



*Tire Maintenance*

# Automotive Tire Maintenance

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**AAA Managing Director – Engineering and Repair**



# Tire Maintenance

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- **Routine tire maintenance includes**
  - Inflation pressure checks
  - Tread depth and physical inspection
  - Rotation and balancing
- **Proper tire maintenance impacts**
  - Ride, handling, braking and safety
  - Tire tread life
  - Vehicle fuel economy





# Tire Pressures

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## AAA Recommends:

- **Check weekly, but at least monthly**
  - Before TPMS light comes on
  - Sidewall height/shape not accurate indicator
  - Check with tire at ambient temperature
- **Proper pressures located on “Tire and Loading Information Label”**
  - 2006 ➡ on driver’s door edge or jamb
  - All cars, in owner’s manual
- **Nitrogen inflation does not eliminate the need for regular pressure checks**





# Tire Rotation

- **Equalizes wear for maximum tire life**
- **Patterns vary and may be limited**

Uni-directional tires – front ↔ rear only

Uni-directional tires *and* different sizes front and rear – rotation possible      not possible

- **Rotation intervals**

Between 5,000 and 7,500 on all cars

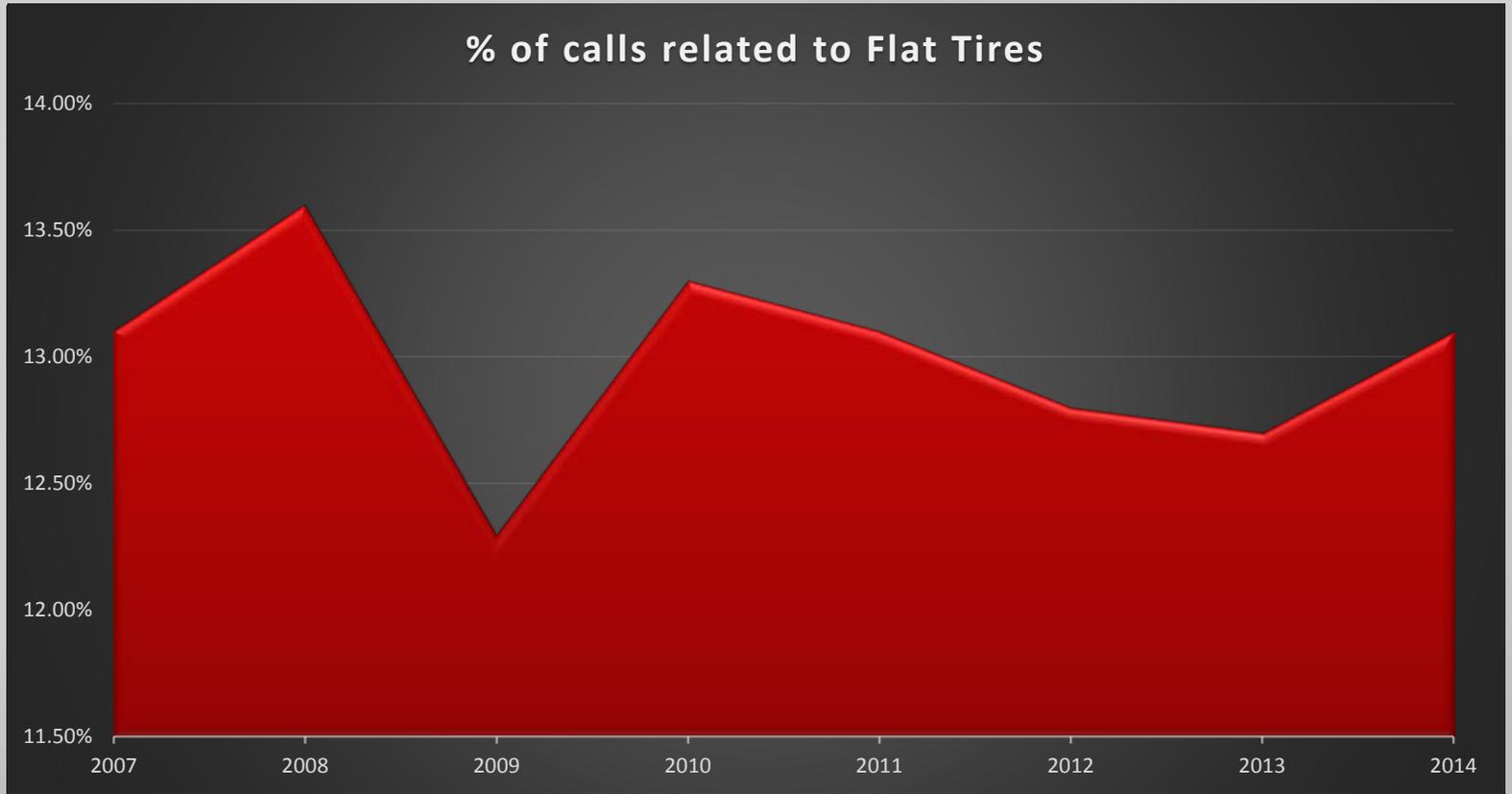
Typically every service on newer models

- **Tire balance during rotation as needed**



# Roadside Trends

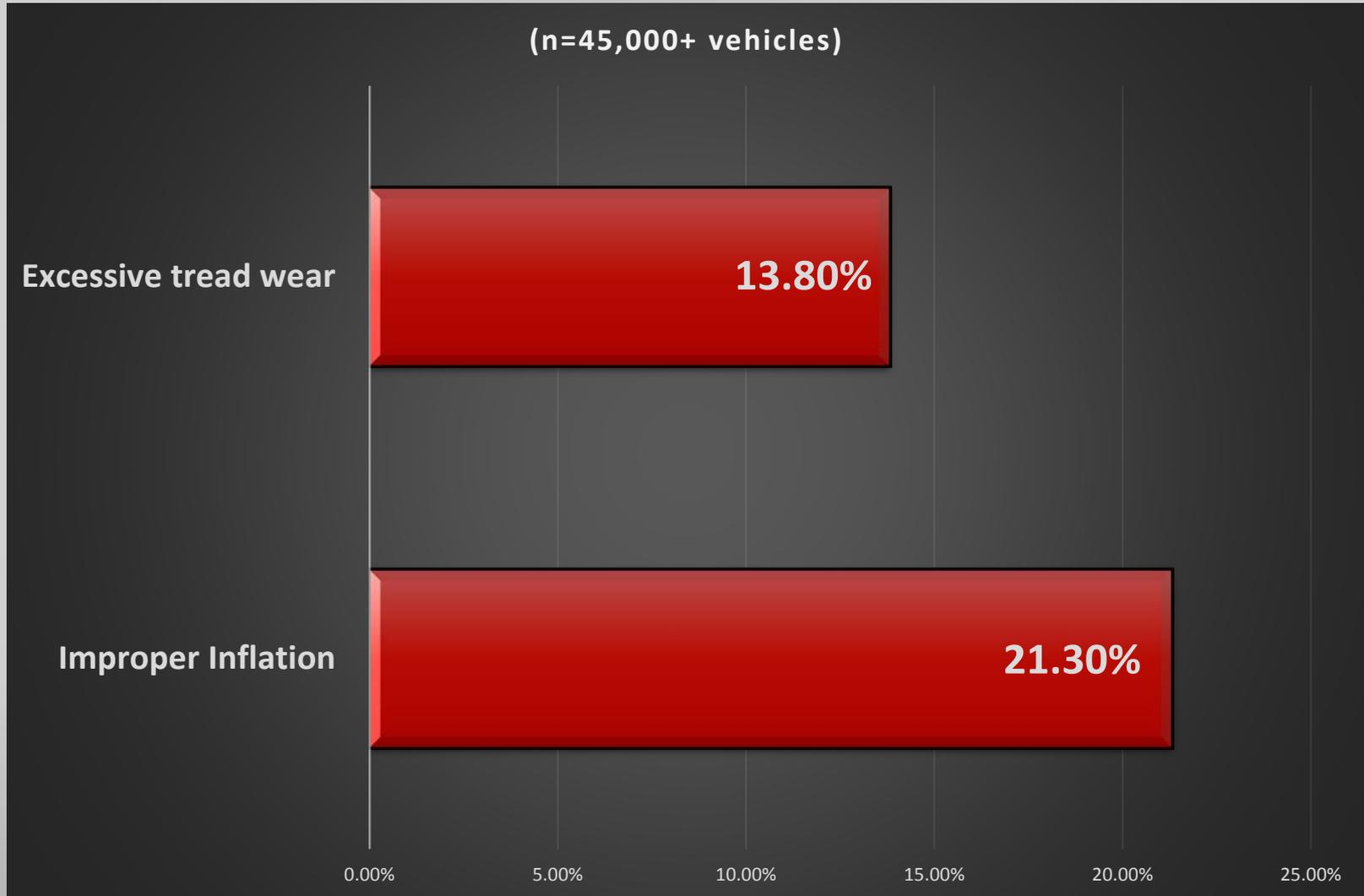
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# AAA Car Care Month

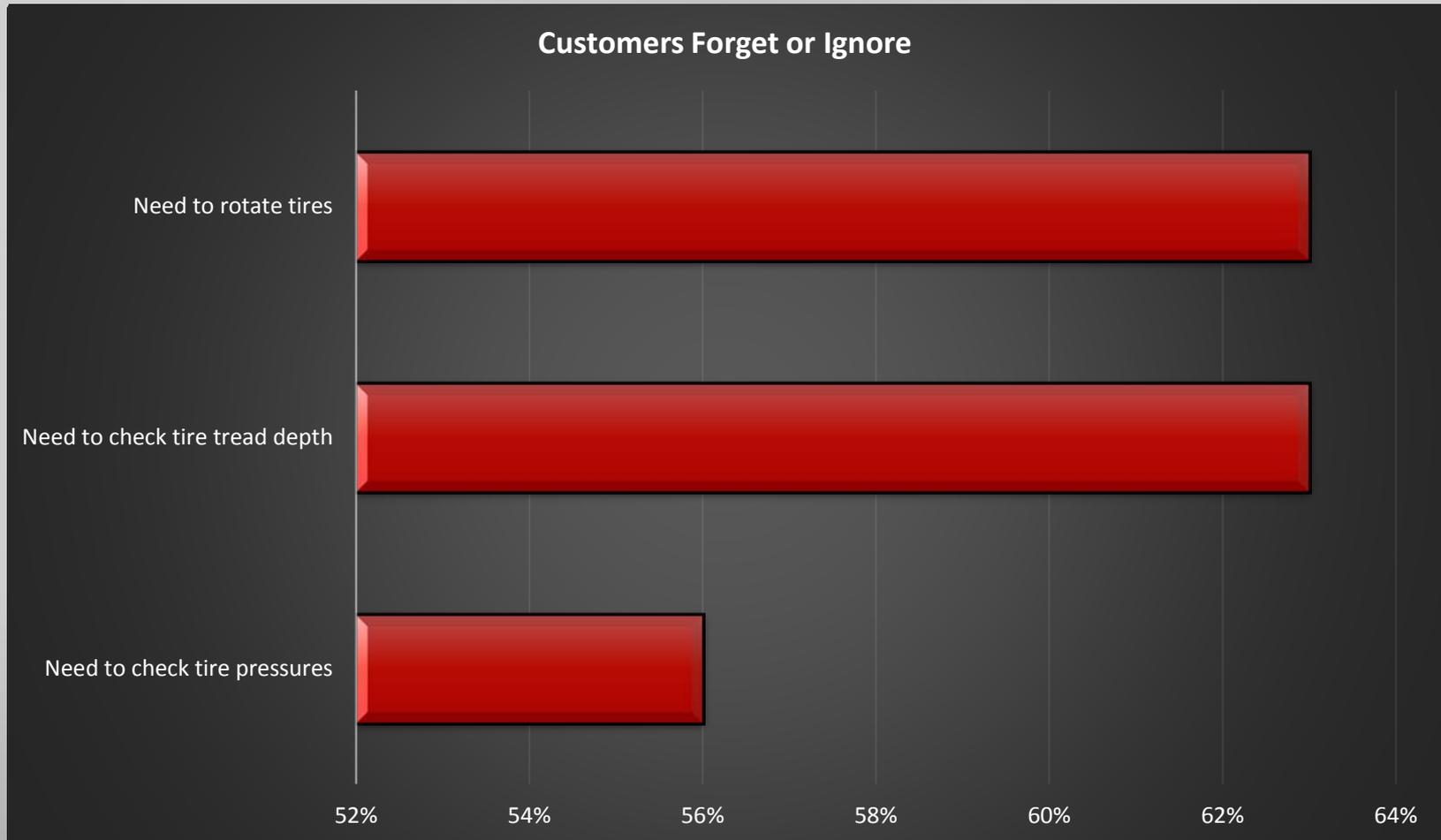
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# AAA Approved Auto Repair Survey

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# Tire Tread Depth

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- Tires with low tread are twice as likely to hydroplane or experience a flat
- Minimum tread depth guidelines
  - 2/32" is legal limit
    - ✓ wear bars appear
    - ✓ Lincoln's head exposed in "penny test"
  - 4/32" increased hydroplaning and longer stopping distances on wet roads
    - ✓ Washington's head exposed in "quarter test"
    - ✓ Time to start shopping for new tires





# TPMS Concerns/Service

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- **25% trigger point is too low to prevent wear**  
TPMS not a substitute for tire maintenance
- **TPMS maintenance – seal service kits**  
Seal, retaining nut, valve stem and cap  
At first tire replacement ~40,000 miles
- **TPMS sensor replacement**  
At second tire replacement ~80,000 miles  
Typical battery life 5-12 years, average is 7





## Dave Yelvington Shop Manager – AAA Carolinas

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*“We have seen increased consumer awareness of tire pressures as a result of TPMS warning lights, which we believe has resulted in reduced incidents of pressure-related tire failures and low-inflation tire wear. “*



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# Discussion