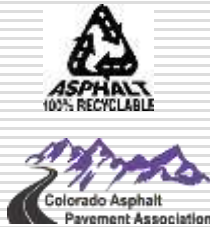


# **"2018 Asphalt Industry Outlook & Association Preview"** *provided for CAPA MEMBERS*

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**Presented by  
Tom Peterson, P.E.  
Executive Director**



## **2017 Asphalt Industry Outlook & Association Preview**

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### **Webinar Outline**

- The CAPA Focus
- 2017 - A Look Back
- 2018 - Market Report
- State of the Industry Report
- Trends and New Developments
- Resources and Professional Development



COLORADO RIDES ON US

Asphalt.

## The CAPA Focus

# Who is CAPA?



**Membership**  
28 Members  
147 Assoc./Affiliates  
71 Local Agencies

**Industry Partners**





CAPA Mission: *To advance the use and quality of asphalt pavements in Colorado.*

*Colorado*





## **Asphalt Pavement Materials (APM):**

- 65 production facilities
- 8.0 million tons of annual production in Colorado



- A majority of producers operate sand, gravel, and quarry operations
- A majority of producers also are general contractors



ASPHALT: driveways, trails, parking lots, city streets, county roads, state highways, airports, dams, etc.



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2017 – A Look Back

**2017  
13 New Member  
Organizations**



**252 Members ....**  
CAPA is the largest state  
asphalt pavement association  
in the US



**CIVIL TECHNOLOGY INC.**



**New Members:**  
equipment, engineering, auction,  
consulting, utility adjusters,  
profile consulting,





**Affiliate Agency Members:**

3 new members in 2017, 76 Affiliate Agency Members total including Northwest Parkway, E-470 Toll Authority



**CERTIFIED INSPECTOR**



**LABCAT CERTIFIED**



*RMAEC/LabCAT: A partnership between .....*





- Level A – Field
- Level B – Laboratory
- Level C- Volumetrics
- Level E – Aggregates
- Level I – Inspector
- Level S - Smoothness



## 2017: Attendance exceeds 500 for 3<sup>rd</sup> year in a row.

- Level A, B, C, E Evaluations: 95%/100% - Good to Excellent in Quality and Benefit
- Level I (Inspector Certification): 95%/95% - Good to Excellent in Quality and Benefit
- *CDOT/CAPA Agreement extended 5 years through the end of 2022!*



## Inspector Certification: Teamwork, Safety, New Technology



Agency Project Drivers: plans and specifications, contract requirements, quality



- Keys to Project Success
- Communication
- Developing trust
- Joint problem solving
- Being Reasonable

Contractor Project Drivers: cost, schedule, production, constructability



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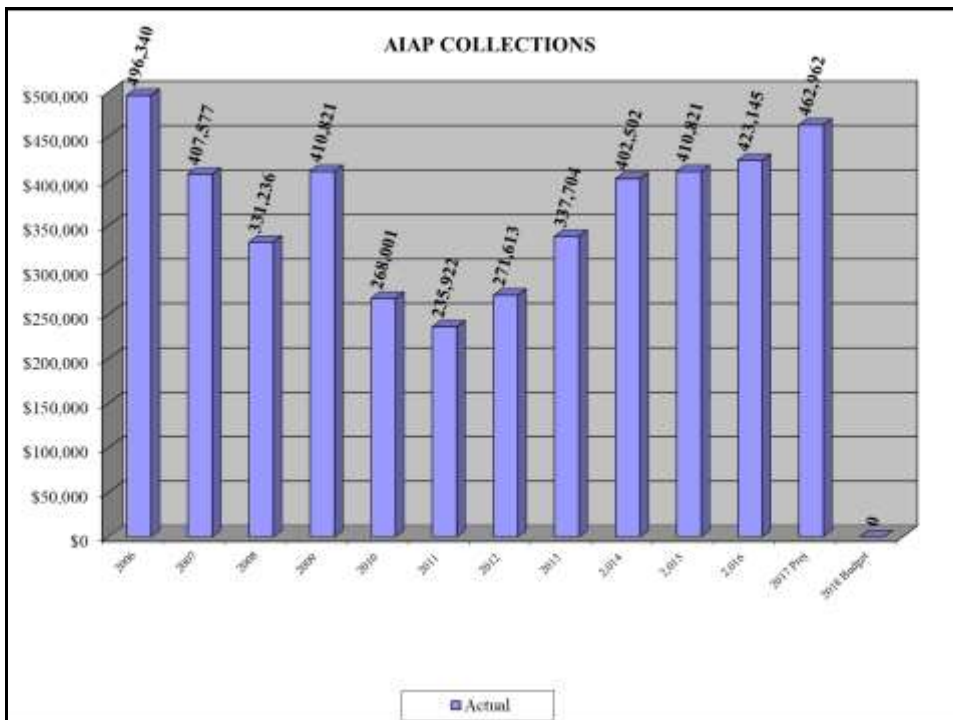
## 2018 Outlook: Market Report

## 2018 Colorado Asphalt Pavement Outlook

8.0 million tons of asphalt placed in 2017

City/County:	35%
State DOT:	25%
Commercial/Residential:	30%
Other: (airport, federal lands, other, etc.)	10%

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016)



FIFTY-THIRD ANNUAL  
**COLORADO**  
**BUSINESS ECONOMIC**  
**OUTLOOK**  
**2018**

Leeds School of Business  
 UNIVERSITY OF COLORADO BOULDER  
 BUSINESS RESEARCH DIVISION

*..... provides a summary of 2017, a forecast for 2018, and industry-specific data analysis and insight into the key factors influencing each sector.*

## Colorado Business Economic Outlook 2018

### United States:

- ❑ Economy growing at 3.1% Q2 2017 and 3.0% Q3 2017.
- ❑ Notable growth in employment, income, and wealth.
- ❑ The US is effectively at full employment.
- ❑ Growth in consumer spending grew from 2.3% in 2016 to 3.7% in 2017.
- ❑ Housing starts will continue improving at a modest rate, surpassing 1.2 million in 2017 and 1.3 million in 2018,
- ❑ Government expenditures is expected to grow by 0.7% in 2018.

### Colorado – Economic Trends:

- ❑ Higher % of female workers, approaching 50%
- ❑ Goods-producing industries continue to decline
- ❑ College-educated population continues to increase
- ❑ New high-tech industries have added significantly to Colorado’s economy and key industry clusters, specifically aerospace, biosciences, IT-software, and telecommunications.



# Colorado Business Economic Outlook 2018

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## Colorado:

- ❑ Colorado continues to outperform most states economically, real GDP 2.7% in Q1 2017 and 3.8% in Q3 2017.
- ❑ Personal income grew 3.9% in Q2 2017.
- ❑ Employment growth: 57,300 jobs (2.3%) in 2016, 56,300 jobs, or 2.2% growth in 2017. This trend will continue in 2018, with the state adding 47,100 jobs, or 1.8% growth—a pace that will likely keep Colorado in the top 10 nationally.

## Colorado:

- ❑ Colorado's July 2016 population was estimated at 5,538,180, an increase of 90,125 from the previous year.
  - ❑ Natural increase (births minus deaths) accounted for 30,000 of the increase, with net migration contributing to the remaining 60,000.
  - ❑ Housing unit growth picked up to an estimated 29,600 in 2016 but it is still behind household formation, creating continued tightness in the housing market and price escalation.
- 



According to U-Haul, Colorado ranked No. 9 nationally in 2017 for inbound migration. In 2016, the state ranked No. 11 and a year earlier, it ranked No. 22.

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# Colorado Business Economic Outlook 2018

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## Colorado:

- Consistent ***new business formation is critical to sustained job growth***. Older firms have a lower job creation rate than younger ones, so employment growth is more muted without the formation of new businesses. From 2010 to 2014, the latest data available, all businesses in Colorado had an average job creation rate of 15.2%. For comparison, firms that were one or two years old had job creation rates of 24.3% and 19.6%, respectively. This above average job creation rate applies to young firms as a whole relative to the statewide average.



# Colorado Business Economic Outlook 2018

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*The Colorado construction industry will experience higher levels of activity in the near future but continue to suffer from labor shortages and growing costs.*





# Colorado Business Economic Outlook 2018

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## Colorado - Employment:

- ❑ Silver tsunami – industry is essentially hiring one new employee for every one that is retiring.
- ❑ The migration of workers from oil and gas exploration to the construction industry has slowed.
- ❑ Construction firms can produce an increased volume of work only by using more overtime and productivity-enhancing techniques.
- ❑ Total construction employment to increase modestly in 2018, adding 2,500, or 1.5%.

## Colorado – Single Family Housing:

- ❑ Year-end 2017 should finish with 23,700 permits for new single-family detached homes, a 9.8% increase for the year. Continued growth in 2018 will see another 9.7% increase, to 26,000 single-family permits.
- ❑ **Metro Denver and Northern Colorado typically account for about two-thirds of Colorado's new home sales,** and the market has been strong in those areas in recent years.

# Colorado Business Economic Outlook 2018

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## Colorado - Housing:

- ❑ **Demand for housing** is driven in large part by net immigration. The State Demographer expects a net migration of 61,500 people in 2017 and 61,000 in 2018.

## Colorado – Housing:

- ❑ An increase in **mortgage rates** to more than 4% for the first half of 2017 did not slow residential building construction.
- ❑ **Multifamily construction activity** remained consistently strong in 2017. By year-end, expect 17,000 multifamily units to be permitted, slightly lower than the 17,400 in 2016.



# Colorado Business Economic Outlook 2018

## Colorado – Non residential Building:

- The nonresidential building sector tracks new, remodeled, and rehabilitated offices; retail; medical facilities; colleges; churches; schools; and government buildings. Building starts in 2017 are forecast to end the year at \$5.4 billion, increasing 5.6% in 2018, to \$5.7 billion.
- Demand across a broad range of real estate sectors was responsible for increased activity in 2017, including office, retail, distribution, hotels, and medical facilities.

## Colorado – Non residential Building:

- Major project starts in 2018:
  - DIA Terminal - \$650 M
  - Concourse B & C expansions - \$1.5 B
  - Redbarre Campus, Parker - \$750 M
  - FHWA: Cottonwood Pass
    - 100,000 tons of AMP (2018 – 2019)
  - Chimney Hollow Reservoir
    - Asphalt core
    - 200,000 tons of AMP (2019 – 2021)



## Market Outlook

The demand for construction services and asphalt pavement materials continues to increase. The economic forecast released by the Colorado Legislative Council calls for non-residential construction spending to **increase 6.3% in 2018** (increased 4.5% in 2017). This increase is from a number of market sectors including commercial development, oil and gas development, and governmental investment in streets, roads, highways, and airports.

# Colorado Business Economic Outlook 2018

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## Colorado: Nonbuilding/Infrastructure:

- This sector tracks construction of roads and bridges, drainage and flood control, water and wastewater facilities, electric power generation and transmission, reservoirs, mass transit, and similar projects.
- The forecast of the final statistics of project awards for 2018 is for \$3.5 billion, assuming the bulk of the construction costs for Central 70 shows up in 2018. This would represent a 17% increase over 2017, which the committee predicts will end the year at \$3 billion in project awards.

## Colorado – Infrastructure:

- Denver Water’s North System Renewal - \$500 M over 6 years
- National Western Center redevelopment
- Pena Boulevard Reconstruction: \$50 - \$80 M.
- Thornton Pipeline – 58 miles
- I-25 The Gap - \$237 M
- Call Before You Dig: The data show year-over-year increases of 7%–11% in the volume of requests for identifying buried utilities every year since 2012. Once again, 2017 has been busier than the previous year, with 2017 volume on pace to be about 5% higher than 2016.

# 2018 Colorado Asphalt Pavement Outlook

---

8.0 million tons of asphalt placed in 2017

City/County:	35%
State DOT:	25%
Commercial/Residential:	30%
Other: (airport, federal lands, other, etc.)	10%

## 2018 Forecast

**+5% over 2017**

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016)

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## Transportation Funding:

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### State of Colorado Funding:

- **Senate Bill 267 (Construction starting in 2019)**
  - Approved in June, 2017
  - \$1.8 B
  - 4 – years
  - Criteria and process for project selection being developed
  - 10% transit
  - 25% in rural counties
- 



## Colorado DOT – Asphalt Pavement Projection 2018

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REGION	2017 (tons)	2018 (tons)	Change (tons)
1 Denver	185,000	183,000	(- 2,000)
2 Pueblo	216,600	250,500	(+33,900)
3 Grand Jun.	301,165	137,051	(-164,114)
4 Greeley	244,662	282,208	(+ 37,546)
5 Durango	62,517	145,170	(+ 82,653)
<b>TOTAL:</b>	<b>1,009,944</b>	<b>997,929</b>	<b>(- 12,015)</b>

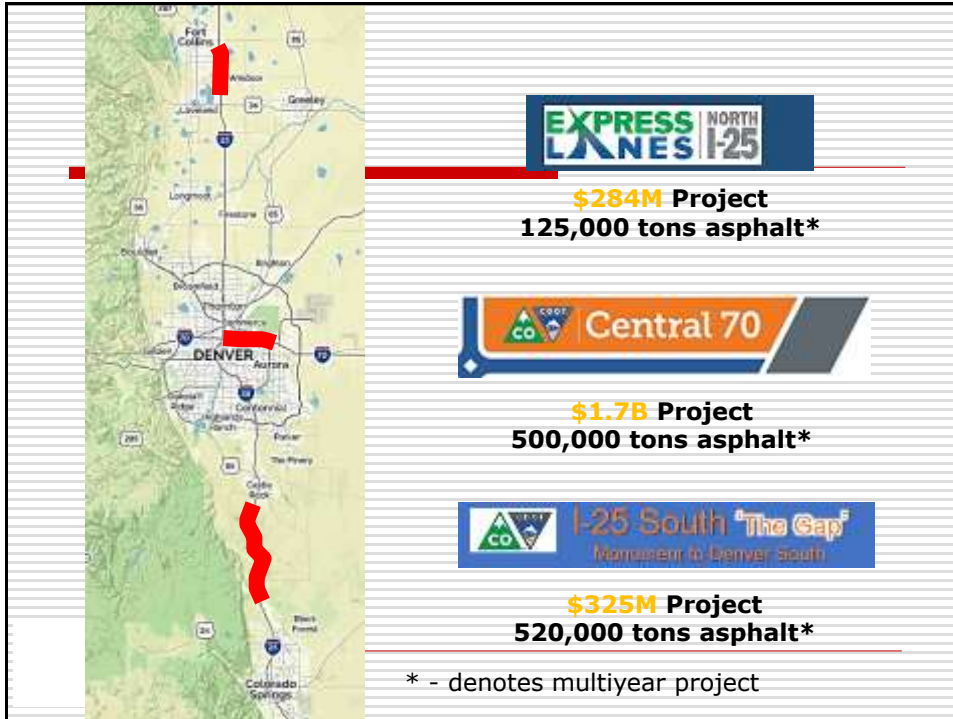
Note:

- Does not include Design/Build, CM/GC, or Flood Recovery Projects
- Several projects already bid and awarded
- Surface treatment quantities also available

**2018 Maintenance Estimated Quantities: TBD**

**2017 Maintenance Estimated Quantities:** {8 Maintenance Sections}

- November, 2016 – July, 2017: 43,866 tons
  - July, 2017 – November, 2017: 115,456 tons
-



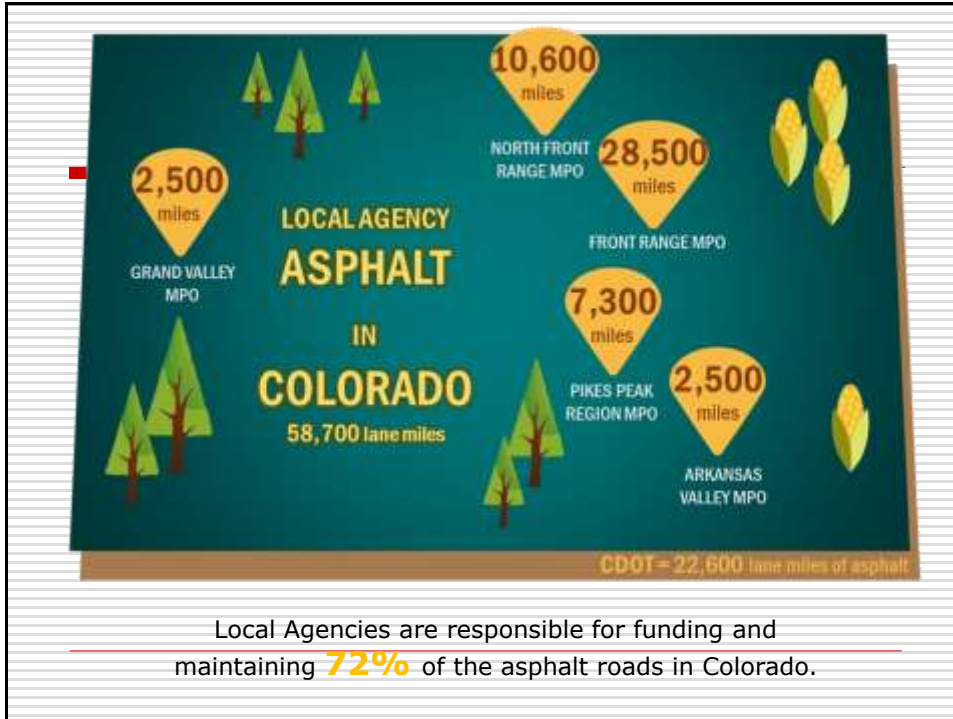
## 2018 Colorado Asphalt Pavement Outlook

8.0 million tons of asphalt placed in 2017		2018 Forecast
City/County:	35%	No Change + *
State DOT:	25%	+5% over 2017
Commercial/Residential:	30%	No Change from '17
Other: (airport, federal lands, E-470, etc.)	10%	

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016)

\* - denotes the large D/B, CM/GC projects





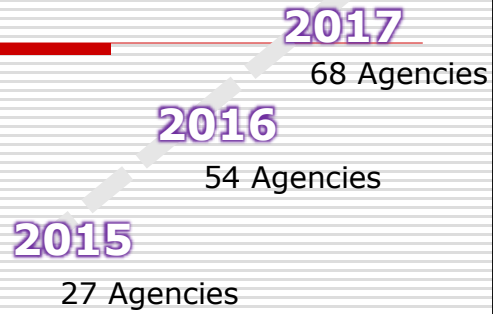
Colorado Asphalt Pavement Association

**Local Agency Roadway Condition/Funding Survey**

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<b><u>Street Improvement Budget</u></b>	<b><u>Pavement Condition</u></b>
<ul style="list-style-type: none"> <li>- Maintenance Overlay: Mill &amp; Overlay</li> <li>- Preventive Maintenance (PM)/Surface Treatment</li> <li>- Concrete Repairs</li> <li>- Asphalt Supply for maintenance crews</li> <li>- Capital Improvement Projects (CIP)</li> </ul>	<ul style="list-style-type: none"> <li>- Network PCI</li> </ul>

# Local Agency Responses



Local Agency	Paved Lane Miles	Year	Annual Asphalt Program		PCI	Public Works CIP
			Mill/Overlay + Preventive + Crack Seal	\$ / lane mile		
Adams County	1473	2017	\$7,100,000	\$4,820	71	\$9,181,000
Arapahoe County	1162	2017	\$4,332,500	\$3,728	70	
Arvada	1525	2017	\$7,800,000	\$5,115	64	
Aspen	72	2016	\$283,500	\$3,938		
Aurora	4356	2017	\$13,700,000	\$3,145	69	\$15,500,000
Basalt	41	2017	\$258,210	\$6,298	55	\$141,891
Boulder County	806	2017	\$4,374,973	\$5,428	79	\$15,100,000
Boulder	628	2017	\$2,474,000	\$3,939	73	
Broomfield	529	2014	\$3,900,000	\$7,372		
Breckenridge	120	2017	\$750,000	\$6,250	78	
Cañon City	194	2017	\$3,500,000	\$18,041	37	
Castle Pines	82	2017	\$350,000	\$4,268	75	\$864,321
Castle Rock	640	2017	\$3,940,000	\$6,156	75	\$4,700,000

## 2018 Local Agency Trends

Castle Rock  
 Cherry Hills Village  
 Douglas County  
 El Paso County  
 Lone Tree  
 Pitkin County  
 Rio Blanco County  
 Steamboat Springs  
 Superior  
 Greeley  
 Breckenridge  
 Jefferson County  
 Greenwood Village

**Wild Card:**  
 + Capital  
 Improvement  
 Projects (CIP)

**+ \$17.4 M**

Street/Road Maintenance



2  
 Agencies



1  
 Agencies



10  
 Agencies


## Street Improvement Ballot Initiatives



8 Local Agencies


**\$43.2M**

Increase




**Fort Morgan**  
CITY OF FORT MORGAN


**Sales Tax Measure**  
**Yes 61.2%**  
 No 38.3%




**Ballot Issue 2A**  
**Yes 53.7%**  
 No 46.3%




**Ballot Issue 2C**  
**Yes 57.7%**  
 No 42.3%






**Greeley**


**Yes 76.6%**  
 No 23.4%



**Ballot Issue 2A**  
**Yes 73.7%**  
 No 23.3%



**El Paso County**  
**Issue 1A**  
**Yes 67.2%**  
 No 32.8%



**Ballot Issue 2D**  
**Yes 65.9%**  
 No 34.1%



## Public Policy Issues Impacting the Construction Industry

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- Energy
  - Health Care
  - Labor
  - Regulations
  - Environmental
  - Taxes
  - Funding
  - Marijuana
  - DBE/WBE
- 



**DENVER BUSINESS JOURNAL**  
denverbusinessjournal.com

**DBJ's #3 business story of 2017:  
A lack of money means highway headaches  
Traffic jam westbound I-70 with snow covered mountains**





## Colorado Transportation Funding

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**THE DENVER POST**  
denverpost.com

Here's what to expect in the 2018 legislative session in Colorado, 1/8/2018

An off-season filled with scandals is backdrop for major debates on PERA and transportation at the Capitol

**LEGISLATIVE PREVIEW: Colorado's Capitol offense, and defense in 2018, 1/8/2018**

State lawmakers say roads and schools will dominate legislature this year, pundit says showboating will be all the rage in the General Assembly

**Aurora Sentinel**

---

Key Questions?? Is it a priority? Is there chatter on how to pay for it?? indicators of political movement??



## Transportation Funding:

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**Is 2018 the Year for a statewide transportation ballot measure??**

### **CIC 527**

- Led by CCA and including CAPA, CRCMA, CSSGA, Move Colorado.
- \$500,000 collected to initiate an effort
- Current Activities:
  - Coalition building (Denver Chamber of Commerce)
  - State Capital Lobbying
  - Public Relations/Public Education
  - Polling

**Key Issues:** Citizen initiative versus legislative referred measure. Sales tax – 0.5 cents/\$1 spent - \$500 M/yr. Bonding - ?, transit component - ?, sunset - ?, project list - ?, rural/urban balance, opposition, endorsements:

Challenge: \$500k - \$1M to get on ballot; \$6M - \$10M campaign

## Federal Transportation Funding

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 **USA TODAY** At Camp David, Trump will push Republicans to make infrastructure top 2018 priority, 1/4/2018

House Transportation Committee  
Chairman floats raising gas tax to pay for  
infrastructure rebuild, 1/4/2018



WASHINGTON  
**Examiner**

GOP Rep. Bill Shuster to retire, spend final  
year working with Trump on massive  
infrastructure bill, 1/2/2018

**GOOD NEWS!!** On the radar, discussion on how to pay  
for it, indicators of political movement.

## Coalition Trip to DC - Spring, 2018

---



## TRANSPORTATION CONSTRUCTION COALITION

A Unified Voice for Strong Federal Surface Transportation Investment

**5% annual increases**  
in federal highway and transit investment



create between **78,000 and 122,000 new jobs**

**5% annual increases** in federal highway and transit investment over 5 years would **create between 78,000 and 122,000 new jobs** (includes direct, indirect, and induced jobs).

**5% annual increases**



create an additional

**\$9.6 billion in real GDP**

**5% annual increases** in federal highway and transit investment over 5 years would **create an additional \$9.6 billion in real GDP** for the U.S. economy.

[www.transportationconstructioncoalition.org](http://www.transportationconstructioncoalition.org)

## 2018 Colorado Asphalt Pavement Outlook

8.0 million tons of asphalt placed in 2017

City/County:	35%	<b>2018 Forecast</b> <b>+5% over 2017</b>
State DOT:	25%	<b>No Change + *</b>
Commercial/Residential:	30%	<b>+5% over 2017</b>
Other: (airport, federal lands, E-470, etc.)	10%	<b>No Change from '17</b>

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016, 8.0 M tons in 2017)

\* - denotes the large D/B, CM/GC projects



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## 2018 Outlook: State of the Industry

*DISCLAIMER: It is understood that any number of the issues and factors presented may change with or without notice and could result in significant impacts on the accuracy of this information.*



**How much does asphalt cost? What is the cost of asphalt? We need to clarify cost:  
Project – Mix/Material – Liquid Asphalt**

## Liquid Asphalt Supply

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From an asphalt supply and availability standpoint, liquid asphalt binder remains in ample supply throughout Colorado and there are no known disruptions.

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## What Factors Impact Project Cost?

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**Higher labor costs.** Qualified labor, both skilled and unskilled are in short supply. There are many Federal Davis Bacon wage rate projects, so the hourly rate on non-Davis-Bacon is increasing. This is very true for general laborers/flaggers.

*The cost of aggregates has historically increased 3% - 4% annually. At present, the indication is that the trend of annual increases will occur in 2018.*

**Availability of subcontractors** (including DBEs) is tight in several specialty areas. A shortage of skilled labor continues to put pressure on costs and subs are being selective about which projects they have the resources to support.

The cost of **protecting workers in the construction work zone** is increasing. We are seeing an increase in both the frequency and severity of accidents in the work zone.

**Cement prices** have historically increased at the beginning of each calendar year. At present, there is no reason to believe this trend will not occur in 2018.

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## Construction Cost – Universal Factors

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- **Health care premiums** continue to increase at an average rate of 8% - 15% per year.
  - **Workman's compensation premiums** and claim expenses continue to increase.
  - **Legal expenses** with frivolous construction defect claims and frivolous HR claims increase cost.
  - **Regulatory and enforcement fees** continue to increase costs of construction.
  - **Permitting costs of equipment and material sources** and the ongoing onerous demands placed on approvals of special use permits.
- 

## Why do our Bids Vary from the Project Estimate?

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A recent APWA survey found that *over 50% of public projects are completed over budget*, partly due to;

- Outdated or inaccurate estimates
  - Changes in Project Scope
  - Inflation – consumer costs, other
  - Market Conditions – Supply/Demand, high costs from subcontractors, increasing health care costs, increasing costs to find, hire and train a new employee
  - Short supply of subcontractors including DBE subs
  - Contract Requirements – traffic control, testing, inspection
  - Cost of Doing Business: permitting, environmental
-



## How Can You Maximize Your Limited Street/Road Improvement Funds?

**Get the Work Out Early!** The single most effective way to maximize the limited road improvement funds is to advertise and bid projects as early as possible.

**Utilize Recycled Asphalt Pavement (RAP):** Increasing the amount of RAP used is considered one of the effective ways to reduce the cost of asphalt materials. Most agencies currently specify **20% - 25% RAP** on all lifts (including top lift).

**Uniformity and Consistency in Material Requirements:** Minor variations in material requirements from agency to agency can lead to increased costs without increased value. The most common asphalt material specifications in Colorado are for **SX 75 gyrations, PG 64-22 or 58-28, 20% RAP**.

**Maximize Work Hours & Project Schedule:** Shorter work hours and restrictive traffic handling requirements result in lower production, longer projects, and increased costs.

**Accurate Engineer's Estimate:** Additional costs are incurred by both the contractor and the agency when projects must be re-bid. Understand what factors should be considered as the engineer's estimate is established.



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## 2018 Outlook: Trends & New Developments

## Trends: Asphalt versus Concrete



### Pavement Type Selection

1. Commerce City – Tower Road, Alternate bid – ASPHALT
2. Arapahoe Rd. @ I-25, concrete out – ASPHALT in!
3. Town of Castle Rock – Meadows Pkwy. Concrete out – ASPHALT in!
4. Colorado Springs – Centennial Blvd. alternate bid – ASPHALT
5. Central 70 – D/B/M/O/F – ASPHALT 500,000 tons
6. I-25 Gap - 18 miles – ASPHALT 520,000 tons to 670,000 tons
7. Town of Parker – JP Morgan Pkwy – concrete out – ASPHALT in!
  
8. DIA (DEN): Pena Blvd. – PCC rubblization, PCC in; Concourse B/C expansion
9. Weld County – CR 47 PCC 4 lane divided
10. I-25 North Express Lanes – mostly PCC

Key Factors: traffic impact, budget, maximize scope, maintenance

## Material Conservation – Utilize More Recycled Asphalt Pavement



Asphalt pavements are **100% recyclable** and are the **#1 product recycled in the U.S. each year**. **CDOT now at 17% RAP on average.**

*Specify for innovation ....*

## New Developments: Asphalt Specifications



### Item #20 – Asphalt Specification, approved, October, 2017

1. A reduction in total length from 40 to 20 pages.
2. A new elimination of references to CDOT requirements.
3. Terminology changes from hot mix asphalt to asphalt paving materials and warm mix asphalt to workability mix additive.
4. RAP increase to 25%
5. The use of liquid anti-strips.
6. Elimination of the use of 100 gyration mixes
7. Target air voids changed from 4.0% to 3.5%.
8. Encouragement of the use of WMA for a compaction aid.
9. Surface temps and not ambient used for determining placement of asphalt pavement materials
10. Elimination of the use of incentive/disincentive requirements.



### Construction Quality: Longitudinal Joints a Key



## Work Zone Safety

*.. The frequency and severity of work zone accidents continue to increase at an alarming rate."*



AWARE System: Advanced Warning and Risk Evasion System

## How can asphalt help save the environment?

*See how IoT sensors connected to our network are giving cities the ability to cut carbon emissions and commute times. <https://www.verizon.com/about/our-company/humanability>*



## **Possibilities with WMA** **Warm Mix Asphalt/Workability Mix Additive**

- Extend the paving season (compact at lower T)*
- Improve workability (easier to get compaction)*
- Reduce fuel consumption at the plant*
- Reduce emissions at the plant*
- Increase haul distance*
- Reduce fume and improve safety at paver*
- Reduce aging of the binder (improve performance)*
- Pave at lower temperatures*



*CDOT, Sept. '09*





## Warm Mix Asphalt – Mesa County

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- Warm Mix Asphalt
- Move traffic sooner
  - More consistent density





**WELD COUNTY COMMISSIONERS to discuss permanency of asphalt plant near Windsor today**



**TheTribune** Serving Greeley and Weld County, CO

January 10, 2018 – Front Page

Opposition hired an attorney and a marketing (PR) consultant.

Applicant (contractor) hired experts (land appraiser, traffic engineer, environmental – noise and water quality, medical doctor – health effects of dust and emissions).

**HOPING FOR THE BEST**  
Contractors behind the project and residents opposed to the project are staying optimistic

**W**eld County commissioners will discuss today whether to allow a \$20 million asphalt plant to remain in a residential neighborhood in Windsor. The plant, owned by Simon Contractors, has been operating since 2011. The plant is the subject of a lawsuit filed by a group of residents who say the plant is causing health problems and property damage. The plant is also the subject of a lawsuit filed by the state of Colorado, which says the plant is violating state air quality laws. The plant is also the subject of a lawsuit filed by the state of Colorado, which says the plant is violating state air quality laws.

**Trends: Gravel Pit & Asphalt Plant Permitting**

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**TheTribune** Serving Greeley and Weld County, CO

**Weld County commissioners will ask for re-hearing after Colorado Appeals Court loss in Martin Marietta case, 12/4/2017**

The Board of Weld County Commissioners will appeal the Colorado Court of Appeals decision that ruled against them in a land-use case involving a concrete and asphalt plant near a residential neighborhood in Johnstown. In this case, the appeals court said Martin Marietta was never able to prove it could meet the noise standard commissioners put in place. Typically, commissioners have simply required a promise from the company it will meet the standards. Today, the \$20 million plant is nearly complete, as Martin Marietta went forward with construction at the company's own risk despite the ongoing legal dispute.

---

## Trends: Gravel Pit & Asphalt Plant Permitting



**THE DENVER POST**  
**denverpost.com**

**Controversial gravel pit project along Arkansas River gets green light from Pueblo County planners, 4/25/2017**  
Agricultural union calls decision a classic example of how development in Colorado drives out ranchers and farmers

Dan Hobbs harvesting radishes, lettuce and other item at his farm in Avondale. Hobbs' farm is near where a controversial gravel mine was approved by Pueblo County commissioners this week.

---

## Trends: Gravel Pit & Asphalt Plant Permitting



**THE DENVER POST**  
**denverpost.com**

**Controversial gravel pit project along Arkansas River gets green light from Pueblo County planners, 4/25/2017**

**FAKE NEWS!!**

**At left, proposed site.**

**District Judge ruled against the applicant, 1/9/2018.**

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## Trends: Gravel Pit & Asphalt Plant Permitting

Loveland  
Reporter-  
Herald

Loveland, CO

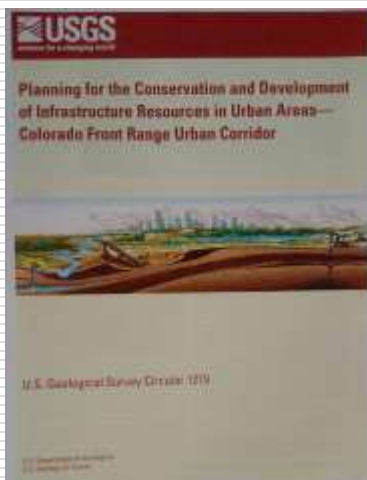
reporterherald.com

**Johnstown gravel pit gets Larimer Planning Commission OK  
County commissioners will have final say on Stroh site, 11/18/2017**



FORT COLLINS — Fourth-generation family business Coulson Excavating is one step closer to being able to mine sand and gravel on their property in Johnstown, which is surrounded by neighborhoods.

## Trends: Gravel Pit & Asphalt Plant Permitting



### Future Outlook:

**..... demand for aggregates can be expected to continue at reasonably high levels**

**... recoverable resources are being hauled from greater distances as local resources become depleted or inaccessible.**

**.... Increased costs for this aggregate would be passed along in the form of higher taxes, user fees, and purchase prices.**

**... Decisions made in the near future will have long-term effects on the continued availability of reasonably priced aggregate in the project area and the entire region.**

## Trends: Gravel Pit & Asphalt Plant Permitting

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### Air Quality Impacts and Health Risks from Asphalt Pavement Mixture Plant Emissions

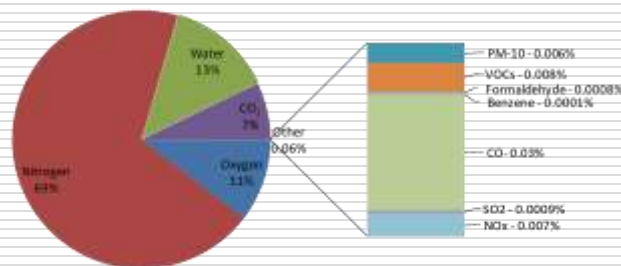
National Asphalt Pavement Association  
5100 Forbes Blvd.  
Lanham, MD 20706

Phone: 888-468-6499  
<http://www.asphaltpavement.org/>

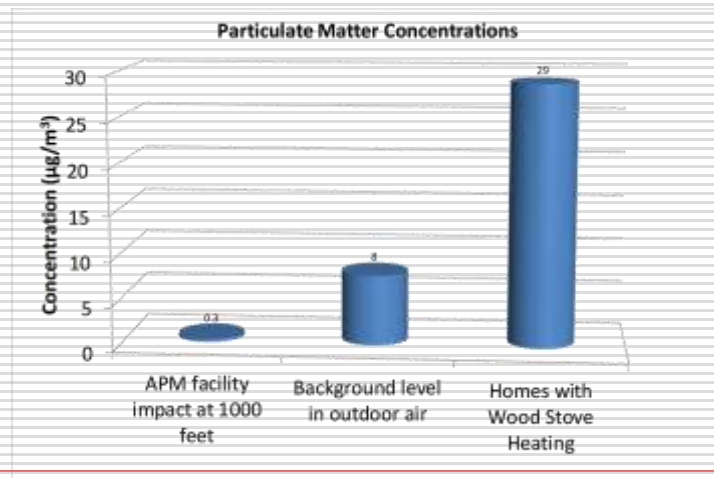
## What's in Dryer Stack-Gas?

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Asphalt Pavement Mixture Plant  
Effluent Composition (by Mass)



## Impacts of a Typical APM Plant vs. Background: Particulate Matter



## Trends: Gravel Pit & Asphalt Plant Permitting

### Conclusions

- ❑ Asphalt Pavement Mixture (APM) plants are minor sources of air pollution and plants employ controls to reduce emissions
- ❑ Air quality impacts due to APM emissions are typically small fractions of existing background levels already present in indoor and outdoor air
- ❑ APM plant emissions pose no public health hazard, consistent with studies by the Agency for Toxic Substances and Disease Registry



[www.safeasphalt.org](http://www.safeasphalt.org) - .. A website devoted to sharing information on asphalt plants and the environment.

**Key Points:** The asphalt industry is closely regulated. The industry has made great strides in environmental stewardship and sustainability. Modern asphalt plants are more efficient, quieter and cleaner than ever before. Asphalt plants can operate effectively in a people environment.



[www.co-asphalt.com](http://www.co-asphalt.com) - .. A website devoted to being the source of information for our members and user/agency partners.

**New Features:**

- **Workforce Development**
- **Safety asphalt plants, work zone**
- **Local Agency Resources**





COLORADO RIDES ON US

Asphalt.

## 2018 Outlook: Resources & Professional Development



45<sup>th</sup> Annual Rocky Mountain Asphalt  
Conference & Equipment Show

[www.rmaces.org](http://www.rmaces.org)

**NEW This Year:**

- Theme:  
***Paving to the  
Future***

February 21 - 23, 2018  
Crowne Plaza DIA  
[www.rmaces.org](http://www.rmaces.org)





# 45<sup>th</sup> Annual Rocky Mountain Asphalt Conference & Equipment Show

[www.rmaces.org](http://www.rmaces.org)

## NEW This Year:

- Innovations  
Breakout Session (Wed.  
morning - Feb. 21)

1. Equipment Innovations
2. Maintenance Innovations
3. Test Equipment & Data Management Innovations
4. Research – Moisture Damage of Asphalt Pavements



# 45<sup>th</sup> Annual Rocky Mountain Asphalt Conference & Equipment Show

[www.rmaces.org](http://www.rmaces.org)

## - Equipment Product Innovations:

Honnen, Power Equipment Co., Roadtec, Wagner Equipment, Faris Machinery, Bobcat of the Rockies, 4 Rivers Equipment, Volvo, Wirtgen, BOMAG





## 45<sup>th</sup> Annual Rocky Mountain Asphalt Conference & Equipment Show

[www.rmaces.org](http://www.rmaces.org)

### **NEW This Year:**

**- 10<sup>th</sup> Annual Flexible Pavement Research Symposium**

### ***Understanding Moisture Damage of Asphalt Pavements***



## 45<sup>th</sup> Annual Rocky Mountain Asphalt Conference & Equipment Show

[www.rmaces.org](http://www.rmaces.org)

### **101 Education Sessions – Back to Basics**

***Maintenance:*** Asphalt Maintenance & Repair, Soil Stabilization Solutions, Wide Crack Repair, Small Paving Applications, Chip Seals, Slurry Seals

***Equipment & Operator Education:*** Tack Coat Application, Paver Operation, Roller Operation, Milling Operation, Equipment Setup for Night Paving, Equipment Maintenance, Subgrade Equipment

***Materials:*** Warm Mix Asphalt (WMA) Asphalt Mixture Selection, Crude Oil Refining Economics, Sampling and Testing, Recycled Asphalt Pavement, Plant Operations, Mix Design



**Early Registration Deadline: Feb. 15**

## **2018 Webinar Series:**

- 15 Webinars Scheduled
- No Cost to CAPA Members, APWA, CARSE, CDOT
- All aspects of asphalt pavements



Industry Outlook; workforce development, asphalt paving programs, plants, placement and compaction, wide crack repair, inspection, maintenance, project management, thin lift paving, communication, pavement forensics, understanding PG binders.



### Technical Focus:

- Wide Crack Repair
- In-place recycling
- Pavement Durability vs. Stiffness (Rutting)
- New Technology





Date: Whenever You want it, 2018  
Location: At Your Office  
Subjects: Asphalt A to Z



## Short Course in Asphalt Technology



Date: Whenever You want it, 2018  
Location: At Your Office  
Subjects: Asphalt A to Z

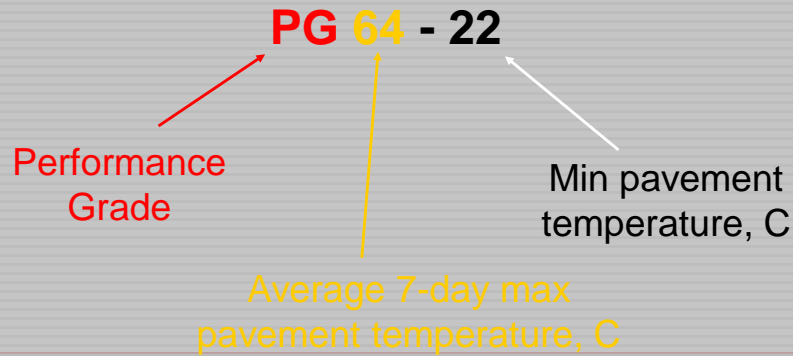


## Asphalt Lunch & Learns

Specifications  
New Technology  
Pavement design  
Maintenance  
Inspection  
Troubleshooting Field Problems  
Testing 101  
Warm Mix Asphalt  
Asset Management/PMS

# Superpave Asphalt Binder Specification

Based on Climate



93

## Pave Green - Sustainability



- **Asphalt 100% recyclable**
- **LEED Credit available when using asphalt**
- **Warm Mix asphalt**
- **Recycled Asphalt Pavement**
- **Perpetual Pavement**





**Pavement Core, I-25 N. of Pueblo, original construction - 1962**

**Q: How long do asphalt pavements last?**

**A:** Longer than most people think. Don't confuse the number of years to the next resurfacing (10, 12, or 15 years or more) with how long the pavement is in place. Most asphalt pavements have been in place since the original construction.

## **The Asphalt Advantage**

- Lower Initial Cost*
- Competitive Life Cycle Costs*
- Improved Smoothness*
- Lower Pavement Noise/Quiet pavement*
- Faster Snow Melt*
- Enhanced Pave Green - Sustainability*
- Ease of Maintenance*
- Reduced Time of Construction, Less Traffic Disruption*

## The Asphalt Industry of Colorado



## **"2018 Asphalt Industry Outlook & Association Preview"** *provided for CAPA MEMBERS*

**Presented by  
Tom Peterson, P.E.  
Executive Director**

