The Role of MBUF in Highway Funding Options

Dan Murray
Vice President
ATRI
Freight Industry’s NFP research organization

Safety and Human Factors
Technology
Environmental Factors
Economic Analyses
Transportation Security

Awards: ITE, ITSA, TIDA
Board of Directors

Maverick
TRANSPORTATION LLC

Cummins

GREAT WEST
Casualty Company

Con-way

SCHNEIDER NATIONAL

FedEx
Freight

ABF

Georgía Motor Trucking Association

AT A
AMERICAN TRUCKING ASSOCIATIONS

Trimac

Combined Transport Incorporated

PENSKE Corporation

ATRI American Transportation Research Institute
Questions & Assumptions

- Does the Fuel Tax Need to be Replaced?
- Is an MBUF “Better”?
  - More Efficient?
  - More Equitable?
  - Less Manipulation?
  - More Enforceable?
  - Less Costly?
  - Returns More $$$ to Roads?
Facts...

- No Federal Increase Since 1993
- EIA: 150+ Years of Known Reserves
- Major Exemptions:
  - Gov’t Fleets
  - School Buses
  - Transit Vehicles
  - Charities
  - Driver Education Fleets
  - EPA / LUST Funds
  - USPS
Facts Cont’d...

- Federal Fuel Tax Admin: 0.2%
- State Fuel Tax Admin: 2-3%
- Total “Fuel Tax Payers” = 500
- FT Evasion: Minor to Moderate
- All Known Energy Can be Commoditized / Monetized
  - Kilowatts
  - Cubic Ft
Alt Fuel Vehicles Relatively Expensive

Alt Fuel Vehicle Growth Stagnating (in short- to medium-term)
Must the Fuel Tax be Replaced?


- Projected Sales of Hybrid-Electric and Battery-Electric Vehicles have been overhyped
- Consumers are likely to reject HEVs and BEVs due primarily to cost, battery life and performance
- Sales a small fraction of overall market absent significant increases in oil prices and/or government intervention

- Some studies project higher shares, but no more than 15%-20% HEV-BEV by 2020
HEV Market Share Projections

US: Sales of HEVs and PHEVs—2007-2020

Source: J.D. Power Global Forecasting
BEV Market Share Projections

US: Sales of BEVs—2007-2020

Source: J.D. Power Global Forecasting
Cost Effectiveness

- Billions in Implementation Costs
- Anticipate Extremely High Collection Costs
- New Enforcement Costs
Equity

- Finally, will ALL users pay?
- Will heavier cars pay more?
- Social Engineering & Esals: Will heavier people pay more?
- Will Employers Pay? (Inflationary)
- Will Tax Payers Pay? (Inflationary)
1,000 vs 248,000,000: Evasion and Enforcement

- Significant risk of evasion; high enforcement costs
  - Federal fuel tax has <1,000 taxpayers
  - 208 million drivers
  - 248 million registered vehicles
  - By comparison, IRS processed 237 million tax returns in 2009

- All technology can be defeated
Who is In Charge?

- Taxpayer Approvals?
- Federal / National System?
- States Rights vs All Roads?
- Local Jurisdictions...
  - Social Equity Issues?
- Uniformity & Seamless System Critical!!
**Legend**

- **3 Days**
- **4 Days**
- **5 Days**
- **6 Days**
- **7 Days**
- **10 Days**
- **13 Days**
- **14+ Days**

**California** - City permit valid for 1 day.

**Louisiana** - If overweight, permit only valid for 1 day of travel.

**New York** - Thruway permit valid for 3 days.

**Washington** - More days will be granted if requested.

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**Weekend Travel Restrictions**

- **Florida** - Travel is permitted for Dims no greater than 10’w, 14’6”h with a 48’trailer.
- **Ohio** - Sunrise till 3pm on Sat & Sun.
- **Michigan** - All day Sat, & till 3pm on Sunday.
- **Minnesota** - Memorial Day to Labor Day – 2am to 10pm on Sat, & 2am to 2pm on Sun.
- **Oregon** - Till noon on Sat between Memorial Day & Labor Day.
- **Vermont** - Travel is permitted if vehicle does not exceed 10’6”w, 100’L, or 108,000 lbs. GVW.
- **Washington** - Sun till noon.

**Legend**

- Red: **Sat & Sun all day**
- Yellow: **No Travel**
- Green: **Sat Only**
- Green with R: **Special Restrictions – Read Permit**
- Blue: **Sat till noon, No Sunday**
- Blue with R: **Sat & Sun Till Noon**

Prepared by: Mr. Brad Lowry 800-866-5500 ext.799 Updated last: 11-3-10

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Legal Single Axle Weight

Legend

- $20,000
- $21,600
- $22,000
- $22,400
- $24,000

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**Legend**

- **$20,000**
- **$21,500**
- **$22,000-23,000**
- **$23,000**
- **$24,000**
- **$25,000**
- **$27,000**
- **$28,000**
- **$29,000+**
- **$** Depends on Axle Spacings
- **$** Florida – Allows 25,000 to 27,000 lbs depending on axle spacings.
- **$** South Dakota – Max Depends on your axle spacing's & Routes

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Legal Tandem Axle Weight

Legend

- **$33,400**
- **$34,000**
- **$35,200**
- **$36,000**
- **$38,000**
- **$44,000**

* Arizona – Only allowed 34,320lbs on tandem axles
* Colorado - Allowed 40,000 on Non Interstate

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Arizona- Allowed up to 46,550 lbs with a 4’4” spread
California- can get up to 46,000 – 53,532 lbs with a 4’ spread
Florida- 40,000 to 50,000 lbs with a 4’ spread
Illinois- 44,000 to 48,000 lbs
Massachusetts- depends on Axle spacing
Michigan- depends on routes, tire size, & vehicle gage
Nevada- depends on Axle spacing’s & routes
New Jersey- Calculated at 800 lbs per inch tire width
Rhode Island- depends on routes & vehicle configuration

Legend

- $40,000
- $43,000
- $44,000
- $45,000
- $46,000
- $48,000
- $50,000
- $52,000+

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Arizona, Alabama, Idaho, Illinois, Indiana, Maryland, Nebraska, & West Virginia – Must have 8′ of spacing to get legal weights.

California & New York – Must have 8′6″ of spacing to get desired weights.

Minnesota – Must have a spread of 8′-9″ to get desired weight.

North Carolina – Federal Bridge Formula applies.

**Legend**

- Blue: $34,000-35,000
- Purple: $44,000
- Yellow: $36,000
- Cyan: $48,000
- Orange: $37,000-39,000
- Brown: $50,000
- Red: $42,000-43,000
- Green: $54,000+

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Max 3 Axle Weights

Legend

- $\$50,000
- $\$61,750
- $\$66,000
- $\$51,000-52,000
- $\$62,000
- $\$70,000+
- $\$53,000
- $\$63,000
- $\$60,000
- $\$65,000

CA & NV – Can get one bump with 3 axle if 18' between groups
Arizona & California – Must have a 9' spread to get 51,540.
Michigan & Vermont – Weights determined on a case by case scenario.
Florida – Can get 60000-82500 on a tridum.

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**Max 4 Axle Weights**

- **Arizona** – Allows 55,650 w/ a 13’6” spread.
- **California** – Allows 55,650-63,998 w/ a 13’ spread.
- **Michigan & Vermont** – Weights determined case by case scenario.
- **Florida** – Allows 66,000 to 110,000.
- **Kansas & Oklahoma** – Allows 65,000 on 4 axles.
- **Arkansas, NC, & ND** – Allows 68,000 on 4 axles.
- **West Virginia** – Allows 64,000 on 4 axles.
- **Georgia** – Allows 92,000 on 4 axles.
- **Wisconsin** – Allows 90,000 on 4 axles.
- **Alabama** – Allows 88,000 on 4 axles.
- **Delaware** – Allows 85,000 on 4 axles.

**Legend**

- $53,000-60,000
- $60,000
- $61,000-68,000
- $70,000
- $72,000
- $74,000
- $80,000+
- $100,000+

**Disclaimers:**

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§Florida, Wyoming, & Michigan § Allowed $92,000 up to 122,000 on 5 axles.

§NY & NJ § Allowed up to $102,000 on 5 axles.

§Massachusetts & Connecticut § Allowed $96,000 up to 128,000 on 5 axles.

§Mississippi § Allows more weight depending on axle spacing’s & routes.

§Wisconsin § Allowed up to $104,000 on 5 axles.

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Nebraska - 102,000 on 6 axles.

SC - 107,000 on 6 axles.

West Virginia - 108,000 on 6 axles.

NC, SD, & OR - 119,000 on 6 axles.

Texas - 117,000 on 6 axles.

NM - 118,000 on 6 axles.

MS - 123,000 on 6 axles.

Georgia - 125,000 on 6 axles.

New York - 126,000 on 6 axles.

FL & UT - 127,000 on 6 axles.

Massachusetts - 128,000 on 6 axles.

Maine - 134,000 on 6 axles.

Wisconsin - 142,000 on 6 axles.

Legend

$100,000-108,000

$109,000-110,000

$112,000

$116,000-119,000

$118,000-114,000

$120,000

$122,000+

$123,000

$132,000+

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Oregon - Must be on 9 axle unit or more.

Idaho - Depends on route. More weight can be allowed with a bridge analysis.

Montana - Minimum 23’6” to next axle group.

Washington - Additional weight allowed on a case by case review that is based on axle width & route.

North Dakota - 45,000 to 60,000. Special Request Only.

Legend

- $40,000 lbs.
- $43,000 lbs.
- $46,000 lbs.
- $50,000 lbs.
- $55,000 lbs.
- $60,000 lbs.
- $61,600 lbs.
- $65,000 lbs.
- Special Request Only

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Arizona § Up to 14’w is a class A permit only.
Arkansas § Allows 18’ on Interstate.
Louisiana § Over 14’w not allowed on Interstate.
Maine § Over 16’w a police escort is needed.
Minnesota § Escort needed after 14’6”
Washington § Allows 14’-32’ dependin on route.

§ Legend
- § 14’ Wide
- § 15’ Wide
- § 16’ Wide
- § 17’ Wide
- § 18’ Wide +
- § 20’ Wide
- § Depends on Route, Hwy, or has no set limit

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Arkansas Over 17’ H requires utility escort.
Connecticut – allows 14’H but may depend on routes.
Idaho Contact engineering for heights over 15’6” (574)674-8836.
Kansas based on bridge/structure clearances.
Kentucky – anything over 15’6” requires a review.
Maine Over 16’ contact utility, pole car required.
Massachusetts Over 13’8” requires route survey.
Montana Heights exceeding 17’ requires applicant to determine best route.
Oklahoma Over 21’ must be approved
South Carolina Limited by overhead structures, must clear by 3’.
Texas Route Analysis required for higher limits.
Utah Loads in excess of these are permitted single trip according to route.
Washington Over 16’ is a super load
Wyoming Dimensions must be approved by WHP for loads in excess of 17’.

Legend

- **14’ High**
- **17’ High**
- **15’ High**
- **18’ High +**
- **16’ High**
- Depends on Route, Hwy, or clearances

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Escorts Required on 4 Lane for Width

**Alabama** - 2 Escort vehicles required if over 12'W.

**Arizona** - Over 14'W is handled on a case by case basis.

**Connecticut** - 2 escorts needed at 13'6"W & 3 escorts required at 15'+W.

**Georgia** - Amber light may replace rear escort on divided highway at 12'W.

**Illinois** - Requires 3 escort vehicles if over 16'W.

**Massachusetts** - 13'6"W requires 2 escort vehicles.

**New York** - Note: State regulations are different from NY Thruway & NYC. Call either NY State Thruway Authority (518-436-2793) or NYC (718-433-3328) to get current escort regulations.

**Rhode Island** - 14'6"+ requires 2 escort vehicles.

**Virginia** - Requires 3 escort vehicles over 14'W.

---

**Legend**

- §12' W
- §13' W
- §14' W
- §14' W with 2 Escorts
- §14'6" W
- §15' W
- §15' W with 2 Escorts

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**Legends**

- **13'9" H**
- **14' H**
- **14'4" H**
- **14'6" H**
- **15' H**
- **15'6" H**
- **15'10" H**
- **16' H**
- **17' H**
- **18' H**
- **Determined by Route**

---

**California** - At 15' high, one High Pole escort required in L.A. & or Bay areas.

**Delaware** - Route Survey required if over 15'H, 2 escorts required at 15'H.

**Illinois** - Over 14'H in Chicago requires IL Highway Patrol.

**Indiana** - Detailed route survey required for loads exceeding 17' H.

**Louisiana** - High Pole escort required at 15'10" H.

**Massachusetts** - Route Survey required on all loads 13'8" & over.

**Missouri** - Loads exceeding 17' H requires 1 Hwy Patrol & 1 chase car.

**New York** - Route Survey Required at 14' H. Any over height loads going into NYC requires a route survey.

**Oklahoma** - At 15'9" H, 1 High Pole escort & 1 chase car required.

**South Carolina** - No specific requirement exist for over height vehicles. Bennett Requires a High Pole escort at 15' H.
Note: States that are white, escorts will be determined by state.

Alabama – 1 escort req. if trailer length is 57’ L, 2 escorts req. at 105’ L or 5’ of overhang.
Arkansas – Over 110’ L, 2 escorts required.
California – In L.A. County at 100’ L requires 2 escorts.
Georgia & Iowa – Below 100’ L, amber light may replace rear escort.
Massachusetts – Over 95’ L, 2 escorts. Over 115’ L at least 1 State Trooper.
Michigan – 90’ to 100’ req. 2 escorts. Two amber lights req. on all loads over 80’ L
Nebraska – Amber lights may replace rear escort.
New York – Over 65’ L in NYC, 1 car required. Over 80’ L on NY Thruway, 1 escort required.
Utah – Escort may not be required. It is up to permit officer’s digression.
Wisconsin – Escort requirements will be specified on permit.
Wyoming – 2 escorts required at 110’ L.

Legend:
- §75’ L
- §80’ L
- §85’ L
- §90’ L
- §95’ L
- §100’ L
- §105’ L
- §110’ L
- §115’ L
- §120’ L
- §125’ L
- §140’ L

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Some politicians who oppose tax increases won’t distinguish between VMT fees and fuel taxes.

Some Politicians who believe taxes are too high for consumers, believe consumers can afford equivalent “user fees”.

Revenue-neutral VMT fees require a rate increase due to higher collection costs.

Revenue-neutral VMTs are inadequate.
Political Situation – Facts?

Bipartisan Mixed Messages
### What's Needed?

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- 6-Year Highway Funding Proposals (millions)
Questions?

Dan Murray

dmurray@trucking.org

www.atri-online.org