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North Dakota
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NDSU | UPPER GREAT PLAINS TRANSPORTATION INSTITUTE
NORTH DAKOTA LOCAL TECHNICAL ASSISTANCE PROGRAM



Geosynthetic Asphalt Interlayers

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North Dakota Asphalt Conference

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Interlayer – “A layer between two others”

Geosynthetic – “Polymeric material”

- Texas Under Seal is an interlayer (non-geosynthetic)
- Functions:
 - Reflective crack delay
 - Waterproofing
 - Tensile reinforcement

Geosynthetic Interlayer Types

- Fabrics
- Grids
- Composites
- Hybrid Mats
- Membranes



Common Applications

- Overlays and chip seals on cracked pavement
- Asphalt overlays on rigid pavement
- Widening joints
- New pavement





National
25

9.95 No Contracts

**GOLD'S
GYM**



FREE
MUSCLE TANNING

PERSONAL
TRAINING

SHOOTBOX





















Effectiveness

- Existing pavement condition
- Climate
- Traffic conditions
- Installation quality
- Binders used



Other Considerations

- Coverage area
- Cost/benefit
- Manufacturer recommendations
- Millability & Recyclability

Installed Costs

• Fabrics	\$2.50/SY	\$18,000/L-M
• Grids	\$6.00/SY	\$43,000/L-M
• Composites	\$8.00/SY	\$57,000/L-M
• Hybrid Mats	\$4.00/SY	\$28,000/L-M
• Membranes	\$15.00/SY	N/A

References

- Asphalt Interlayer Association (<http://www.aia-us.org/>)
- TTI “Guidelines for Using Geosynthetics with HMA Overlays...”
- FHWA Fabric Interlayer Application Checklist

- FHWA Distress Identification Manual (FHWA-RD-03-031)
- Mn/DOT Pavement Distress Identification Manual
- Asphalt Institute Pavement Distress Summary

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