# Summary of RAP Projects

Illinois DOT/Illinois Center for Transportation

Impact of High RAP Content on Pavement Structural Performance

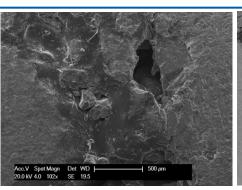
Sam Carpenter Imad Al-Qadi

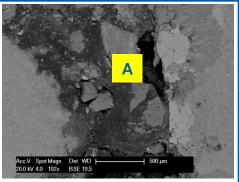
Determination of Usable Residual Asphalt Binder in RAP Imad Al-Qadi

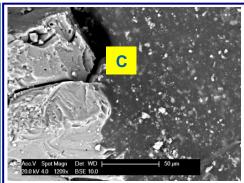


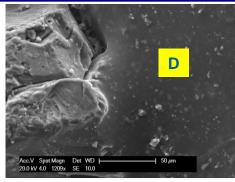
### Film Thickness Measurement

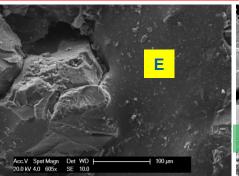
 Images were captured at low magnification rate and were repetitively enlarged

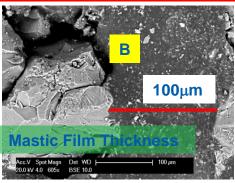


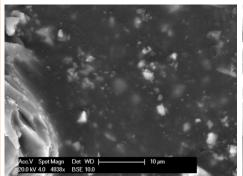


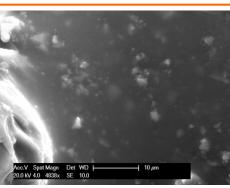






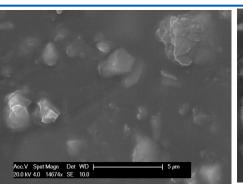


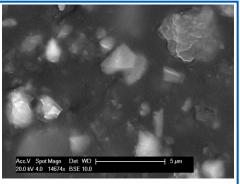


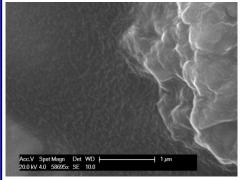


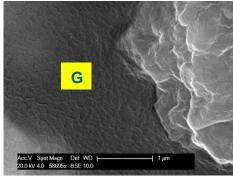
#### Film Thickness Measurement

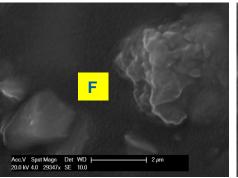
□ From 5mm to 500nm:

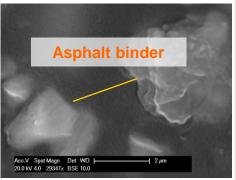


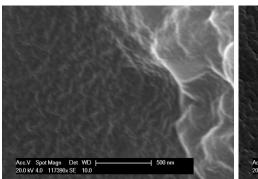


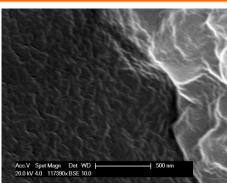






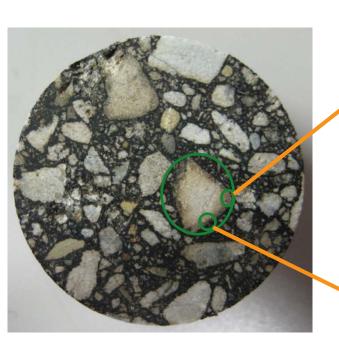


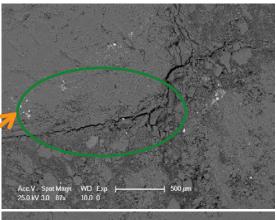


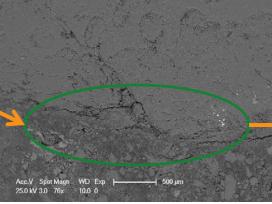


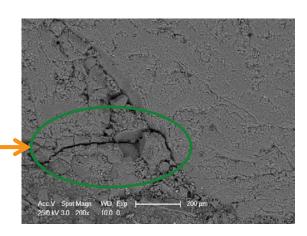
## Cracks around the RAP Aggregate

80% RAP



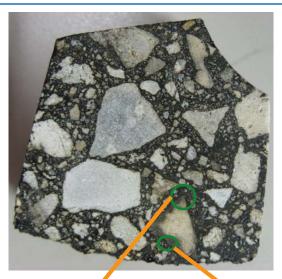


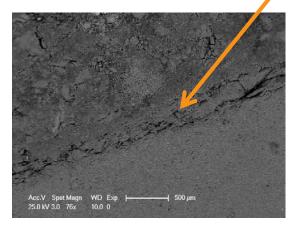


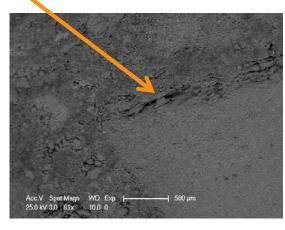




## Fragmentation around RAP Aggregate







#### Virgin Aggregate

Generally
Well Bonded
Interface

