



EJMT – Concepts and discussion points for 2019 legislative consideration

Grier Bailey on behalf of the Colorado Petroleum Marketers Association

Board of Trustees

Kirk Swallow – Swallow Oil Company Rifle Colorado

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CWPMA – What is a fuel distributor

Who are our customers?

Gasoline retail stations –a lot of them are owned by fuel distributors

Governments, Transportation Departments, Schools, Cities and counties, construction companies, farms, hospitals, airports, ski areas, and many homes that have propane based home heating systems.

- Fuel distributors are responsible for the distribution of just under 2.4 billion gallons of gasoline, diesel, and aviation fuel (mostly by 8,000 gallon tanker trucks) each year in Colorado.

$2,400,000,000 / 8,000 = 300,000$ Transport truck roundtrips per year in Colorado.

April 12th, 2010

“Lake Dillon Fire Protection District Chief Dave Parmley said, that in worst-case scenario, a crash like last week’s could send a fireball of fuel down the steep embankment toward the A-Basin parking lot. That’s exactly what happened in the early 1980s, when a crash at the A-Basin turn set the North Fork on fire as burning gasoline flowed along the surface of the stream.”



A containment crew attempts to block contaminants from a wrecked tanker truck on Loveland Pass from reaching the North Fork, a relatively pristine Blue River tributary

Purpose

This language would authorize CDOT in coordination with the Colorado State Patrol to establish the EJMT infrastructure evaluation program. The Program will generally consist of a representative group with significant interest in the EJMT and related infrastructure, Loveland Pass and related infrastructure, and adjacent commercial and community interests.

CDOT shall have convening authority of the evaluation program, is responsible for staffing and coordination of the evaluation group. CDOT would further be delegated the responsibility of conducting any study recommended by the evaluation program. The Colorado state patrol who maintains jurisdiction over hazardous materials routes on state highways has the authority to allow a variance from 42-20-301 for the purposes of supporting the recommendations of the EJMT infrastructure evaluation program and in coordination with CDOT.

Loveland Pass in Fall, Winter, and Spring





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For Evaluation

42-20-302. Application for route designation - procedure - approval

(1) Petitions for new route designations or for a change in an existing route designation may be submitted to the patrol no more than once a year:

(a) By a county, with respect to any public road maintained by the county, upon approval of the petition by the board of county commissioners of such county;

(b) By a town, city, or city and county, with respect to any public road located within such town, city, or city and county, including any portion of a county primary road designated pursuant to [section 43-2-110 \(1.5\), C.R.S.](#), that is subsequently annexed by a town or city, upon approval of the petition by the governing body of such town, city, or city and county;

(c) By the department of transportation, with respect to any public road maintained by the state, except for any public road located within a town, city, or city and county, upon approval of the petition by the transportation commission.

April 15th 2010

- LOVELAND PASS –The transport vehicle was carrying 7,000 gallons of petroleum when it rolled over a westbound Highway 6 embankment above Arapahoe Basin Ski Area Friday, leaking about 500 gallons. The tanker was traveling from the Front Range to the Western Slope when the wreck happened around 10:30 a.m.



What is the petroleum exemption? Statutes:

TITLE 42. VEHICLES AND TRAFFIC

HIGHWAY SAFETY

ARTICLE 20. TRANSPORTATION OF HAZARDOUS AND NUCLEAR MATERIALS

PART 3. ROUTE DESIGNATION FOR HAZARDOUS MATERIALS

C.R.S. 42-20-301 (2017)

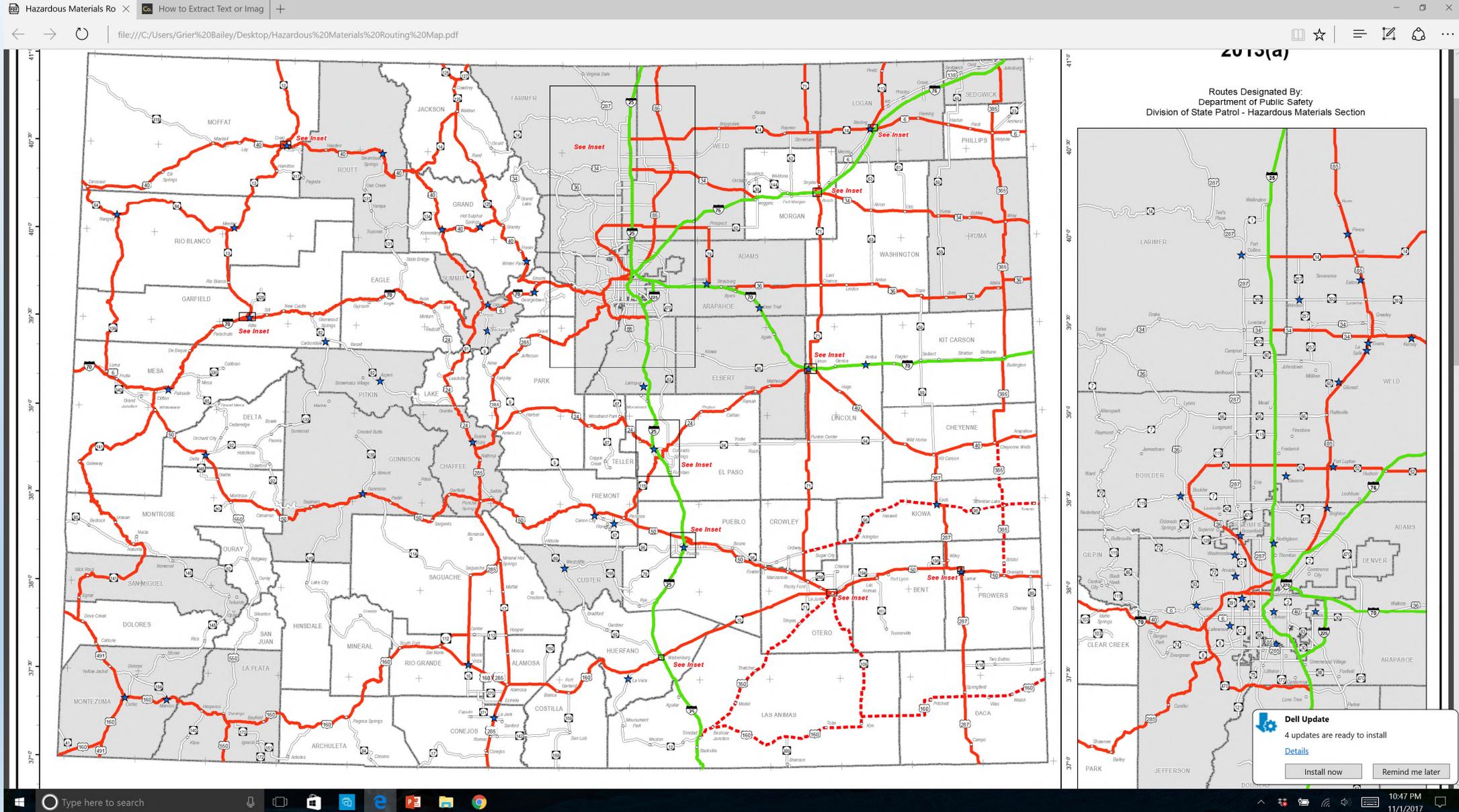
42-20-301. Route designation

- (1) (a) The patrol, after consultation with local governmental authorities, has the sole authority to designate which public roads are to be used and which are not to be used by motor vehicles transporting hazardous materials. The patrol shall exercise its authority in accordance with section 42-20-302. Gasoline, diesel fuel, and liquefied petroleum gas are exempt from route designation unless the petitioning authority specified in section 42-20-302 requests their inclusion. The patrol may exempt crude oil from route designation after a request from the petitioning authority.

Statutes:

- (2) The patrol may approve route designations only for those materials listed in table 1 of 49 CFR 172.504, in any quantities, and those materials listed in table 2 of 49 CFR 172.504, when carried in quantities of five hundred gallons or more; except that the patrol may not accept or approve route designations for those materials listed in table 2 when packaged in containers of five gallons or less or when packaged as consumer commodities as defined in 49 CFR 173.1200.
- (3) Notwithstanding any other provision of this part 3 or part 1 or 2 of this article to the contrary, the transportation commission may regulate hours of operation of the Eisenhower-Johnson tunnels, structure numbers F13Y and F13X, respectively, on interstate 70.

The Petroleum Exemption in practice



August 29th, 2011

- **DENVER (AP)** – State wildlife officials say they found no fish killed in Clear Creek after a tanker truck crashed and spilled 4,000 gallons of diesel fuel into the waterway.
- Jennifer Churchill of the Colorado Division of Wildlife said Monday an aquatic biologist checked the creek after the spill was reported Saturday on U.S. 6 near the Loveland Basin ski area. The truck driver suffered minor injuries.



Many studies and conversations occurred before this legislative action however the fire suppression system solution was a direct result of HB 11-1210 (coordination meetings)

Summary of 11-1210

- Recognizing the need for immediate improvements on the I-70 Corridor, the Colorado Legislature approved H.B. 11-1210, requiring the Colorado Department of Transportation (CDOT), on or before December 20, 2011, to make prioritized recommendations to the Transportation Committees of the House of Representatives and Senate regarding actions that can be taken on or before July 1, 2014, to improve mobility on the Corridor.
- Each recommendation must include a cost estimate and recommend a potential funding source for the improvements. CDOT must consider operational and safety improvement options, transit options, and traffic demand management options and shall also investigate the feasibility of nongovernmental actions that might improve mobility in the corridor.

Summary of 11-1210

- Additionally, CDOT was required to consult with interested local governments and business entities that are located within the corridor that may be substantially impacted by action taken to improve mobility in the corridor and shall take such consultation into account when developing the recommendations.
- The prioritized strategies identified in this report build on more than a decade of work to improve mobility and operations on the I-70 West Corridor.

Recommendation 6

- 6. Develop a fire suppression system for the Eisenhower and Johnson Memorial Tunnels (EJMT) Description: Install fire suppression within EJMT. These water mist systems target zones within the tunnel complex to facilitate a rapid fire incident response and help to prevent a catastrophic structural fire regardless of the amount of congestion inside the tunnel.
- Benefits: Improves emergency response, reduce employee and civilian heat exposure in fires, and extends the response time window to allow CDOT personnel additional time to safely access a fire in the tunnel structures. A fire suppression system could reduce the need for tunnel metering (which results in lengthy traveler delays) as the system would allow personnel to respond to fires regardless of congestion. A fire suppression system could also present new options for routing hazardous materials.

Report Pursuant to H.B. 11-1210

- Concerns: Additional maintenance demands/costs. One low-risk factor is that the system may discharge by mistake. Fire Suppression Systems are not extensively used in the United States, so judging effectiveness of the system is difficult. Colorado State Patrol is responsible for routing hazardous material vehicles and would have to determine, in collaboration with CDOT and FHWA, if free flow of hazardous material carrying trucks is possible through the Tunnels, should such a system be installed.
- How will safety be maintained or improved: This option allows for more expedient fire suppression in the event of an emergency. Protects motorists and emergency responders from fire hazards and extends the current eight minute window responders have to control a dangerous fire event.

Report Pursuant to H.B. 11-1210

- How will mobility be improved: A fire suppression system could reduce the need for tunnel metering (which results in lengthy traveler delays; a 4 minute recovery is required for each minute metering is in effect) as the system would allow personnel to respond to fires regardless of congestion.
- Currently, when Loveland Pass is closed, regular traffic is stopped every hour to allow hazmat trucks to convoy through the EJMT alone. A fire suppression system could allow for a policy change for hazmat trucks to free flow through the tunnels thus preventing regular traffic from being stopped and throughput would be increased. The fire suppression system would help with rapid fire incident response in tunnel reducing the risk of catastrophic fire incidents. If Hazardous materials were allowed through the tunnels, CDOT could shift resources from Loveland Pass to I-70 at the EJMT for cost effectiveness and efficiency.

August 5th, 2013

- FRISCO, Colo.—Authorities are still trying to assess the damage after a tanker truck crashed on Loveland Pass, dumping at least 4,000 gallons of gasoline above Arapahoe Basin Ski Area.
- Fire officials tell the Summit Daily the environmental damage could be severe.
- The Solar Transportation vehicle was hauling diesel and unleaded fuel into Summit County when it tipped over and ruptured on Saturday. Officials say the pollution was 3 or 4 inches deep in places.



So all the studies and reports said we needed a Fire Suppression system - HB13-1252

- CWPMA is partnership with CMCA, CDOT, the I-70 Coalition and CDLE (OPS) allocated 5 million dollars from the petroleum storage tank fund that CDOT then leveraged to secure a series of grants and matches to get the system installed.
- Whats the nexus? The Petroleum storage tank fund is the nations leading program for the prevention and remediation of releases of fuel from UST's – it is the nations leading program because of the partnership between fuel distributors and OPS. The continued risk to our drivers and environmental contamination on Loveland pass swayed our Board to divert money from UST cleanups to this project.
- Our trucks currently use EJMT when Loveland pass is closed and this investment provided the platform for addressing the critical need for CDOT, made the current transit of our trucks, and everyone else, safer and provided an opportunity to revisit this conversation.

CDOT – Response to Governor’s Vision 2018 mandate and WIG (wildly Important goals) mandate - 2016

- CWPMA and our partners commend CDOT for engaging in thorough discussion and appreciate the analysis conducted by CDOT staff.
- CDOT spent numerous hours and involved partners like CSP is trying to evaluate the cost/benefit to changing the rules under two scenarios

CDOT – Response to Governor’s Vision 2018 mandate and WIG (wildly Important goals) mandate - 2016

Scenario A: Hazmat will be permitted to use the undesignated portion of I-70 and travel through the EJMT at the top of each hour regardless if Loveland Pass is open or closed.

\$1,320,278 Annual Savings to Petroleum Carriers

Under Scenario A, allowing hazmat vehicles to travel through EJMT can result in a Total Operating Cost Savings to the industry of \$1,320,278 per year.

CDOT – Response to Governor’s Vision 2018 mandate and WIG (wildly Important goals) mandate - 2016

Scenario B: Hazmat will be permitted to use the undesignated portion of I-70 and travel through the tunnels at any time. This scenario envisions that hazmat carriers pass through the EJMT without holds and with all other public traffic.

Under Scenario B, the annual savings to industry would be \$2,584,696.

Industry additions to analysis for consideration

What is costs for a hazardous materials spill

- Loveland Pass spill in 2014 – From Insurance company
Resulted in the following losses:

- \$2,057.42 Work Comp
- \$96,324.42 Truck/Trailer
- \$6,948.55 Business Personal Property (lost fuel)
- \$629,753.67 Environmental Property Damage

- \$735,084.06 Total

Industry additions to analysis for consideration

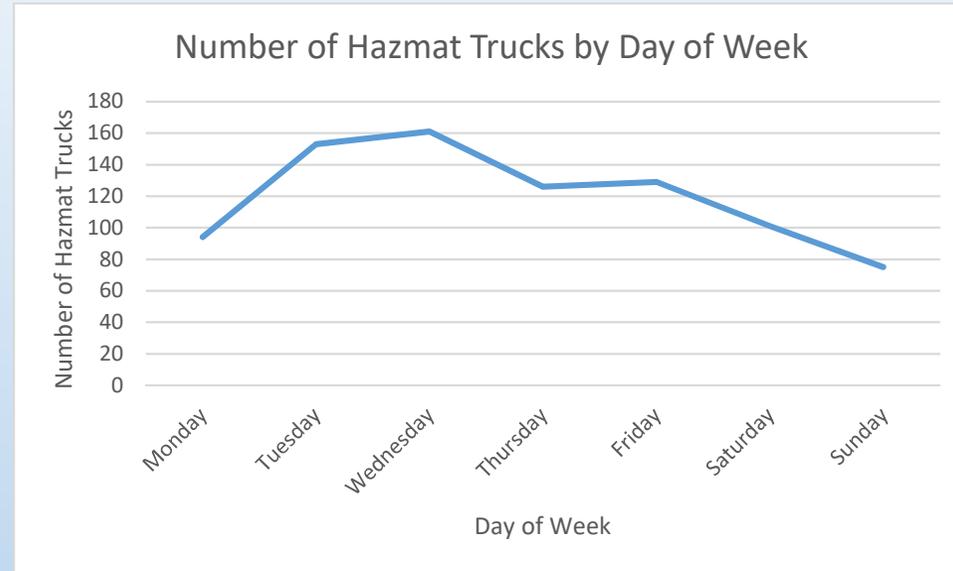
- Surcharges added by distributors on End users /consumers Savings
 - HOS time (driver use) losses from trips that face congestion or delays
 - We drastically reduce the potential damage on the Clear Creek side of the pass.
 - Additional insurance premiums from having to travel over riskier routes
 - Savings to the system for less miles, wear and tear on Loveland pass
 - Stress factors and fatigue to drivers and companies
 - Grade issues within the City of Dillon, marketers report that trucks routinely have issues stopping at stoplights within city limits.
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- Importantly, at the end of the day saving costs isn't the primary goal for CWPMA members, the goal is to be safer.

October 7th, 2017

- **SUMMIT COUNTY, Colo.**
(CBS4) – Officials with Colorado State Patrol are urging drivers to use caution when driving in the high country after a semi truck crash on Saturday.
- The fuel tanker hit a guard rail on Highway 6 over Loveland Pass in a patch of what was described as wintry conditions in the morning. Conditions on other parts of the road were clear at the time.

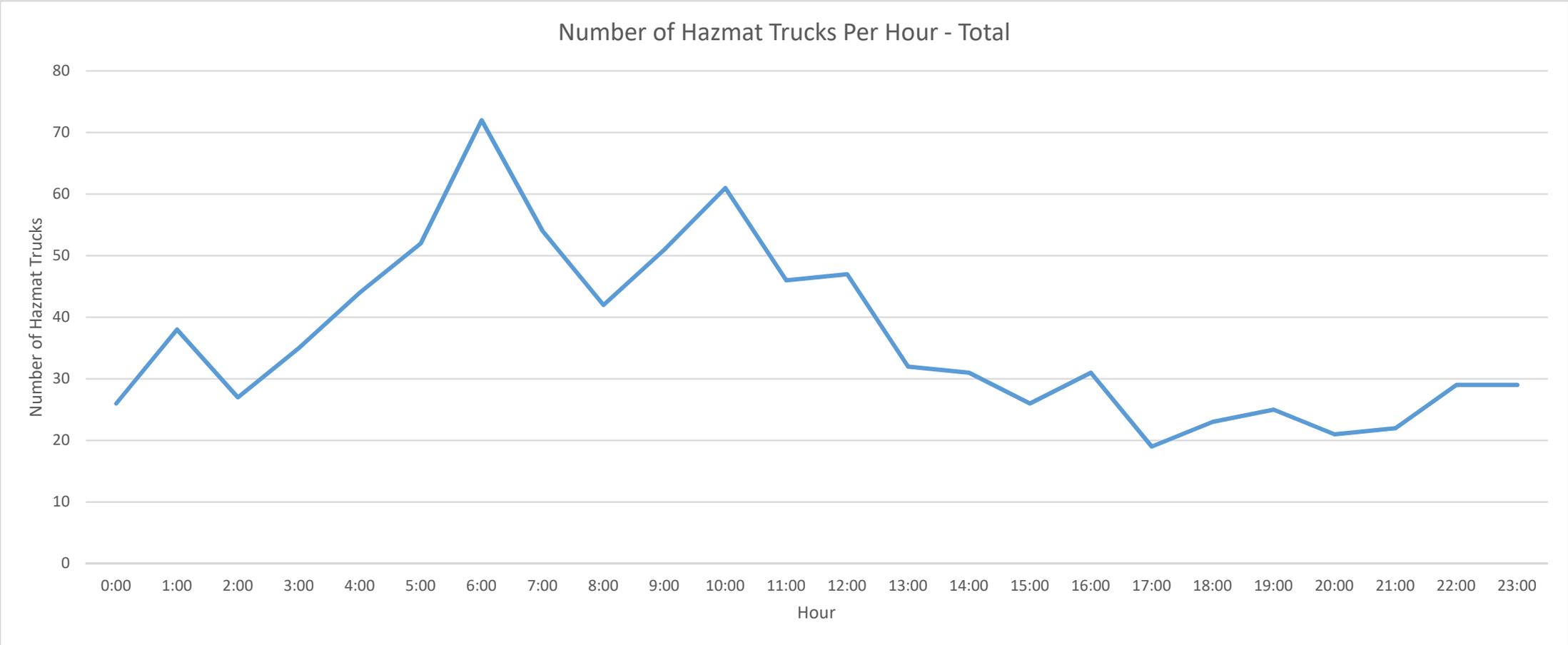


Colorado State Patrol Flow Study 4/18/16



Day of the Week	Number of Hazmat Trucks
Monday	94
Tuesday	153
Wednesday	161
Thursday	126
Friday	129
Saturday	101
Sunday	75

Colorado State Patrol Flow Study 4/18/16



June 13, 2018



Done

11 of 12



CWPMA Takeaways

- Petroleum distributors already try hard to avoid transports during peak periods – traffic and congestion is added cost
- Fuel source infrastructure (fuel sourced out of Denver terminals) plus transit up to the tunnels explains why truck traffic spikes between 5-7 a.m
- The second spike is due to delivery patterns – Fuel going to Summit, Eagle and to a lesser extent Grand and Routt counties – drivers are able to return to Denver within FMCSA HOS requirements.
- Fuel is an on demand business – When Eagle/Vail Airport calls our distributors are responsive – Similarly weekend traffic strains station storage limits.

Back to our proposal – Amending current statute – Part 1

- **Part 1 Requires CDOT to establish the evaluation program and sets minimum criteria for any future study**
- CDOT shall establish the EJMT evaluation program.
- CDOT in coordination with the Patrol and evaluation program members, shall institute an evaluation program. The purpose of the program is to assess the necessary conditions to allow for the transport of hazardous through the EJMT. CDOT may, upon the recommendation of the EJMT evaluation program, conduct a further study that considers conditions, where certain classes of hazardous materials subject to the restrictions and requirements outlined below, allows the transport of Gasoline, diesel, and liquefied petroleum gas and other products.
- **CDOT in coordination with the Colorado State Patrol has the sole authority to suspend the evaluation program under the auspices of 2 CCR 601-8 section 4.3.**
- CDOT garnering the technical assistance of other pertinent agencies and with the scope developed by the evaluation program members, may conduct an updated study directed to assess infrastructure improvements necessary to allow the transport of certain classes of hazardous materials through the EJMT including, but not limited to, the following parameters:
 - Utilization of past studies and recommendations to avoid duplication of efforts when possible including
 - The 2/24/17 Colorado School of Mines “Fire emergency Preparedness at the EJMT, CO
 - The June 2006 Risk analysis study of Hazardous Materials Trucks through EJMT by Parson Brinckerhoff Quade & Douglas
 - An analysis of risks associated with eastbound transit versus westbound transit through the tunnel
 - An analysis of speed and/or lane restrictions for Commercial motor vehicles on the straight creek side of the EJMT to the highway 6 interchange.
 - An analysis of if infrastructure improvements are necessary to protect the environment and if so what those improvements are.
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- The study shall be completed no later the 6/1/2019

Part 2 - Oversight group

- **Part 2 establishes an EJMT evaluation working group – that is dedicated to infrastructure and safety improvements and is responsible for making funding recommendations based on the below criteria -**
- From the effective date of this act and until the Executive Director of the Department of transportation sees fit to suspend or terminate the program the EJMT evaluation group is established.
- The voting members of the working group are designated as follows:
 - The Executive Director of CDOT or their designee
 - The Chairperson of the Freight Advisory Council or their designee
 - The Chief of the Colorado State Patrol or their designee
 - The Director of the Division of Fire prevention and Control or their designee
 - A Commissioner from Clear Creek County
 - A Designee of the City of Georgetown
 - A Commissioner from Summit County
 - A Designee of the City of Silverthorne and the City of Dillon
 - A representative of an company or an association that maintains a state fuel distributors license
 - A representative of a company or an association that is involved in other hazardous materials transport
 - A representative of a general commercial trucking company or Association.
 - Representatives of the Colorado Ski Industry - Specifically Arapahoe Basin and Loveland Ski resorts.

Part 2 – Page 2 - Oversight group

Part 2 establishes an EJMT evaluation working group – that is dedicated to infrastructure and safety improvements and is responsible for making funding recommendations based on the below criteria –

The duties of the working group shall be:

- To establish the scope and parameters of an infrastructure improvement study for the transit of certain classes of hazardous materials through EJMT
- Approve funding recommendations to the transportation commission for improvements along the corridor
- Design and set the parameters for any future program that would allow the transit of Hazardous materials through EJMT

Primary funding priorities may include but are not limited to:

- Expanding the reservoir of water for use of potential fires within the EJMT
- Firefighting capacity which can includes additional training for personnel certified in haz-mat and fire response
- additional fire-fighting equipment at both side of the tunnel to include foam mitigation
- enhanced smoke and air ventilation systems
- enhanced drainage and sump systems
- enhancements to catchment basins along I-70
- Improvements to runaway truck ramps along I 70 from the tunnel to exit 20

Secondary Priorities or recommendations may include but are not limited to:

- Locations for trucks to cool brakes and engines prior to entrance of tunnel
- Emergency response capabilities for supporting agencies
- Installation of Downhill Speed Warning System
- Analysis of speed or lane restrictions for hazardous materials carriers from EJMT to exit 205 along I-70

Part 3 establishes a funding source for improvements - identifies funding mechanisms for the improvements along the corridor and repeals the program after five years

- Within CDOT there is established the EJMT infrastructure improvement fund as an enterprise – Sources of funds can include:
- Monies may be appropriated or used as loans, matches, or sole project funding from sources under the administration of CDOT
- Federal dollars that might be used for the purpose outlined
- Great Outdoors Colorado is authorized to provide grants as matches for studies or enhancements the protection of natural habitat and watersheds for the straight creek wilderness area including mitigation efforts to reduce the risk of contamination
- Any monies provided to the fund from the general assembly during the course of the EJMT evaluation groups work.
- An infrastructure improvement fee not to exceed \$15 per transit may be placed on any hazardous materials carrier of gasoline diesel and liquefied petroleum gas that utilizes the EJMT under the auspices of an evaluation program, by a 2/3 majority of the voting members of the EJMT working group except that the fee shall not be assessed on hazardous materials carriers when access would otherwise be allowed for passage outside the conditions of the program.

Part 4 – Criteria for any future program participants

- Minimum of Three Year CDL per Driver
- FMCSA safety rating
- Evaluation of Driver Residency – a previous CDOT report noted that 9/10 of runaway trucks were from out of state companies and drivers
- Participation in Pre-Pass
- Authority to remove a company from pilot participation