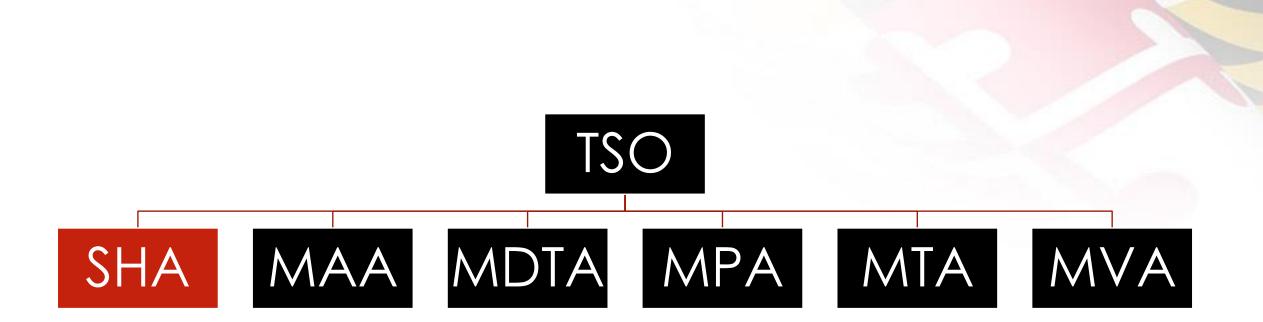
# MARYLAND STATE HIGHWAY ADMINISTRATION

Sandi Sauter Office of Maintenance Deputy Director, Operations

#### MARYLAND DEPARTMENT OF TRANSPORTATION



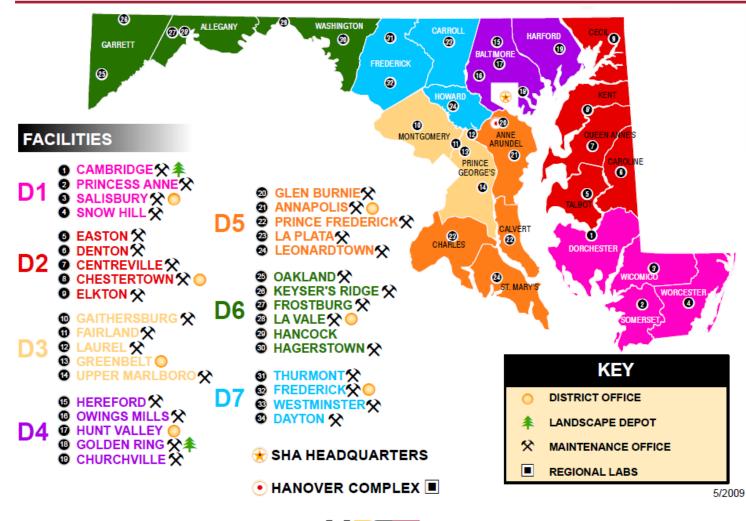


#### MARYLAND DEPARTMENT OF TRANSPORTATION





### FACILITIES

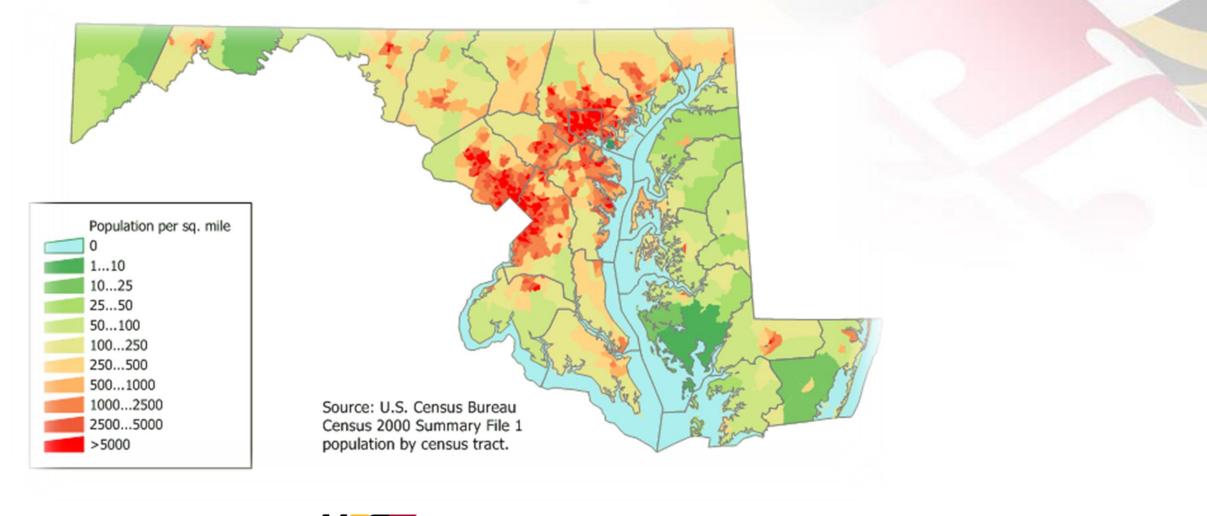


#### **Operations**

- Maintenance Districts
  - 7 District Offices
  - 28 Maintenance Shops (2 Satellite Shops)
- Central Offices
  - Maintenance
  - Construction
  - Traffic
  - Statewide Operations Center
  - Materials

MaryLand DEPARTMENT OF TRANSPORTATION

### POPULATION DENSITY



MARYLAND DEPARTMENT OF TRANSPORTATION

#### INVENTORY

- 17,143 Lane Miles (280 to 1,050 per Maintenance Shop)
- 5,151 Centerline Miles
- 13,085 Roadside Miles (237 to 856 per Maintenance Shop)
- 38.6 Trillion Annual Vehicle Miles of Travel (179 Million to 3.4 Trillion per Maintenance Shop)
- Annual Average Daily Traffic
  - 50,000+: 3,075 Lane Miles (18%)
  - 10,000-49,999: 7,441 Lane Miles (43%)
  - <9,999: 6,616 Lane Miles (39%)



#### RESOURCES

• ~1,050 Maintenance Shop Employees

- ~750 Field Employees (15 to 48 per Maintenance Shop)
- ~100 Managers
- ~200 Administrative Staff and Mechanics
- \$261 Million Operating Budget
  - Routine: \$123 Million (\$1.5 Million to \$6.2 Million per Maintenance Shop)
  - Winter: \$61 Million (\$0.3 Million to \$5.0 Million per Maintenance Shop)
  - Other: \$77 Million



# ROUTINE BUDGET

- Roadway & Shoulder Maintenance
  - Patching
  - Sweeping
  - Shoulder Drop-Off/Build-Up
- Roadside & Drainage Maintenance
  - Mowing
  - Litter
  - Brush & Tree
  - Drainage Maintenance

- Traffic Services
  - Sign Maintenance
  - Pavement Markings
  - Guardrail Repair
- Structure Maintenance
  - Small Structure Repair
- Support Services
  - Rest Area Maintenance
  - Lighting
  - Drawbridge Operation



# OTHER BUDGET

- Statewide Maintenance Support
- Statewide Traffic
- Statewide Operations Center
- Statewide Bridge
- Statewide Environmental Design
- Electricity
- Headquarters

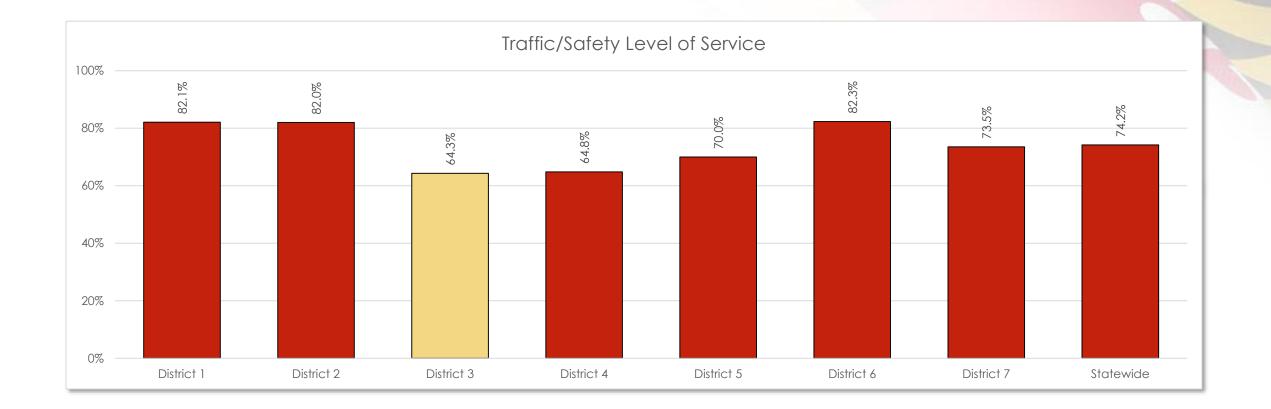


# LEVEL OF SERVICE

- Condition Assessment
  - Assess 1/3 of centerline miles in 1/2 mile segments annually
  - 16 maintenance elements/assets
    - Traffic/Safety
    - Aesthetic
    - Drainage
  - Meets/Does Not Meet (Pass/Fail) desired maintenance condition
  - Provides managers with evaluation of service provided to customers
- Maintenance Business Plan
  - Traffic/Safety Level of Service (Target 87%)
  - Aesthetic Level of Service (Target 71%)
  - Overall Level of Service (Target 84%)

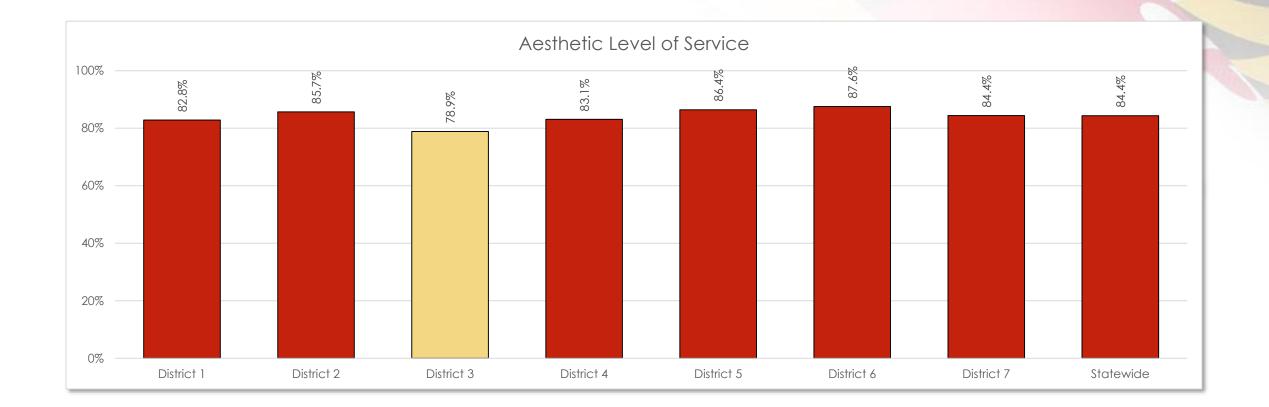
MARYLAND DEPARTMENT OF TRANSPORTATION

#### TRAFFIC/SAFETY LEVEL OF SERVICE



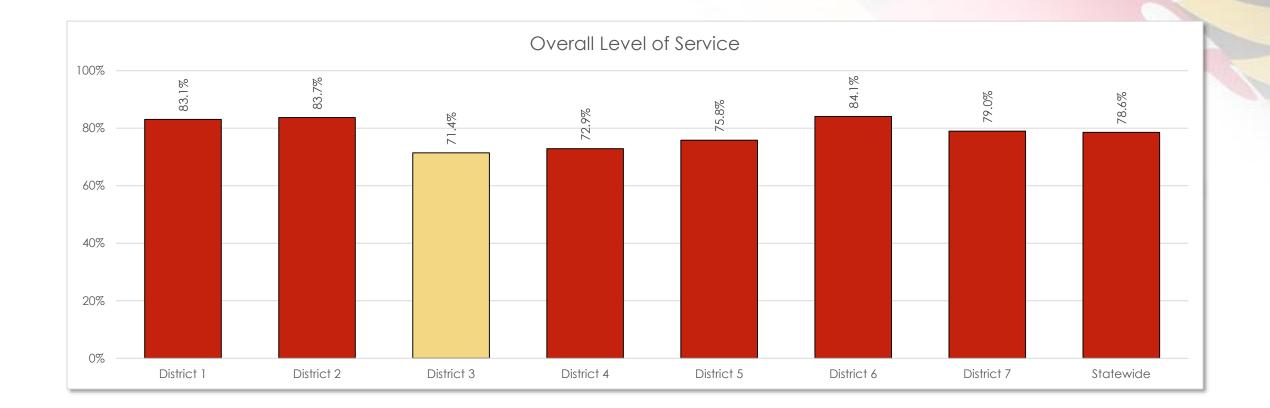


### AESTHETIC LEVEL OF SERVICE



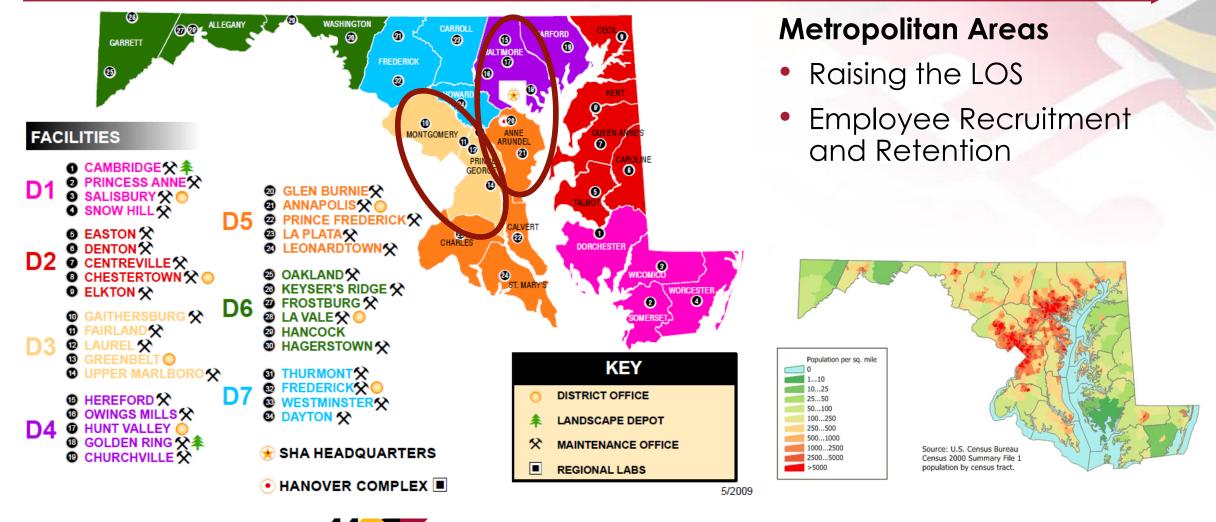


## OVERALL LEVEL OF SERVICE





#### GEOGRAPHICAL CHALLENGES



Maryland department of transportation

### OPERATIONAL CHALLENGES

- Reduced staffing levels
- Increased reliance on contractors
- Keeping durable pavement markings on high volume roads
- Increased use of protection vehicles
- Frequent guardrail and end treatment hits and repair time
- Environmental requirements
- Permit process and requirements
- Customer requests



# OTHER CHALLENGES

#### • IT Issues

- Antiquated financial system
- No Asset Management System (other than bridges and pavements)
- Varied inventory collection applications and no formal update process
- Limited/ineffective use of technology
- Internal Issues
  - Slow procurement process
  - No "Office of Asset Management"



# STRENGTHS

- Budget
  - Consistently grown for past 5 years
- Maintenance Training Programs
  - Equipment Operator
  - TC3
  - New Supervisor
  - Leadership Education
- Work Order Application
  - Deployed 150+ iPads to Team Leaders (field supervisors) in 2013



### STRENGTHS

- New Equipment
  - Skid Steer Attachments
  - Mini Excavator
  - Telehandler Attachments
  - Boom Axe Mower Heads
  - Athey Loader
- Equipment Replacement Schedule
  - Dump Trucks: 10 years/4,500 hours
  - Mowers: 12 years/4,500 hours
  - Loader/Excavator: 15 years/4,500 hours
  - Pick-Ups: 125,000 miles





