- ／ Twenty-four 4.5 Hz geophones deployed in a line at usually 1- 3 m spacing
- ／ Depth of investigation equal to approximately quarter of the array length: up to 10 m
- ／ Source can be a sledgehammer or a vehicle mounted 40 kg Accelerated Weight Drop (AWD)
- ／ Results can be displayed as 2D profiles or a 3D model constructed from multiple profiles
- ／ Topographic variation can be accommodated

## APPLICATIONS

- ／ 2D section of compressional wave velocity
- ／ Inference of engineering parameters: Young's modulus, shear modulus
- ／ Liquefaction Assessment
- ／ Ground Improvement QA
- ／ Drillhole Targeting

