2023 ASPHALT INDUSTRY OUTLOOK "MARKET CONDITIONS, TRENDS, AND NEW DEVELOPMENTS" PROVIDED FOR CAPA MEMBERS & AGENCY PARTNERS

Tuesday, January 10, 2023

Presented by Tom Peterson, P.E. Executive Director

Mike Skinner, P.E. Director of Engineering

Tom Clayton, SET Director of Technical Services







2023 ASPHALT INDUSTRY OUTLOOK & MARKET ANALYSIS



WEBINAR OUTLINE



CAPA OVERVIEW



2022 - A LOOK BACK



2023 - MARKET CONITIONS



INDUSTRY TRENDS

Webinar Participants:

- producer/contractors
- suppliers
- consultants
- product/service providers
- agency personnel



NEW DEVELOPMENTS



RESOURCES AND PROFESSIONAL DEVELOPMENT

CAPA MISSION:
TO ADVANCE
THE USE AND
QUALITY OF
ASPHALT
PAVEMENTS IN
COLORADO.









1983-2023

<u>Membership</u>

24 Producer/Suppliers 162 Associate & Affiliates 77 Local Agencies

263 TOTAL MEMBER ORGANIZATIONS

Industry Partners







































7040 W. Hwy. 160 Alamosa, Co. 81101 (719) 589-6671





A CRH COMPANY

















Russ Larsen Elam Construction

New Board of Directors:



Tony Majka Holcim



CAPA Executive Committee 2023 – 2024

President: Russ Larsen, Elam Construction

Vice President: Grant Cruseturner, Brannan Sand & Gravel

Secretary: Ryan Yoch, Martin Marietta Treasurer: Ed Wells, Connell Resources

1st Past President: Mike McDonald, Kiewit Infrastructure

Officer: Stu Ponting, CASI

Officer: Jeff Keller, APC Construction, a CRH Company

Officer: Scott Davis, Schmidt Construction Co.
Officer: Ken Coulson, Coulson Excavating Co.

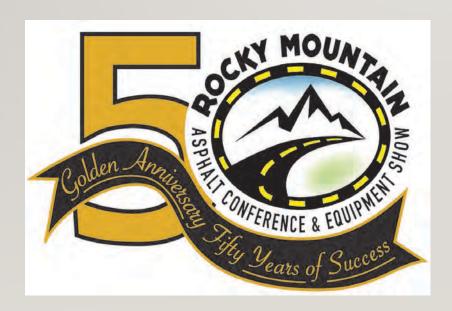


Jess Hastings Benesch



Carey Jones, Kumar & Associates







ASPHALT PAVEMENT MATERIALS (APM):

66 PRODUCTION FACILITIES 9.25 MILLION TONS

- A majority of producers operate sand, gravel, and quarry operations
- A majority of producers also are general contractors
- Some producers are privately held, locally owned and operated and some are large, vertically integrated, publicly traded, and nationally/internationally owned.



All Types of Asphalt Pavements



Cradle to Grave

- Design
- Construction
- Maintenance
- Asset Management











Complete Service

- **Best Practices**
- **Innovations**
- **New Technology**
- **Training & Education**
- Marketing & Promotion
- Spec. Development
- Technical Assistance



Local Agency Asphalt Specifications/Local Agency Funding for Streets/Roads

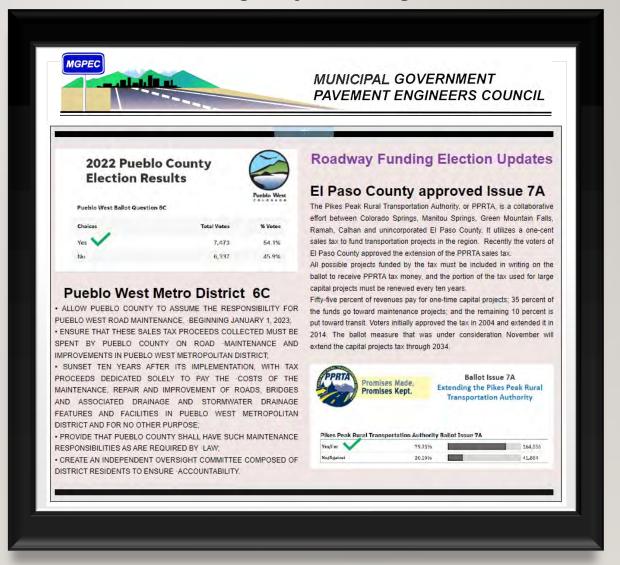


Best Practices for Asphalt Specifications

- Spec. Development
- Technical Assistance

Increased Funding for Streets & Roads

- Pueblo County
 Ballot Measure 2C
- El Paso County
 Ballot Measure 7A





COLORADO RIDES ON US

Asphalt.

2022 – The Asphalt Market A Look Back

2022 Colorado Asphalt Pavement Materials Usage PROJECTION

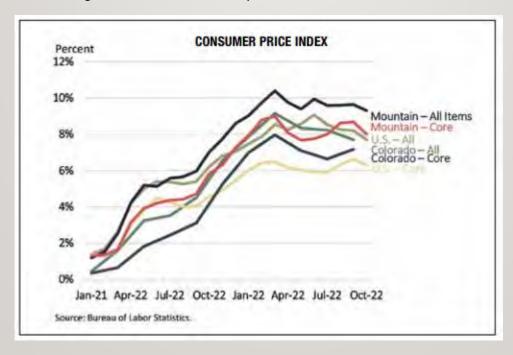
Construction Type	% Market	Volume of Work Change
City/County:	35%	estimated 10% increase in volume
State DOT:	20%	estimated 16% increase in volume
Commercial:	1/3 of 35%	estimated no change in volume
Residential:	2/3 of 35%	estimated no change in volume
Other:	10%	estimated no change in volume

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016; 8.8 M tons in 2018; 8.7 M tons in 2019; 9.9 M tons in 2020; 8.9 M tons in 2021)

2022 Asphalt Quantity Projection - 9.4 Million tons This represents an estimated 6% increase in overall market for asphalt materials as compared to 2021.

<u>Colorado Asphalt Pavement - Key Market Issues 2022</u> #1 Inflation

"Over the course of 2022, heightened inflation has been at the forefront of economic headwinds in Colorado and the nation. In June of 2022, the Consumer Price Index (CPI) jumped 9.1% year-over-year, the fastest pace in four decades.



#2 Supply Chain Disruptions, including asphalt, cement and trucking





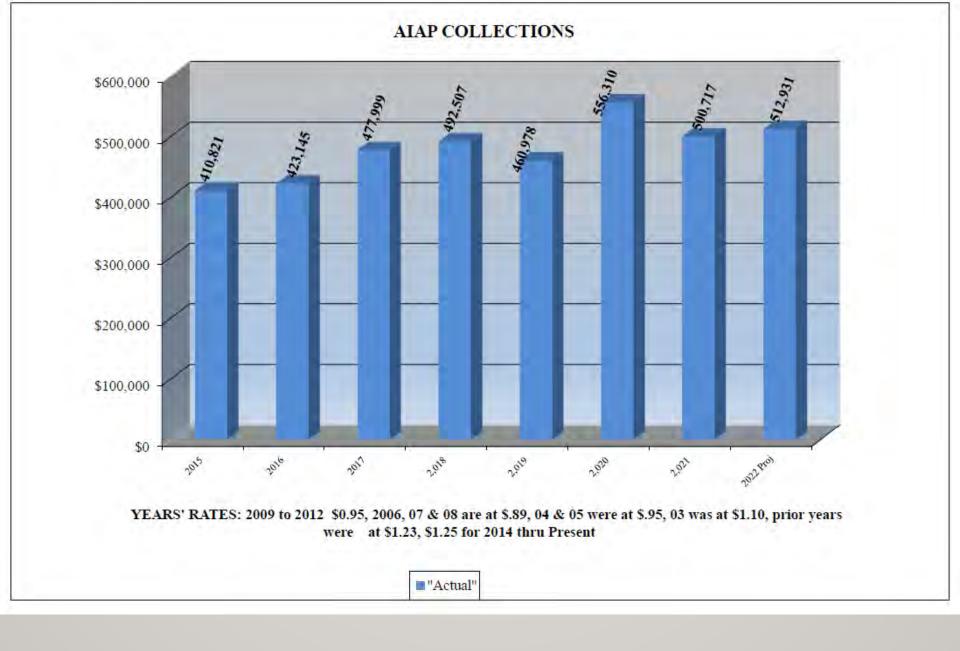
Colorado Asphalt Pavement - Key Market Issues 2022

- #3 Several Large (Mega) CDOT Capital Projects Nearing Completion
- #4 Commercial/Residential Market Stayed Strong (... completing projects)
- #5 Extended paving season (ie. dry, warm) late into November/December









The actual 2022 market of asphalt pavement in Colorado increased 3.5% as compared to 2021.



Colorado Asphalt Market - 2022

\$512,931/\$1.25 per liquid ton = 410,345 tons of AC

410,325 tons of virgin AC / 0.048 AC in ton of HMA = 8.55 M tons of HMA

8,550,000 tons + 700,000 tons =

9.25 M tons of HMA

- Assume 15% RAP in all mixes, 4.8% virgin AC content per ton of HMA
- Assume non-member/non-reporting market total 700,000 tons

2022 Colorado Asphalt Materials Usage ACTUAL

Construction Type	% Market	Volume of Estimated Tonnage
City/County:	34%	10 <i>% increase</i>
State DOT:	21%	15% increase (1.75 M increase to 2.0 M)
Commercial	1/3 of 35%	0% change
Residential:	2/3 of 35%	0% change
Other:	10%	0% change
	100%	

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016; 8.0 M tons in 2017; 8.8 M tons in 2018; 8.7 M tons in 2019; 9.9 M tons in 2020; 8.9 M tons in 2021, 9.25 M tons in 2022)

2022 Asphalt Quantity Actual – 9.25 Million tons

(3.5% increase over 2021)

"2022 was a Good Year"



COLORADO RIDES ON US

Asphalt.

2023 Outlook: Market Conditions



This forecast anticipates continued slow growth in Colorado and the nation through 2023, and a return to a more moderate pace of expansion in 2024. In the latter half of 2022, the Federal Reserve's aggressive steps to rein in inflation (ie. raising interest rates) have become the primary risk to the current economic expansion.

Different areas of the economy are exhibiting different degrees of strength and weakness. **Labor markets** continue to be a bright spot with low levels of unemployment, plentiful job openings, and rising wages.

January 3, 2023

2023 Colorado construction forecast: Increased negotiations and cost-effective builds

Critical Issues Facing the Construction Industry in 2023

- Inflation
- Rising Interest Rates
- Labor costs continue to rise
- Price of materials has steadily increased
- Declining consumer confidence
- Recession expected (how long ?, how bad ?)
- Concerns about delayed projects are growing



January 3, 2023

2023 Colorado construction forecast: Increased negotiations and cost-effective builds

Critical Considerations for 2023:

- The private sector market (multi-family housing, office buildings, distribution centers, etc.) is expected to slow due to inflation and higher interest rates.
- Publicly funded projects such as hospitals, schools, and infrastructure are more likely to move forward.
- Cost cutting measures may need to be considered to bring projects into budget.
- The double-digit inflation in mid 2022 has leveled off. 2022
 Q4 costs should continue relatively flat into 2023.

FIFTY-EIGHTH ANNUAL

COLORADO

OUTLOOK

2023



Nationally, expected slow growth in GDP in 2023. This is due to inflation and higher interest rates.

The Colorado economy will stay competitive but slower growth in 2023.

Key economic issues – inflation, increasing interest rates, growth caps, worker shortage, supply chain impacts including affordable housing.

COLORADO BUSINESS ECONOMIC OUTLOOK 2023

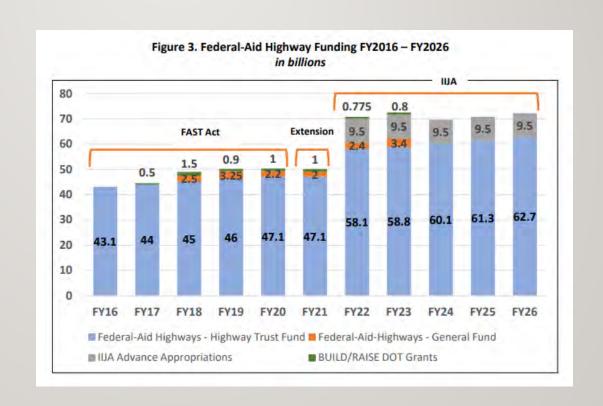
Construction:

- Two different trends have emerged within the construction sector. Residential building –
 especially single-family (private finance) is quickly coming under high downward pressure while
 infrastructure (non-building, public finance) is growing in volume.
- All construction subsectors continue to suffer from labor scarcity, delays in supplies, and price increases.
- Financing is harder to obtain.
- Non-building construction (infrastructure) will grow by 10% over 2022. (water supply, roads, dams, bridges, mass transit) (asphalt tonnage increase ?)



COLORADO BUSINESS ECONOMIC OUTLOOK 2023

Federal Funding



COLORADO BUSINESS ECONOMIC OUTLOOK 2023

- The **Colorado population** grew by 46,000 in 2022. This is expected to rebound to 55,500 in 2023. 93% of the growth will be in the Colorado Front Range.
- Colorado's housing industry is on the decline. The number of single-family permits issued in Colorado totaled 25,700 in 2022, which is a 15% decline from 2021. A 7% reduction to 24,000 permits is expected in 2023. Expect 22,000 multifamily units to be permitted in 2023, a 20% decrease from 2022.
- Multi-family housing (apartments, condominiums, townhouses, etc.) continues to grow as a percent of the home construction market. It is estimated that in 2022, multi-family housing permits exceeded single family permits for the 1st time.

RESIDENTIAL BUILDING PERMITS BY TYPE 2013–2023

	Year	Single Family	Multifamily	Total Housing Units
_	2013	15,772	11,745	27,517
	2014	17,104	11,594	28,698
	2015	20.025	11,846	31,871
	2016	21,577	17,397	38,974
	2017	24,338	16,335	40,673
	2018	26,134	16,493	42,627
	2019	24,756	13,877	38,633
	2020	26,636	13,833	40,469
	2021"	30,246	26,278	56,524
	2022b	25,700	27,500	53,200
	2023□	24,000	22,000	46,000

"Revised "Estimated "Forecast.

Sources: U.S. Census Bureau and the Colorado Business Economic Outlook Committee.



2023 Single-Family Permits – **7% decrease**.

2023 Multi-Family Permits - **20% decrease**.

Housing construction – (Residential) – down 8%.

The amount of pavement (ie. asphalt tonnage) for multi-family construction is a small fraction (10%) of the amount used for single-family housing construction.





Nonresidential construction (ie. commercial - remodeled offices, medical, schools, churches, retail, etc.) starts in 2022 are forecast to end the year at \$5.7 billion, up 2% from 2021's nearly \$5.6 billion.

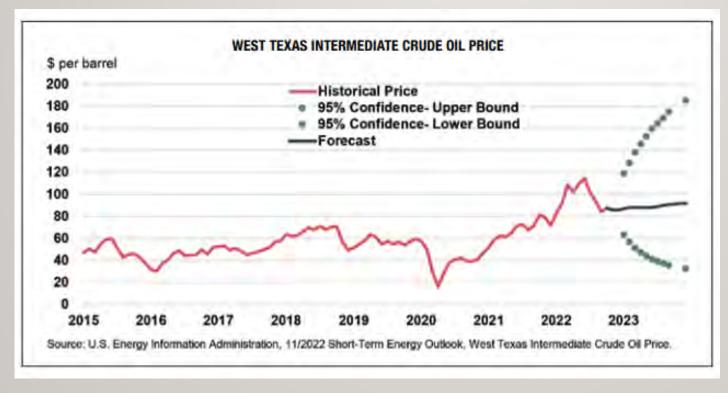
Nonresidential construction starts are expected to decrease 3.5% in 2023 to \$5.5 billion.

Michael Gifford, Colorado AGC. "The slight decrease in the commercial construction projected in 2023 will be a relief to some as it will lighten the burden on a constricted workforce."

Commercial – 2023 3.5% decrease.

Crude Oil

"The 2022 average price of \$98 per barrel so far is 44% higher than the 2021 WTI mean daily price of \$68 per barrel, and is 150% over the 2020 average price of \$39 per barrel Looking toward 2023, the forecast is for pricing to come down a bit to the range of \$65 to \$95 per barrel on average.





Political and economic events at both the national and global scale result in rapid swings in pricing and create supply-demand imbalances.

ASPHALT BINDER SUPPLY & COST DYNAMICS

- Crude Oil Availability
- Refinery Capacity (reduced throughput when lower petroleum fuel demand)
- Refinery reconfigurations, acquisitions, closures
- Refinery Startups & Upsets (ie. production problems)
- Demand vs. Supply (ie. asphalt production economics and fuels conversion economics)
- Transportation costs (truck and rail)
- Energy and terminal costs to heat and store asphalt

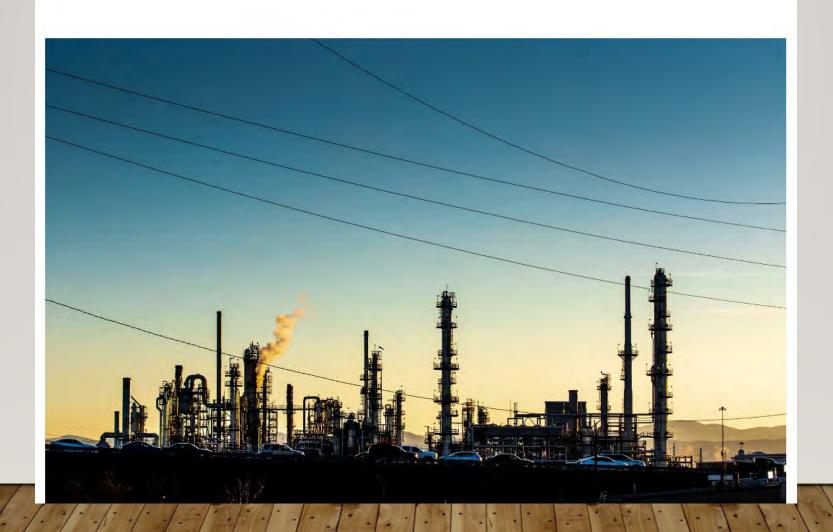




Suncor has shut down Colorado's only refinery. That's raising concerns about air quality and higher gas prices



By Sam Brasch · Dec. 29, 2022, 2:40 pm





Calgary, Alberta--(Newsfile Corp. - December 28, 2022)

• Suncor Energy (TSX: SU) (NYSE: SU) today provided an update related to its Commerce City refinery. Due to the extreme and record-setting weather impacting much of the United States, including Denver, Colorado, Suncor's Commerce City refinery experienced equipment damage in the days leading up to December 24th, 2022. Consistent with our operational excellence and safe operating practice, on December 24th it was determined that the entire facility would be shut down and put into safe mode to allow for the inspection of all units and repair of the damaged equipment. The inspection and repair of the damaged equipment is ongoing. Based on our current assessment we anticipate a progressive restart of the facility with a return to full operations expected to be completed by late Q1 2023.

2023 - LIQUID ASPHALT MARKET (COLORADO)

- There does not appear to be any other supply issues throughout the western states.
- The extent of the damage at the Suncor refinery is being assessed.
- Typical liquid asphalt products remain available.
- Expect to be operational by late Q1 2023.
- Suncor and producers looking to secure alternative asphalt supply.
- Asphalt binder prices spiked in Q2 of 2022. Stable pricing has continued from Q3 and Q4 of 2022 into Q1 of 2023.
- Delay and/or flexible construction starts -? Extend contract time -?





CDOT Asphalt Cost Adjustment Index (Monthly Average) 2022

Year Average for 2022 \$531.37 Liquid Ton

December Cost \$313.53 Liquid Ton
November Cost \$391.95 Liquid Ton
October Cost \$441.45 Liquid Ton
September Cost \$426.81 Liquid Ton
August Cost \$468.74 Liquid Ton
July Cost \$534.96 Liquid Ton
June Cost \$672.77 Liquid Ton
May Cost \$642.82 Liquid Ton
April Cost \$592.26 Liquid Ton
March Cost \$628.91 Liquid Ton
February Cost \$526.01 Liquid Ton

January Cost \$ 436.23 Liquid Ton

CDOT Asphalt Index 2012-Present

EAR	* INDEX AVERAGE	% CHANGE IN INDEX FROM PREVIOUS YEAR
2022	\$531.37	65.3%
2021	\$364.81	100.05%
2020	\$178.17	- 60.5%
2019	\$294.31	11.45%
2018	\$ 264.08	1.8%
2017	\$ 259.41	32.3%
2016	\$ 196.02	- 6.8%
2015	\$ 210.26	- 48.8%
2014	\$ 410.65	1.1%
2013	\$ 406.20	0.5%
2012	\$ 404.37	1



CDOT AC
COST
ADJUSTMENT
SPECIFICATION

- New Specification implemented in 2020.
 - Optional (previously mandatory)
 - 10% Trigger (previously 5%)
 - Reference: Poten & Partners/Argus (previously Western Canadian Select)

RESULT: Nearly every contractor opted out in 2021-2022.



CDOT Asphalt Pavement Program

- 1. Surface Treatment Program
- 2. Capital + Other Funding
- 3. Maintenance Supply







	Projected	Actual	
Year	Tons	Tons	Percentage
2014	1,290,679	1,370,184	106%
2015	1,154,054	1,343,902	116%
2016	1,318,433	1,673,068	127%
2017	1,009,944	1,036,222	103%
2018	997,927	1,437,500	144%
2019	1,259,920	1,130,102	90%
2020	978,270	1,342,174	137%
2021	938,056	1,871,674	200%
2022 **	1,295,458		
2023 *	1,157,757		

Notes:

^{**} Actual tons for 2022 are still being compiled.

^{*} The Projected tons are based on Region Estimates for Construction Season 2023, and may include tonnage from other FY budgets besides FY 2023.





\$284M Project



\$1.7B Project



\$325M Project

2023 CDOT Capital Construction + Other Funded Projects:

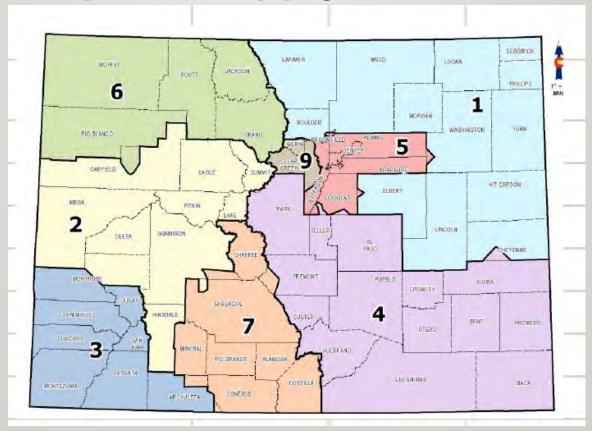
- R1: US 85 (S. Santa Fe) Corridor Improvements
 - Highlands Ranch Pkwy to County Line Rd. Douglas County Two-year project: 50,000 tons of HMA in 2023
- R2: I-25 Fountain North CM/GC
 - 30,000 tons
- R4: I-25 North Express Lanes D/B
 - 20,000 tons
- R3: I-70 Vail Pass CM/GC
 - 25,000 tons
- R5: US 160/US 550 D/B
 - 50,000 tons
- R2: SH 115 Carry Over
 - Colorado Springs to Penrose
 - **-** 57,000 tons
- R4: US 385 Carry Over
 - Cheyenne Wells North
 - 60,000 tons



322,000 tons of **HMA**



CDOT Maintenance Asphalt Supply Quantities

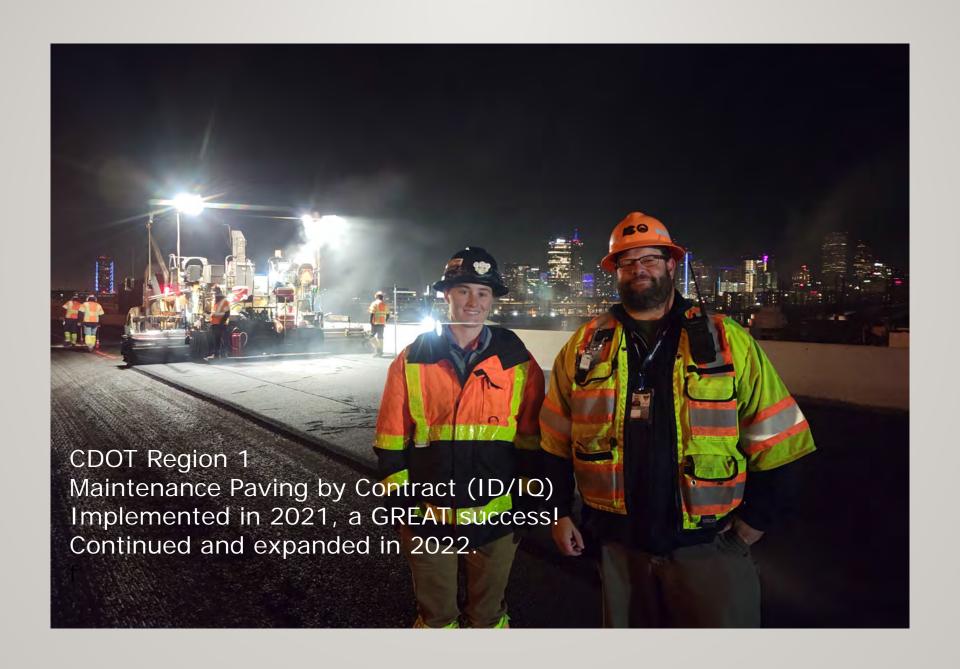


Maintenance Approximate Quantities: {8 Maintenance Sections}

November 1 – June 30 July 1 – October 31

30,000 tons 90,000 tons

120,000 tons





CDOT – Asphalt Pavement Projected 2022 vs. Actual 2022

RE	G 2022 S	ST Planned Tons	2022 ST Actual Tons	Change Tons
1	Denver	175,049	149,414	(- 25,635)
2	Pueblo	301,025	278,849	(- 22,176)
3	Grand Jun.	432,515	458,558	(+ 26,043)
4	Greeley	140,774	194,873	(+ 54,099)
5	Durango	337,126	281,947	(- 55,179)
TOTAL:		1,398,859	1,363,641	(- 35,218)

Capital: (Design/Build, CM/GC, Other Funds):

I-25 Gap - 50,000 tons; I-25 North Express Lanes - 50,000 tons;

Central 70 – 150,000 tons; I-25 Fountain to Academy – 70,000 tons;

US 550/160 I/C Durango – 20,000 tons

CDOT Capital Projects 2022: 446,250 tons

CDOT Supply @ the Plant Maintenance 2021 - 120,000 tons

CDOT Total Asphalt Pavement Materials 2022:

1,363,641 tons + 446,250 tons + 120,000 tons = 1,929,891 tons



CDOT – Asphalt Pavement 2023 Projected vs. 2022 Actual

<u>RE</u>	G 2022 S	ST Actual Tons	2023 ST Projected Tons	Change Tons
1	Denver	149,414	99,601	(- 49,813)
2	Pueblo	278,849	315,274	(+ 36,425)
3	Grand Jun.	458,558	323,927	(- 134,631)
4	Greeley	194,873	342,157	(+147,284)
5	Durango	281,947	130,088	(- 151,859)
TOTAL: 1,363,641		1.363.641	1.211.047	(- 152,594)

Capital: (Design/Build, CM/GC, SB 267)

US 85 S. Santa Fe – 50,000 tons; US 385 carryover – 60,000 tons SH 115 – 57,000 tons; I-25 North Express Lanes – 20,000 tons; I-25 Fountain North – 30,000 tons; I-70 Vail Pass – 25,000 tons;

US 550/US 160 Durango – 50,000 tons.

CDOT Capital + Other Funded 2023: 322,000 tons

CDOT Supply @ the Plant Maintenance 2021 - 120,000 tons

<u>CDOT Total Asphalt Pavement Materials 2023 Projected:</u> 1,211,047 tons + 322,000 tons + 120,000 tons = 1,653,047 tons



CDOT Actual 2021:

1,749,963 tons

CDOT Actual 2022:

32 Surface Treatment Projects* 1,363,641 tons 8 D-B, CM/GC, and Other Projects 446,250 tons CDOT Maintenance/Small Quantity projects 120,000 tons

2022 Actual Grand Total: 1,929,891 tons

* - 1 no bids, 6 deferred, 5 bids rejected

CDOT Projected 2023:

41 Surface Treatment Projects
7 D/B, CM/GC, and Other Projects
322,000 tons
CDOT Maintenance/Small Quantity Projects
1,211,047 tons
322,000 tons

2023 Projected Grand Total: 1,653,047 tons

This represents a 14% projected decrease in 2023 over 2022.



Summary:

2022 Actual CDOT Grand Total: 1.93 M tons

2022 Total Tons in Colorado: 9.25 M tons

1.93/9.25 = 20.9%

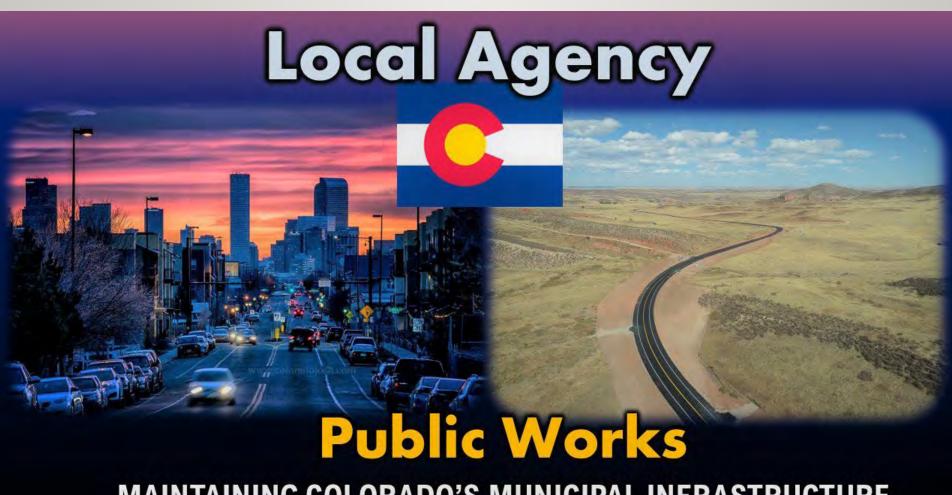
CDOT represented 21% of the 2022 asphalt pavement market in Colorado.

2023 Projected CDOT Grand Total: 1.65 M tons

We are estimating a 14.5% reduction in CDOT asphalt paving in 2023 vs. 2022.



Local Agencies are responsible for funding and maintaining 72% of the asphalt roads in Colorado.



MAINTAINING COLORADO'S MUNICIPAL INFRASTRUCTURE

Street Improvement Ballot Initiatives











Issue 6C (54% / 46%)



Issue 7A (80% / 20%)





CAPA's Local Agency Streets Forum is an opportunity for City and County Public Works staff to network and share Best Practices with their peers. The Forum is hosted twice a year.

January: Industry Trends & Outlook, Funding, Procurement

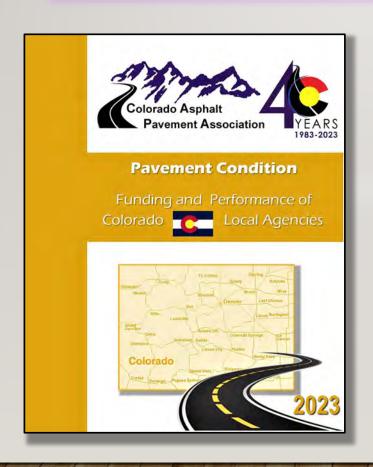
October: Technical, Specifications, Materials, Asset Management

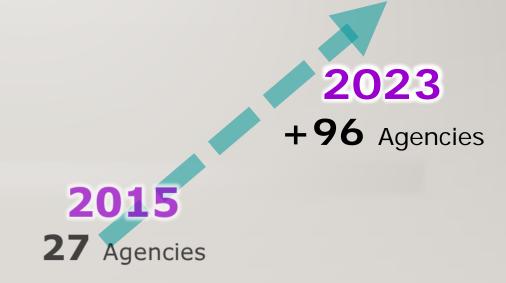
2023 Winter Forum January 19th

11:30 - 1:00









Representing 62,000 lane miles (92% of local agency network)





1 Agency

(7%)

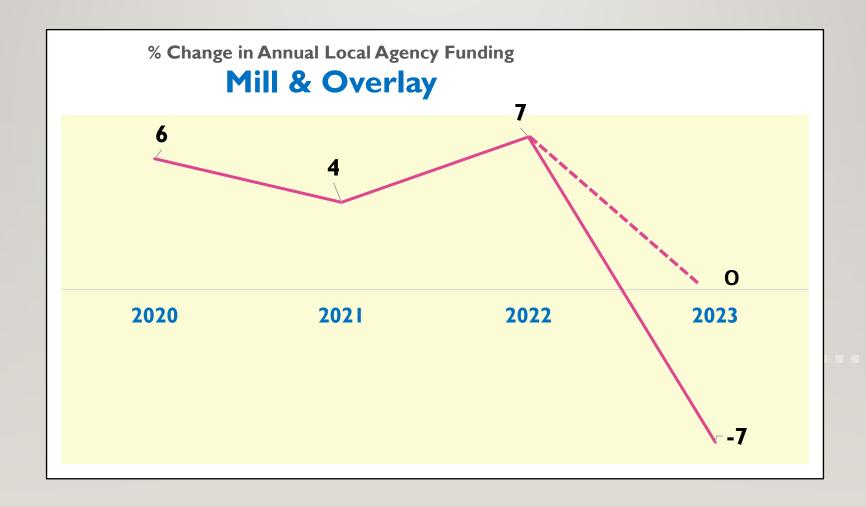
9 Agencies (60%)



\$ 81.2M (2022) \$102.3M (2023)

Street Program Funding

	2022	2023	Δ 2023	Δ 2022	Δ 2021	Δ 2020
CIP*	\$76.5	\$93.0	21%	-15%	40%	5%
Mill & Overlay	\$62.6	\$79.0	-7% / 26%	7%	4%	6%
Maint.	\$18.6	\$23.3	25%	86%	48%	-12%



Local Agency Best Practice

Flexibility in Program Delivery

- Scope of Work
- Work Hours
- Schedule



Local Agency Best Practice

Flexibility in Program Delivery

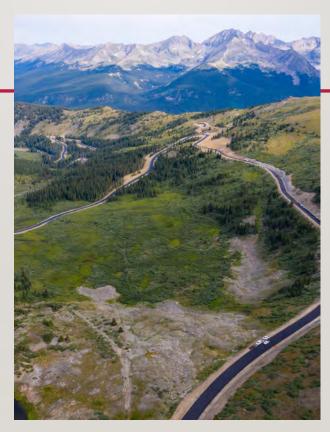
"Our annual Mill & Overlay Program is on a rollover contract. We maintain flexibility of our Streets Program by adjusting the scope of work (tonnage) as necessary if costs exceed contract values."

- Jeff Dankenbring (Public Works Director, City of Centennial)



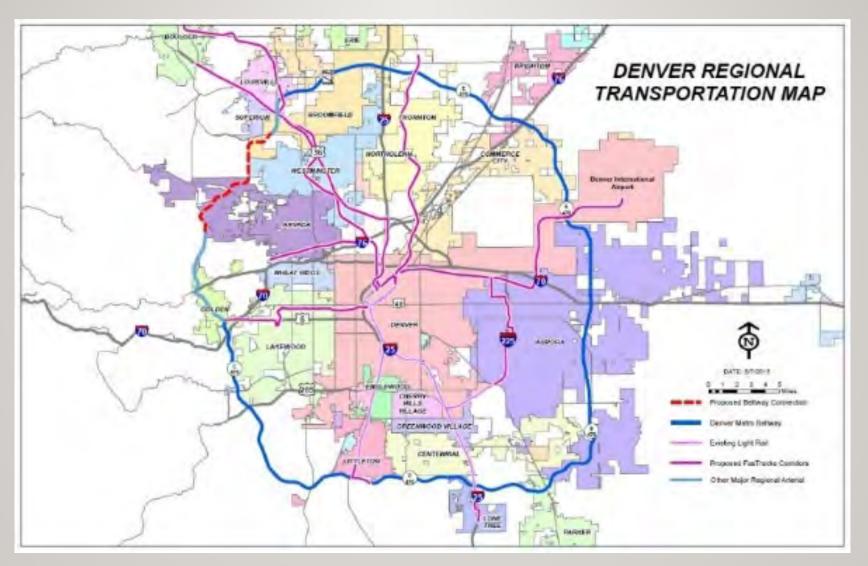
OTHER

- Toll Roads
- Airport
- Highways on Federal Lands
- National Parks
- Military
- State Parks

















E-470 Phase III Widening, I-70 to 104th Ave.

Widening to 3 lanes, 10 miles, \$150 M 250,000 tons of HMA Kiewit Infrastructure, 2022 - 2024





OTHER

- Toll Roads
- Airport

2023 Paving:

Pueblo, Trinidad, Greeley

- Highways on Federal Lands
- National Parks
- State Parks
- Military Roads



FOREST SERVICE



Contract Opportunit

- Grand Mesa-Uncompangre-Gunnison NFs
- GMUG 31 projects worth \$20.3M
 - · Road Reconstruction/Repair multiple
 - Trail/Bridge Reconstruction/Restoration multiple
 - · Campground Reconstruction and Waterlines multiple
 - · Toilet Replacement multiple
 - · Forest-wide Fence Replacement



GMUG - Alpine Road Restoration



GMUG - Culvert Replacement and Drainage Rehab

[UAS]

Contract Opportunities

- San Juan 21 projects worth \$6.8M
- Road Resurfacing, Mx, and Reconstruction multiple
- Toilet Replacement multiple
- Trail and Trail Bridge Maintenance multiple
- Campground Improvements multiple
- Mavreeso Campground Water System Replacement
- Hermosa Creek Aquatic Organism Passage (AOP)



San Juan - Fish Barrier



The Durango and Silverton Narrow Gauge Railroad (a National Historic Landmark) operates on the forest





2023 Colorado Asphalt Pavement Materials Usage PROJECTION

Construction Type	% Market	Volume of Work (tonnage)
City/County:	39%	estimated 3% decrease in volume
State DOT:	21%	estimated 14% decrease in volume
Commercial:	1/3 of 30%	estimated 3.5% decrease in volume
Residential:	2/3 of 30%	estimated 8% decrease in volume
Other:	10%	estimated no change in volume

(12 M tons – 2008; 7.0 M tons in 2015; 7.5 M tons in 2016; 8.8 M tons in 2018; 8.7 M tons in 2019; 9.9 M tons in 2020; 8.9 M tons in 2021; 9.25 M tons in 2022)

2023 Asphalt Quantity Projection: 8.7 M tons

This represents an estimated 6% decrease in overall market for asphalt materials as compared to 2022.



COLORADO RIDES ON US

Asphalt.

2023 Outlook: Trends & New Developments

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.



Colorado legislative leaders commit to 'nonpartisan mission' of addressing water shortage

From water storage to water-saving opportunities, the preferred solutions vary.



Polis seeks \$200M more to fight property tax hike, rejects eliminating 2 cent gas tax increase

By MARIANNE GOODLAND marianne goodland@coloradopolitics.com Jan 3, 2023 Updated Jan 4, 2023 💂 0



Home Equity Line of Credit

for 2 lines of Unlimited. \$30 a line/m

How much do yo

\$25,000 \$30 \$40,000 \$45

Don't expect the Colorado legislature to extend fee relief



Interstate 70 traffic on April 21 near Denver. (Hugh Carey, The Colorado Sun)

Gov. Jared Polis and Democrats in the legislature have been rather coy about whether they plan to extend a pause on a new fee on each gallon of gas Coloradans purchase beyond April 1.

EPA investigating Colorado for discriminatory air pollution



The Environmental Protection Agency is investigating whether Colorado's regulation of air pollution from industrial facilities discriminates against Hispanic residents and other racial minorities, according to a letter released by the agency Wednesday. Advocates say the Suncor refinery too often malfunctions, spiking emissions. They say Colorado rarely denies permits to polluters, even in areas where harmful ozone already exceeds federal standards. The EPA is making use of the Civil Rights Act for the investigation.

Read more →

Metro Denver counties win supreme court approval to limit growth

- O January 11, 2020 & Glen Weinberg
- Colorado Hard Money, Colorado Living, Colorado real estate market trends, Colorado Real Estate values, Denver real estate values, General Colorado Information



limiting law?

After being tied up in litigation, the Colorado Supreme Court just authorized a new anti growth initiative to substantially limit growth within the 11-county metro area (from CO springs to Ft. Collins) and all the cities/towns within. The new initiative limits new residential development to 1% of the existing homes/year. This is modeled after Boulder, Lakewood, and Golden's growth initiatives. What does this mean for real estate? Why is this important? Will this pass? What are the implications of a growth





2023 Industry Trends



2023 Industry Trends



BUILDING BETTER COMMUNITIES THROUGH SUSTAINABLE PRACTICES

Expanding the use of Green Asphalt in Colorado

2023 Industry Trends



Balanced Mix Design:

A new mix design system that "balances" ...

- 1. crack resistance and rut resistance
- 2. material properties and long-term performance
- 3. increases flexibility to the contractor to meet requirements and standards

Why Should We Test Mixtures in the Lab?

Mixtures need to be evaluated in the lab to help ensure the required field performance can be achieved.



CAPA:

- 1. BMD Work Group
- 2. Featured topic at Conference
- Data collection, and evaluation under development

Ways to Increase Mixture AC Content

- Lowering Gyration Levels (N_{design})
- Lowering Design Air Voids
- Increasing Minimum VMA
- Air Voids Regression Approach
- Combination of 2 or more
- Some include laboratory performance testing

Expected Field Performance

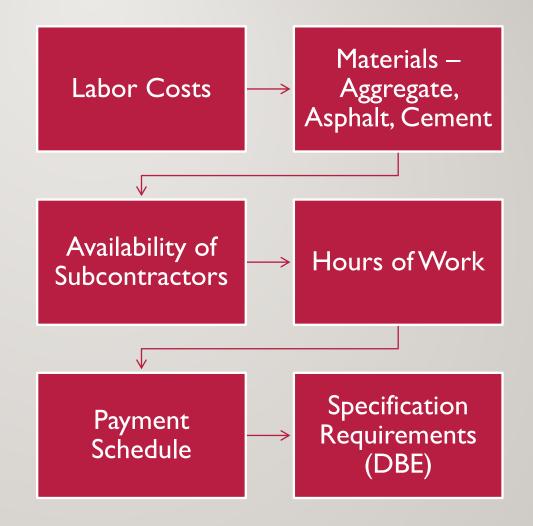
Balanced Mix Design



How much does asphalt cost? What is the cost of asphalt? We need to clarify cost:

Project - Mix/Material - Liquid Asphalt

WHAT
FACTORS
IMPACT
PROJECT
COST?



IMPACTS TO COST: wages, materials, Covid compliance and worker safety, employee benefits (paid family medical leave), regulatory and enforcement fees, permitting costs of equipment and material sources.

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 50 or 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.

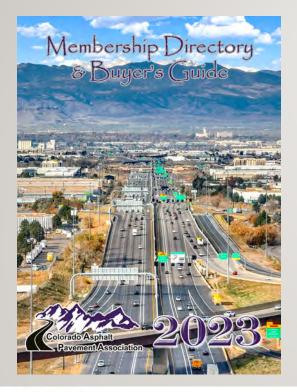
Accurate Engineer's Estimate: Additional costs are incurred by both the contractor and the agency when projects must be re-bid. Understand what factors should be considered as the engineer's estimate is established.



COLORADO RIDES ON US

Asphalt.

2023 Outlook: Technical Resources, Training & Professional Development





WELCOME TO THE CAPA WEB SITE!

We invite you to view and use the Colorado Asphalt Pavement Association website!

Although the look of our site has changed, be sure the content is still as robust as always. We are constantly striving to keep the most relevant information on our site while maintain the information needed to research almost any topic of Asphalt Construction.







<u>CAPA Marketing – Social Media Initiative</u>

- Promoting ASPHALT
- Promoting our MEMBERS
- Promoting our INDUSTRY

More information: tomclayton@co-asphalt.com



Raffle Drawing at the closing session Grand Prize: 2023 Kawasaki Vulcan® S



First Prize: Traeger Century 885

Rocky Mountain Asphalt Conference and Equipment Show

February 7-8, 2023

National Western Complex



Plans for 2023:

• February 7 & 8, 2023

LOCATION: National Western Complex
 4655 Humblot, Denver, CO

Focus on Construction Best Practices, Materials
 Engineering & Testing, Leadership, Maintenance & Rehab.

Pellet Grill

Theme: 50 Years of Success

• Keynote General Session featuring Retired Navy Seal Jason Redmon, 24 breakout sessions, 18 Educational 101 sessions (materials, maintenance, and equipment

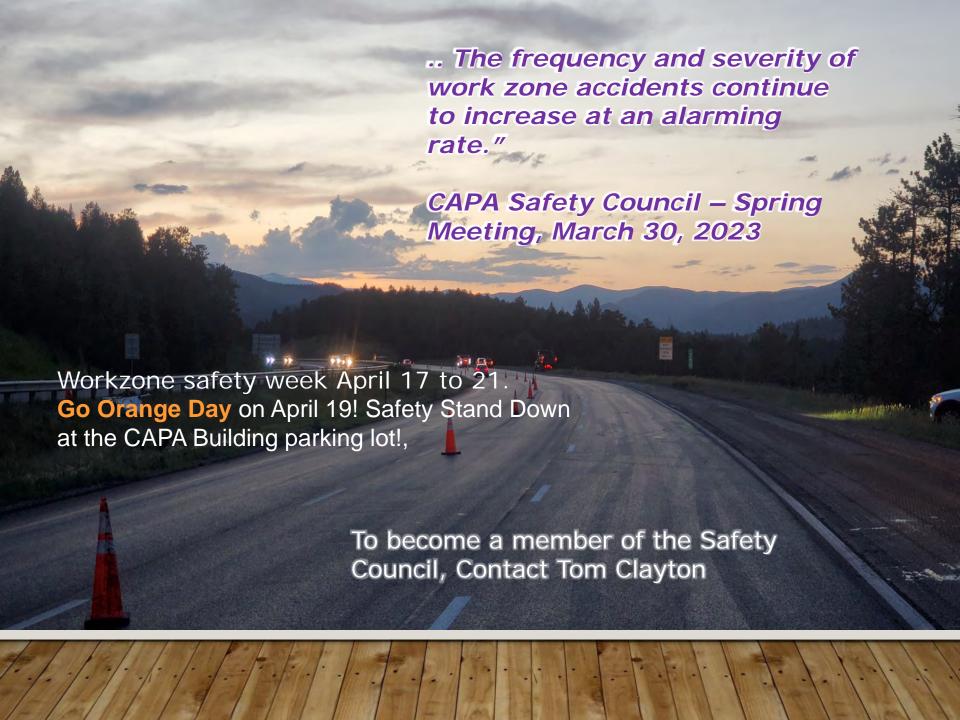
CAPA "Best in Colorado" Asphalt Awards Program — Feb. 8



2023 Conference February 7 & 8, 2023

www.rmaces.org







Date: Whenever You want it, 2023

Location: At Your Office, or where you want it

Subjects: Asphalt A to Z



Short Course in Asphalt Technology

Get your dates reserved as soon as possible, before the season sneaks up on us and before the dates fill up! **Contact Tom Clayton or Mike Skinner**



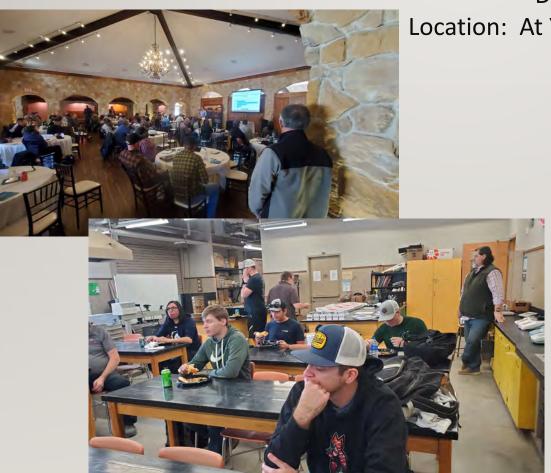
Date: Whenever You want it, 2023

Location: At Your Office, at our training center

Subjects: Asphalt A to Z



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



Get your dates reserved as soon as possible, before the season sneaks up on us and before the dates fill up!

Contact Tom Clayton or Mike Skinner

WORKFORCE DEVELOPMENT

- CAPA has established a Work Force
 Development Working Group
- Exploring ideas to attract people to our industry
- Promoting Careers not Jobs
- Working with Universities, CSU Ft Collins, CSU Pueblo and Mesa
- Statewide advertising campaign to begin in February
- Setting up at industry events such as but not limited to the
 - Skills USA State Meeting
 - FFA Annual Convention
 - Transportation and Construction Girl Events









To become a member of the Work Force committee, Contact Tom Clayton

"Introduction to PC/OA Testing Education Course"

- (PC = Process Control, OA = Owners Acceptance)
 Testing"
- Introductory course
- 1 to 4 days
- Inspectors, Engineers, new testing technicians
- Teach both QC and QA sampling and testing procedures





See more at https://www.co-asphalt.com/education-andseminars



ASPHALT INDUSTRY OF COLORADO









2023 ASPHALT INDUSTRY OUTLOOK "MARKET CONDITIONS, TRENDS, AND NEW DEVELOPMENTS" PROVIDED FOR CAPA MEMBERS & AGENCY PARTNERS

Tuesday, January 10, 2023

Presented by Tom Peterson, P.E.

tompeterson@co-asphalt.com

Mike Skinner, P.E. mikeskinner@co-asphalt.com

Tom Clayton, SET tomclayton@co-asphalt.com







