The Need for Periodic Motor Vehicle Inspections

From the service technician perspective
Majority of respondents, 60%, indicated that their state does not require periodic motor vehicle inspections (PMVI)

As of 2014 only 17 states in the U.S. require vehicle safety inspections

Does your state require a Periodic Motor Vehicle Inspection (PMVI) or a safety inspection program for light vehicles?

Yes: 40%
No: 60%

Base: n=145
In those states where PMVI are required, two-thirds of respondents require inspections once every year.

**How often are vehicles required to be inspected?**

- 67% Once every year
- 22% Once every two years
- 12% Other

**AASA Key Takeaway:**
An annual vehicle safety inspection is the most common interval for those states requiring inspections, however some states do require a bi-annual inspection (once every two years). In some states (that do not require inspections) vehicles are only inspected when the car passes ownership to another person.

*Base: n=51*
“Visibility,” “Tires,” “Communications” and “Brakes” are the top inspection requirements for those states that have periodic motor vehicle inspections.

These components of the car are crucial to operating a safe vehicle.

What are the required items to be inspected for the vehicle?

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visibility: windshield wipers,</td>
<td>90%</td>
</tr>
<tr>
<td>washer fluid, bulbs, turn</td>
<td></td>
</tr>
<tr>
<td>signals, stop lights, headlights,</td>
<td></td>
</tr>
<tr>
<td>and license plate lamp</td>
<td></td>
</tr>
<tr>
<td>Tires: treadwear, cracking,</td>
<td>88%</td>
</tr>
<tr>
<td>pressure, valve stems</td>
<td></td>
</tr>
<tr>
<td>Communications: horn</td>
<td>84%</td>
</tr>
<tr>
<td>Brakes: pedal height, noise,</td>
<td>82%</td>
</tr>
<tr>
<td>parking brake</td>
<td></td>
</tr>
<tr>
<td>Emissions</td>
<td>73%</td>
</tr>
<tr>
<td>Chassis / Suspension</td>
<td>67%</td>
</tr>
<tr>
<td>Systems: check engine light,</td>
<td>59%</td>
</tr>
<tr>
<td>TPMS light</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>43%</td>
</tr>
</tbody>
</table>

Base n=49
Tires were ranked highest of vehicle components for degree of failure

Please rate the following areas on the degree of failure you see in your shop:

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tires</td>
<td>3.3</td>
</tr>
<tr>
<td>Brakes</td>
<td>3.1</td>
</tr>
<tr>
<td>Chassis / Suspension</td>
<td>3.0</td>
</tr>
<tr>
<td>Visibility</td>
<td>2.9</td>
</tr>
<tr>
<td>Emissions</td>
<td>2.8</td>
</tr>
<tr>
<td>Other</td>
<td>2.5</td>
</tr>
<tr>
<td>Systems</td>
<td>2.4</td>
</tr>
<tr>
<td>Communications</td>
<td>1.9</td>
</tr>
</tbody>
</table>

AASA Key Takeaway:
Tires can be an expensive purchase for the end consumer, but if not checked properly they can lead to a serious accident. Tires are a purchase that the end consumer tends to delay and if not replaced at the correct interval can lead to unsafe driving conditions.

Base: n=46
Note: Scale of 1 to 5 where 1 is “Low degree of failure” and 5 is “High degree of failure”
Majority of service technicians believe that PMVI are effective in ensuring vehicle safety

To what degree do you think the PMVI checks the right components and is effective in ensuring vehicle safety?

- 1 - Ineffective: 14%
- 2 - Neither effective nor ineffective: 4%
- 3 - Neither effective nor ineffective: 23%
- 4 - Fully effective: 45%
- 5 - Fully effective: 14%

AASA Key Takeaway:
Service technicians are those who know the vehicle best.

Base: n=125
Majority of service technician respondents would actively support a mandatory PMVI program (or state safety inspection) for their state

Would you actively support efforts to have a mandatory PMVI program for your state?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>73</td>
<td>27</td>
</tr>
</tbody>
</table>

AASA Key Takeaway:
Both AASA and ASA actively support any efforts in Washington, D.C. to enforce requirements regarding state safety inspections.

Base: n=79
Majority of respondents, 77%, feel that PMVI programs reduce unsafe cars on the road.

To what degree do PMVI programs reduce unsafe cars on the road?

- Significantly reduces: 35%
- Moderately reduces: 42%
- Does not reduce: 23%

AASA Key Takeaway: Over a third of respondents believe that PMVI programs significantly reduce unsafe cars on the road.

Base: n=111
Service technician respondents believe that PMVI programs would reduce fatalities and accidents by an average of 16%.

By what percentage would you estimate PMVI programs would reduce fatalities and accidents?

- 41 - 50%: 13%
- 31 - 40%: 5%
- 21 - 30%: 17%
- 11 - 20%: 18%
- 1 - 10%: 26%
- None: 12%

Average: 16%

**AASA Key Takeaway:**
According to the Pennsylvania's Vehicle Safety Inspection Program Effectiveness Study, “the state with a vehicle safety inspection program is likely to have around 1.5 fewer fatal crashes for every billion vehicle miles traveled than the state with no program. That is about ~200 fatalities that could have been prevented in one state.”

*Base: n=108*
Components that were listed as essential for a PMVI: brakes, suspension, and tires

Please list what inspection items you believe are essential to a PMVI program?

Note: A word cloud was used to show top responses; for full results, please see Appendix.
Service technician respondents believe that more than a quarter of cars operate in an unsafe manner

What percentage of cars on the road do you believe are operating in an unsafe manner?

- 61 - 70%: 4%
- 51 - 60%: 8%
- 41 - 50%: 7%
- 31 - 40%: 16%
- 21 - 30%: 33%
- 11 - 20%: 14%
- 1 - 10%: 15%
- None: 2%

Average: 27%

AASA Key Takeaway:
Many of these unsafe cars on the road are due to drivers not knowing what repairs need to be done to their car. With periodic motor vehicle inspections, service technicians have the opportunity to build a relationship with the end consumer and educate them on how to prolong the life of their vehicle and have it operate in a safe manner.
Nearly three quarters of respondents believe that autonomous driving systems will be very important in regards to PMVI

Based on your experience of maintaining vehicle electrical systems, how important do you think inspection of autonomous driving and other vehicle-assist technologies will be?

- **5 - Very important**: 61% (74%)
- **4**: 13%
- **3 - Neither important nor unimportant**: 17%
- **2**: 2%
- **1 - Not very important**: 2%

**AASA Key Takeaway:**
As the vehicle continues to become more autonomous, service technician respondents indicate that it will become crucial to have regular inspections and touch points with drivers and their vehicles to continue to ensure the safety of not only those driving the car but everyone else on the road.

*Base: n=112*
Majority, 66%, believe that having registration and PMVI connected electronically would create a positive impact.

*This method is common in states where state inspections are mandatory.*

What impact do you believe it would have if the periodic motor vehicle inspection was tied electronically to the registration to the vehicle (as opposed to a sticker)?

- Significant positive impact: 29%
- Positive impact: 37%
- No impact: 22%
- Negative impact: 7%
- Significant negative impact: 4%

*Base: n=107*
Majority of respondents, 90%, feel there would be additional business generated if PMVI programs were implemented. This could tap into the $66 billion dollars of unperformed maintenance present in the automotive aftermarket; the entire supply chain would benefit.

To what degree do PMVI programs generate (or would generate) additional business for your shop?

- Significantly contributes to additional business: 26%
- Some contribution to additional business: 64%
- No contribution to additional business: 10%

Base: n=108
Majority of respondents, 77%, feel more education is needed about the importance of PMVI programs

Do you believe more education is needed for the automotive aftermarket about the importance of PMVI programs?

Base: n=107
Majority of respondents, 83%, indicated that more information was needed about the value of PMVI programs.

Do you believe that state policymakers need more information about the safety value of PMVI programs for the motoring public?

- **Yes**: 83%
- **No**: 17%

*Base: n=108*
Appendix A:  
*Full Answers to Selected Questions*
Please list what inspection items you believe are essential to a PMVI program? (1/3)

<table>
<thead>
<tr>
<th>All brake system components, all steering system components, all suspension system components, exterior lights, tires.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All essential, brakes suspension, lights, tires, insurance, etc</td>
</tr>
<tr>
<td>All lighting, wipers, tires, brakes steering</td>
</tr>
<tr>
<td>All safety items installed on the vehicle at the time of manufacture.</td>
</tr>
<tr>
<td>Anything safety related</td>
</tr>
<tr>
<td>Bks. suspension tires ex.</td>
</tr>
<tr>
<td>BRAKE</td>
</tr>
<tr>
<td>Brake inspections that check pad wear and brake system conditions for rust and improperly installed components. Checking for loose suspension and steering items. Checking tires for safety concerns.</td>
</tr>
<tr>
<td>Brake lining (2/32 or above and not contaminated), brake function, brake warning indicator off, suspension tightness, tires above 2/32, windshield condition, wiper function, exterior lights functioning, horn works, windows and lights not blacked out or obstructed, not lifted too high or lowered too low.</td>
</tr>
<tr>
<td>Brakes - Tires – Suspension</td>
</tr>
<tr>
<td>Brakes and chassis parts</td>
</tr>
<tr>
<td>Brakes, ALL lighting, horn, suspension, vision including cracked windshields and wipers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRAKES ALL ASPECTS, BRAKE LINES, HOSES, LIGHTING ALL AND OPERATION OF, STEERING AND SUSPENSION, TIRES AND WHEELS, WIPERS AND WASHERS, STRUCTURAL ERROSION, WINDSHIELD, WINDOWS, SEATBELTS, SEAT OPERATION, HEATER, DEFROST OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brakes, front end, srs, seat belts, body condition, windows and glass, tires, large leaks.</td>
</tr>
<tr>
<td>Brakes, lights, glass, exhaust, structural rusting.</td>
</tr>
<tr>
<td>Brakes, lights, horn.</td>
</tr>
<tr>
<td>Brakes, Lights, Mirrors, Glass, Suspension</td>
</tr>
<tr>
<td>Brakes, steering and suspension. Vision, wipers, lights. Tires, safety restraint systems.</td>
</tr>
<tr>
<td>Brakes, steering, suspension, tires, lights, body/bumpers, seat belts, seats, air bags</td>
</tr>
<tr>
<td>Brakes, suspension, structural integrity</td>
</tr>
<tr>
<td>Brakes, suspension, and exterior lighting</td>
</tr>
<tr>
<td>Brakes, suspension, lights, wipers, tires</td>
</tr>
<tr>
<td>Brakes, Suspension, Rusty brake and fuel lines</td>
</tr>
<tr>
<td>Brakes, suspension, steering, exhaust, lighting</td>
</tr>
<tr>
<td>Brakes, suspension, steering, lighting</td>
</tr>
<tr>
<td>Brakes, suspension, steering, tires, glass, driver controls</td>
</tr>
<tr>
<td>Brakes, suspension, tires, wiper blades, warning lights, fuel leaks, overall condition</td>
</tr>
</tbody>
</table>
Please list what inspection items you believe are essential to a PMVI program? (2/3)

“Brakes, suspension, wheels, tires, lights, wipers, washers, mirrors, fluid leaks, ABS/SCS”

“No politicians making technical automotive decisions, no government profits from program, great place to start!”

“Brakes, tires Suspension”

“Safety equipment - steering/ suspension/ tires/ brakes/ lights/ basic accessories/seat belts/air bags if equipped/ emissions”

“Brakes, tires, dash warning lights, srs lights, seat belts, glass, wipers, prior unsafe crash damage, prior unsafe / sub industry standard repairs, broken lamps / bulbs burnt out, etc”

“Steering Suspension and brakes Communication. Comm alerts one to emissions.”

“Brakes, Tires, Front Suspension Components, Lighting (especially brake-collision-avoidance lighting).”

“Steering suspension brakes”

“Steering, brakes, tires, suspension, frame, exhaust, safety equipment”

“Suspension and steering components.”

“Suspension and steering components.”

“Suspension COMPONENTS RESTRAINT SYSTEMS TIRES”

“Suspension, brakes, lights, glass, steering, visible emissions, body damage”

“Suspension, steering, brakes, lights, horn, signals, wipers”

“Front end parts, brakes, tires, steering parts, wheel bearings”

“Tires”

“Tires, brakes, suspension, lights”

“Brakes, Suspension, Brake, Air Bag, Seat Belt, & Emissions Systems”

“Chassis components, Tires, lighting, brakes.”


“Tires, Brakes Lights”

“Front end parts, brakes, tires, steering parts, wheel bearings”

“Lights, brakes, tires, steering/suspension”

“Lights, Suspension looseness, Brakes, Emissions,”
Please list what inspection items you believe are essential to a PMVI program? (3/3)

“Tires, steering/suspension, SRS components, traction system malfunction lights, lights, horn, wipers”

“Tires, suspension, brakes, lighting, windshields, drivability of drivetrain”

“Tires, suspension, brakes, lights”

“Tires, wipers, brakes, lighting, suspension, steering, body integrity.”

“Tires, brakes, lights, emissions”

“TIRES--ESP DOT DATE ON TIRES TO VERIFY AGE OF TIRES/ BRAKES, SUSPENSION PARTS & ALL LIGHTS”

“Visibility, communication, braking, steering, government mandated components.”

“Visual Brake Check, suspension and steering check”

“Wheel bearings/hubs, suspension, brake, steering, lamps, electrical and fuel system routing.”

“Tires brakes steering suspension exhaust exterior lighting visibility parts like glass, wipers, washers, mirrors no ragged sheet metal, no loose components.”

“Tires, brakes (including hydraulic lines), steering/suspension, lighting, wipers, seat belts/air bags, TPMS”

“Tires, brakes steering & suspension”

“Tires, brakes, basic suspension integrity”

“Tires, brakes, chassis, lamps”

“Tires, brakes, lighting”

“Tires, brakes, steering, suspension, lighting, body and chassis integrity.”

“Tires, brakes, suspension & lighting”

“Tires, Brakes, Windshields, axles, bumpers, fluids, frame, ”

“Tires, brakes, exterior lighting, srs system”

“Tires, braking system, steering & suspension, safety belts”

“Tires, frames, brake and fuel lines rust out, body rust out in rocker panels- safety issue for side crash, window glass, brakes, rotors and drums, lighting system”
Appendix B: Methodology and Contact Information
AASA / ASA 2014 PMVI Survey Methodology Notes

- The purpose of the survey was to gauge service technicians' responses regarding questions on periodic motor vehicle inspections.

- Participation is only available to ASA members. **There were 145 survey responses.**

- This report is only available to AASA members.

- Comments are edited only for spelling and diction and may contain grammatical errors due to their verbatim nature.

- Responses to this survey are confidential. Therefore, only aggregated results will be reported. Individual responses will not be released and will be destroyed after results are compiled.
Thank you to our partner, ASA!

The Automotive Service Association (ASA) advances professionalism and excellence in the automotive repair industry through education, representation and member services. Since 1951, the Automotive Service Association (ASA) has been the leading organization for owners and managers of automotive service businesses that strive to deliver excellence in service and repairs to consumers.

For more information, please visit their website:
www.asashop.org
Contact Information

AASA | Automotive Aftermarket Suppliers Association
10 Laboratory Drive | Research Triangle Park | NC | 27709 | USA

www.aftermarketsuppliers.org
info@aftermarketsuppliers.org