# 2024 ASPHALT INDUSTRY OUTLOOK "MARKET CONDITIONS, TRENDS, AND NEW DEVELOPMENTS" PROVIDED FOR CAPA MEMBERS & AGENCY PARTNERS

Thursday, January 11, 2024

Presented by Tom Peterson, P.E. Executive Director

Mike Skinner, P.E. Director of Engineering

Tom Clayton, SET Director of Technical Services



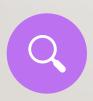




### 2024 ASPHALT INDUSTRY OUTLOOK & MARKET ANALYSIS







CAPA OVERVIEW



2023 - A LOOK BACK



2024 - MARKET CONITIONS



INDUSTRY TRENDS

#### Webinar Participants:

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



NEW DEVELOPMENTS



RESOURCES AND PROFESSIONAL DEVELOPMENT







### <u>Membership</u>

24 Producer/Suppliers 171 Associate & Affiliates 78 Local Agencies

272 TOTAL MEMBER ORGANIZATIONS

### **Industry Partners**















#### ASPHALT PAVEMENT MATERIALS (APM):

### 66 PRODUCTION FACILITIES 9 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.





















































Ryan Yoch Martin Marietta CAPA President, 2024 - 2025



CAPA Executive Committee 2024 – 2025 December 8, 2023

President: Ryan Yoch, Martin Marietta

Vice President: Stu Ponting, CASI

Secretary: Ken Coulson, Coulson Excavating

Treasurer: Ed Wells, Connell Resources

1st Past President: Mike McDonald, Kiewit Infrastructure

Officer: Jeff Keller, APC Construction, a CRH Company

Officer: John Paul Ary, A & S Construction

#### **New Board of Directors:**



Nate Amsinger ESI



Chad Saunders

Elam Construction



Mikey Sasina Metro Pavers



RMAC&ES, 1972 - 2022



#### LabCAT Certified Technician







LabCAT, 1996-2021



"Best in Colorado" Asphalt Awards Program, 1994 - 2024 CAPA MISSION:
TO ADVANCE
THE USE AND
QUALITY OF
ASPHALT
PAVEMENTS IN
COLORADO.





#### **All Types of Asphalt Pavements**



#### **Complete Service**

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

#### **Cradle to Grave**

- Design
- Construction
- Maintenance
- Asset Management









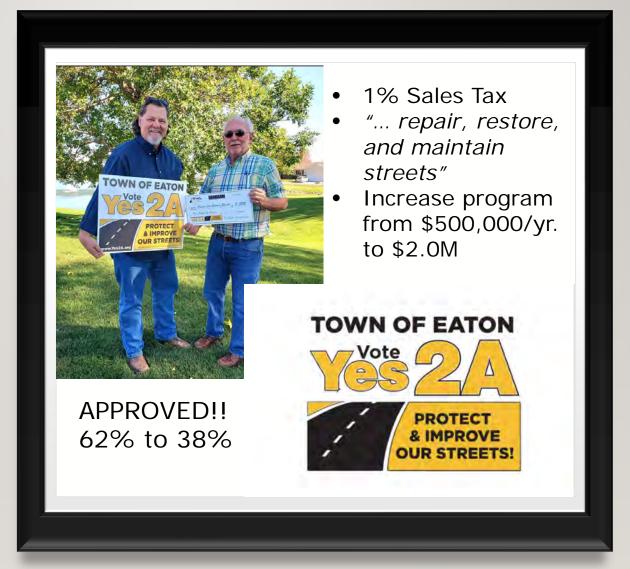


#### **Increased Funding for Streets and Roads**





CAPA provided guidance and \$\$ support to a citizen led advocacy committee.





COLORADO RIDES ON US

Asphalt.

### 2023 – The Asphalt Market A Look Back

# 2023 Colorado Asphalt Pavement Materials Usage PROJECTION

<b>Construction Type</b>	% Market	Volume of Work Change
City/County:	39%	estimated 10% increase in volume
State DOT:	21%	estimated 14% decrease in volume
Commercial:	1/3 of 30%	estimated 4% 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 - 9.0 Million tons This represents an estimated 3% decrease in overall market for asphalt materials as compared to 2022.

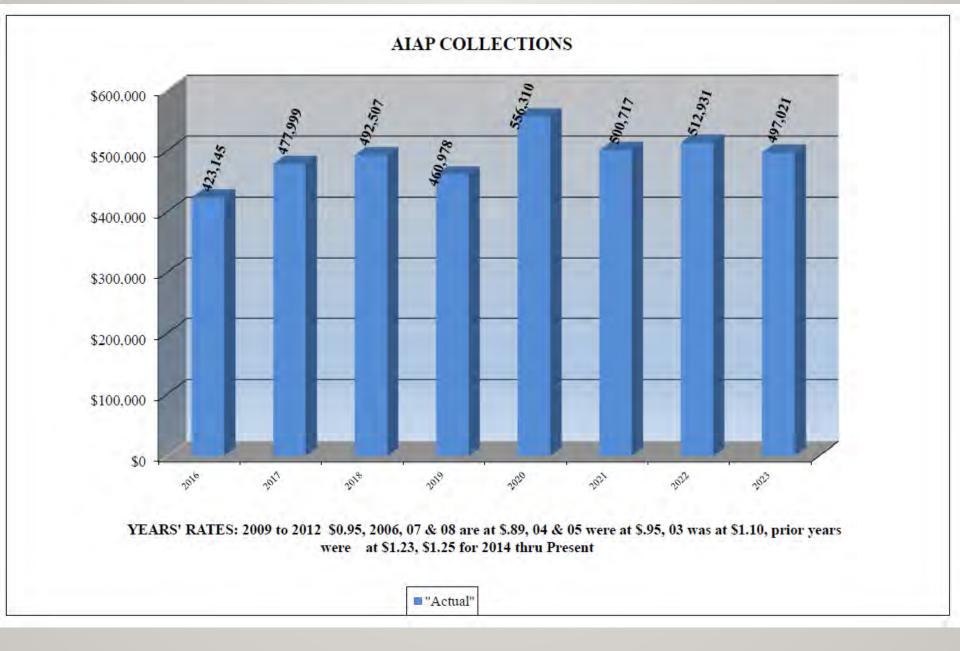
#### Colorado Asphalt Pavement - Key Market Issues 2023

- #1 Wet, rainy start to the construction season.
- #2 Several Large (Mega) CDOT Capital Projects Have Been Completed, CDOT tonnage down.
- #3 Commercial/Residential Market Remained Steady
- #4 Nice weather extended the paving season into the late fall
- #5 Minimal disruption to the supply of asphalt binder









The actual 2023 market of asphalt pavement in Colorado decreased by 3% as compared to 2022.



#### Colorado Asphalt Market - 2023

\$497,021/\$1.25 per liquid ton = 397,617 tons of AC

397,617 tons of virgin AC / 0.048 AC in ton of HMA = 8.3 M tons of HMA

8,300,000 tons + 700,000 tons =

#### 9.0 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

# 2023 Colorado Asphalt Materials Usage ACTUAL

<b>Construction Type</b>	% Market	Volume of Estimated Tonnage
City/County:	40%	6 <i>% increase</i>
State DOT:	17%	4% decrease (1.9 M decrease to 1.4 M)
Commercial	1/3 of 33%	2% decrease (combined with residential)
Residential:	2/3 of 33%	2% decrease (combined w/ commercial)
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, 9.0 tons in 2023)

#### 2023 Asphalt Quantity Actual – 9.0 Million tons

(3.0% decrease over 2022)



**COLORADO RIDES ON US** 

Asphalt.

# 2024 Outlook: Market Conditions

#### 2024 MARKET – THE WORD ON THE STREET!

HEAVY EQUIPMENT SUPPLIER: "ON THE DEVELOPMENT SIDE, THERE IS WORK OUT THERE, BUT QUESTIONS OF WHETHER OR NOT IT WILL BE DELAYED OR ACTUALLY COMING OUT. THERE IS A GROWING MARKET FOR DEMOLITION OF OLD COMMERCIAL AREAS. NEW HOUSING CONSTRUCTION IS MOSTLY MULTI-FAMILY WITH A PARKING LOT AND NOT SINGLE FAMILY WITH STREETS."

**EMULSION SUPPLIER:** ON THE AGENCY SIDE, IT IS A LITTLE TOO EARLY TO TELL. BUT WE ARE HOPING THE MARKET IS THE SAME OR BETTER AS LAST YEAR.

**TRAFFIC CONTROL PROVIDER:** A LOT OF PRIVATE WORK OUT THERE BUT WAITING FOR INTEREST RATES TO COME DOWN TO MOVE FORWARD. AGENCY WORK IS EQUAL OR UP FROM 2023.

**SMALL EQUIPMENT SUPPLIER:** MUNICIPAL MARKET IS STAYING STRONG, UTILITY TRENCHING EQUIPMENT PURCHASES IS STRONG. THERE IS A GROWING ELECTRIC VEHICLE MARKET

**PAVING CONTRACTOR:** MILITARY BASE INFRASTRUCTURE IS OUR CORE BUSINESS. OUR BACKLOG IS BIGGER THAN LAST YEAR. FOR EXAMPLE, FUNDING AT SHRIVER AFB IS UP \$150M THE NEXT 3 YEARS, BUCKLEY AFB FUNDING IS UP FOR ROADS.

#### COLORADO

# OUTLOOK OUTLOOK

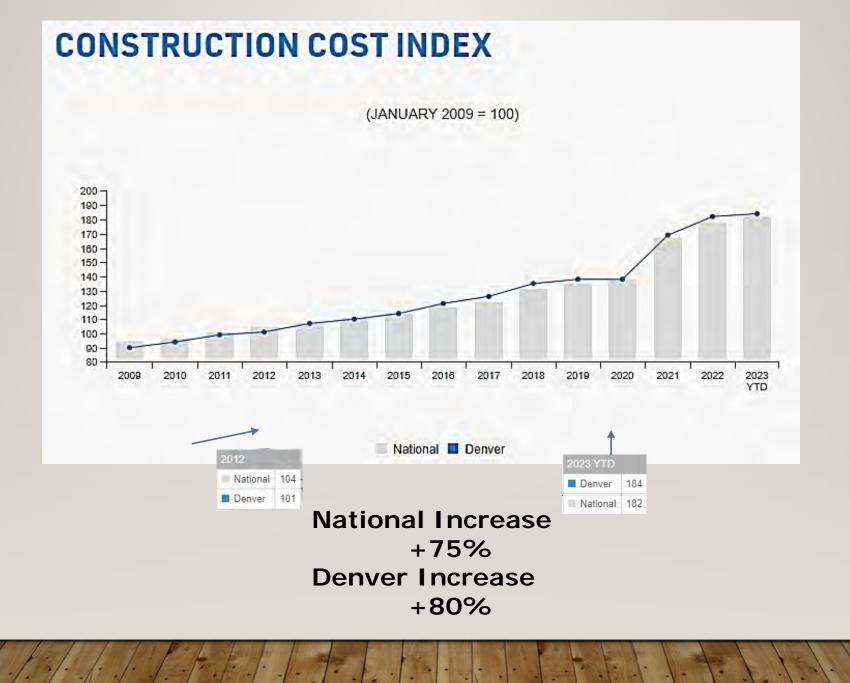
2024



Nationally, the continued impacts of high interest rates could slow growth to estimated 1.1%.

The Colorado economy will stay competitive but slower growth in 2024.

Key economic issues – continued inflation, elevated interest rates, worker shortage, and slowing consumption.



#### **Tailwinds**

Employment Growth
Consumption
Energy
Income Growth
Infrastructure Spending

#### **Headwinds**

Inflation
Real wage growth
Commercial Real Estate
Interest Rates
Worker Shortages
Fed Policy
Demographics
Debt Ceiling
Fiscal Cliff
Climate Change
War

#### Unknowns

Al
Labor Participation
Supply Chain Disruptions
Human Behavior
China
Remote Work
Consumption

"Managing inflation will continue to be a priority for the Federal Reserve, and the health of the economy will be linked with the Federal Funds interest rate." <u>Insurance</u> LOTS of rate hikes in Colorado=VERY expensive and impacting the cost of doing business here.



#### RESIDENTIAL BUILDING PERMITS BY TYPE 2014–2024

Year	Single Family	Multifamily	Total Housing Units
2014	17,104	11,594	28,698
2015	20,025	11,846	31,871
2016	21,577	17,397	38,974
2017	24,338	18,335	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
2022ª	23,728	25,111	48,839
2023 <sup>ti</sup>	18,500	20,200	38,700
2024 <sup>E</sup>	19,400	18,500	37,900

<sup>&</sup>quot;Revised. "Estimated. "Forecast.

#### **Residential Construction:**

- Colorado's housing industry has slowed as demand for new construction is constrained by high interest rates.
- Single family permits were down 22% in 2023 versus 2022 and multi-family construction was down 20% from 2022.
- Historically, multi-family construction has accounted for 30% of residential construction, in 2024 it is expected to be around 50% of residential construction.

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



2024 Single-Family Permits – **8% increase** 

2024 Multi-Family Permits - 8% decrease

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.



Housing construction – (Residential) – up 6%.



Nonresidential construction (ie. commercial - remodeled offices, medical, schools, churches, retail, etc.) starts in 2023 are forecast to end the year at \$5.5 billion, an 18% decrease from the \$6.7% in 2022. Nonresidential construction starts are expected to remain at \$5.5 billion in 2024.

#### Commercial – 2024 No Change





#### VALUE OF CONSTRUCTION BY TYPE, 2014–2024 (In Millions of Dollars)

Year	Residential	Nonresidential	Total Building	Nonbuilding	Total Construction
2014	\$7,565.9	\$4,350.9	\$11,916.8	\$2,438.5	\$14,355.3
2015	8,659.0	4,990.8	13,649.8	3,036.3	16,686.0
2016	10,161.0	5,987.8	16,148.8	2,705.6	18,854.4
2017	10,361.8	6,154.9	16,516.7	2,975.8	19,492.5
2018	11,772.6	8,132.0	19,904.6	4,520.9	24,425.5
2019	10,851.0	5,161.5	16,012.5	3,158.9	19,171.4
2020	12,184.0	5,599.9	17,783.8	2,943.5	20,727.3
2021	15,001.4	5,681.5	20,682.9	3,518.8	24,201.7
2022 <sup>a</sup>	12,945.4	6,715.4	19,660.8	4,746.9	24,407.8
2023 <sup>b</sup>	10,373.7	5,500.0	15,873.7	5,000.0	20,873.7
2024 <sup>c</sup>	10,712.6	5,500.0	16,212.6	5,000.0	21,212.6

#### **Construction: 2024 Forecast**

- Residential: Up 6%, due to an expected 8% growth in single family.
- Commercial/Non-residential: Flat (no change) from 2023.
- Non-Building (roads, highways, water, dams, bridges): Flat (no change) from 2023.

#### ASPHALT BINDER SUPPLY & COST DYNAMICS

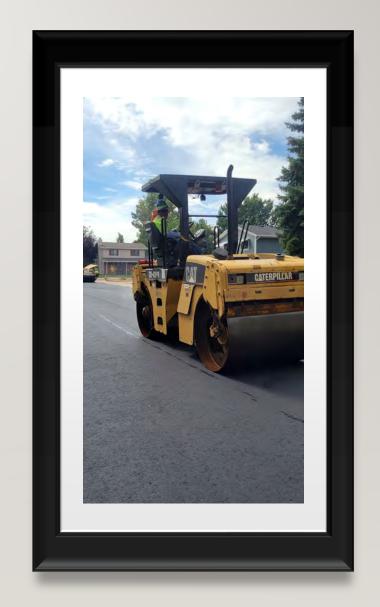
- Crude Oil Availability (Pipelines - Keystone cancelled, Transmountain moving forward moving supply to western Canada/US)
- Refinery Capacity (reduced throughput when lower petroleum fuel demand)
- Refinery reconfigurations, acquisitions, closures
- Refinery Startups & Upsets (ie. production problems)
- 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





## 2024 - LIQUID ASPHALT MARKET (COLORADO)

- Asphalt Supply on all typical binder products are available.
- Asphalt binder pricing has decreased over the last few months.





**NEW DEVELOPMENT** 

"ECF Inc., Columbia, IL a design, build engineering firm specializing in heated products began construction of the new Hudson Asphalt Terminal (HAT) at the BNSF Industrial Park in Hudson, CO.

The HAT terminal is being constructed for use by Cenovus Energy that will bring asphalt in by rail or truck and will deliver asphalt cement into the market by truck. The terminal is expected to begin shipping product in August of 2024".







#### **CDOT Asphalt Pavement Program**

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







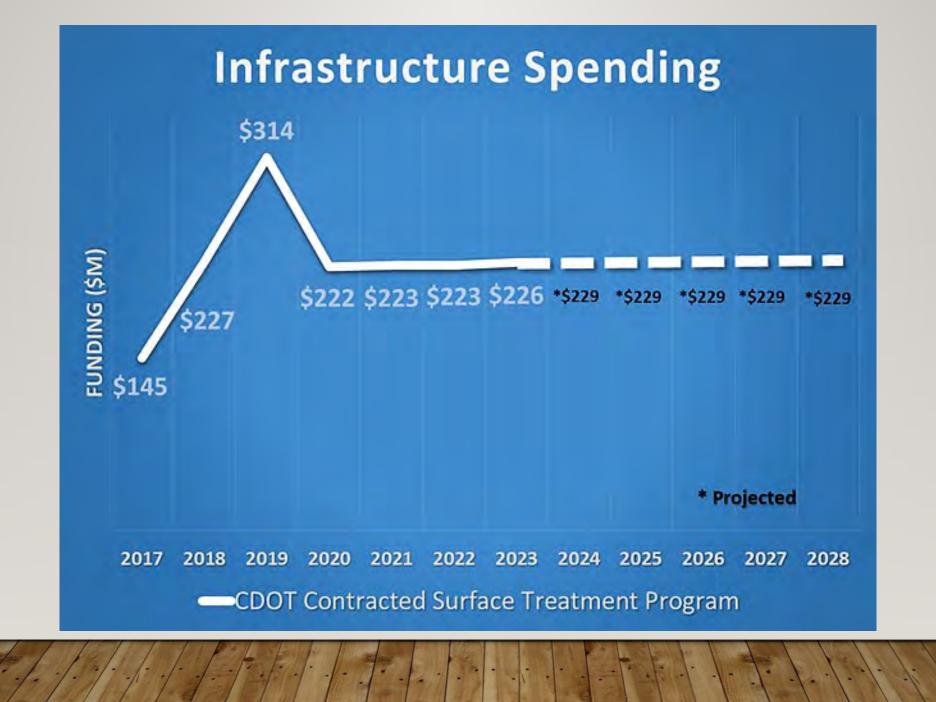
#### COLORADO

#### Department of Transportation

	CDOT Hi	storical Projected a	and Actual Data		
		Projected	Actual		
	Year	Tons	Tons	Percentage	
0.0	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	1,422,732	110%	
	2023 **	1,157,757			
1000	2024 *	1,296,252			
Motos					

#### Notes:

- \*\* Actual tons for 2023 are still being compiled.
- \* The Projected tons are based on Region Estimates for Construction Season 2024, and may include tonnage from other FY budgets besides FY 2024.



### 2024 CDOT Capital Construction + Other Funded Projects:

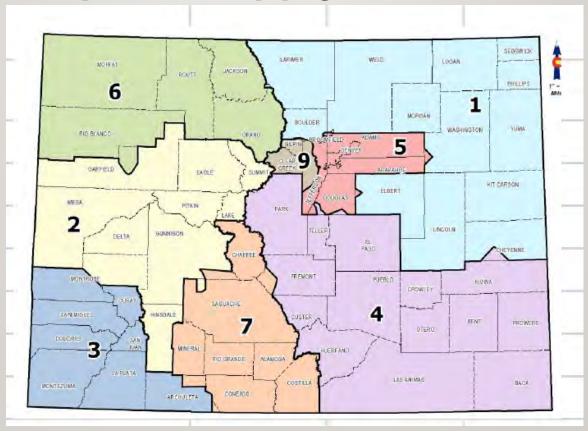
- R1: US 85 (S. Santa Fe) Corridor Improvements
  - Highlands Ranch Pkwy to County Line Rd. Douglas County
  - Two-year project: 40,000 tons of HMA
- R1: Floyd Hill 30,000 tons
- **R2 SH 115 Carry Over –** 27,000 tons
- R2: I-25 Fountain North CM/GC
  - 8,000 tons
- R3: I-70 Vail Pass CM/GC
  - 10,000 tons
- R4: I-25 North Express Lanes D/B
  - 25,000 tons
- R5: US 160/US 550 D/B 5,000 tons
- R4: SH 71 Carry Over
  - Cheyenne Wells North
  - 40,000 tons



# **185,000 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 2023 vs. Actual 2023

RE	G 2023 S	ST Planned Tons	2023 ST Actual Tons	Change Tons
1	Denver	99,769	64,237	(- 35,532)
2	Pueblo	313,764	324,758	(+ 10,994)
3	Grand Jun.	307,560	289,827	(- 17,733)
4	Greeley	302,188	250,254	(- 51,934)
5	Durango	134,476	98.333	(- 36,143)
TO	TAL:	1,157,757	1,027,409	(-130,348)

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

US 85 S. Santa Fe – 50,000 tons; US 385 carryover – 60,000 tons SH 115 carry over – 57,000 tons; US 160 carry over – 22,000 tons

I-25 Fountain N. – 30,000 tons; I-25 N.Express Lanes – 20,000 tons

I-70 Vail Pass – 25,000 tons; US 550/160 Connect – 50,000 tons

CDOT Capital Projects + carry over: 314,000 tons

CDOT Supply @ the Plant Maintenance 2023: 120,000 tons

#### **CDOT Total Asphalt Pavement Materials 2023**:

1,027,409 tons + 314,000 tons + 120,000 tons = 1,461,409 tons



## CDOT – Asphalt Pavement 2024 Projected vs. 2023 Actual

RE	G 2023 S	ST Actual Tons	2024 ST Projected Tons	Change Tons
1	Denver	64,237	111,774	(+ 47,537)
2	Pueblo	324,758	426,134	(+ 101,376)
3	Grand Jun.	289,827	343,791	(+ 53,964)
4	Greeley	250,254	390,523	(+ 140,269)
5	Durango	98,333	23,030	(- 75,303)
TOTAL: 1,027,4		1,027,409	1,296,252	(+268,843)

### Capital: (Design/Build, CM/GC)

US 85 S. Santa Fe – 40,000 tons; SH 115 – 27,000 tons; I-25 North Express Lanes – 25,000 tons; I-25 Fountain North, 8,000 tons; US 550/US 160 Durango – 5,000 tons. I-70 Vail West – 10,000 tons I-70 Floyd Hill – 30,000 tons SH 71 Carry Over – 40,000 tons

CDOT Capital + Other Funded 2023: 185,000 tons

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

### **CDOT Total Asphalt Pavement Materials 2023 Projected:**

1,296,252 tons + 185,000 tons + 120,000 tons = 1,601,252 tons



## CDOT Actual 2022:

1,809,891 tons

CDOT Actual 2023:

35 Surface Treatment Projects\* 1,027,409 tons 8 D-B, CM/GC, and Other Projects 314,000 tons CDOT Maintenance/Small Quantity projects 120,000 tons

2022 Actual Grand Total: 1,461,409 tons

\* - 1 no bids, 5 deferred, 3 bids rejected

## **CDOT Projected 2024**:

41 Surface Treatment Projects\*\*

7 D/B, CM/GC, and Other Projects

CDOT Maintenance/Small Quantity Projects

1,296,252 tons
185,000 tons

2023 Projected Grand Total: 1,601,252 tons

\*\* - 1 bids rejected, 1 pending - Over Budget, Pending Review.

This represents an 4% projected increase in 2024 over 2023.



## **Summary:**

2023 Actual CDOT Grand Total: 1.46 M tons

2023 Total Tons in Colorado: 9.00 M tons

1.46/9.00 = 16.2%

CDOT represented 16% of the 2023 asphalt pavement market in Colorado.

2024 Projected CDOT Grand Total: 1.60 M tons\*

\* - Assumes ALL planned asphalt projects are bid and awarded.

We are estimating 1.6 M tons of CDOT asphalt materials in in 2024 versus 1.46 M tons in 2023. This represents a 4% increase in CDOT asphalt paving in 2024 vs. 2023. 1.6 M tons represents 17% of the projected Colorado total of 9.2 M tons.



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

### **Municipal Government**

Looking toward 2024, Colorado Municipal League anticipates a slowing economy, resulting in flat or declining sales tax revenue, to be the greatest economic challenge for municipalities. Continuing challenges for cities and towns include affordable housing and homelessness, unfunded street and road maintenance, and unfunded water and wastewater improvements.

Unlike counties and special districts, most Colorado municipalities rely on sales and use tax as a primary source of revenue. Flat or declining sales tax revenue, including real estate sales, impacts municipalities on many levels. Less revenue availability means less money



While many municipalities experienced significant recovery in sales and use tax in 2022 driven by pandemic recovery and price inflation in goods and taxable services, 2023 paints a different picture. As inflation slows, many municipalities are seeing slower, or even negative growth in sales tax. Taxable sales of consumer goods, in particular, appear to be retreating from the strong growth experienced by many municipalities over much of 2022.

## Street Improvement Ballot Initiatives



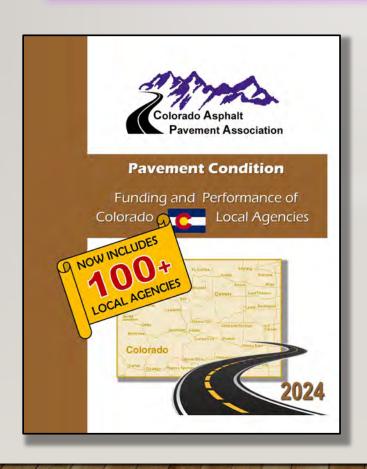


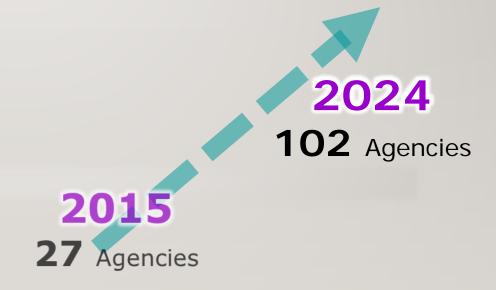
Issue 2E (55/45)



Congratulations! Local Agencies Continue to See Strong Support from Their Citizens for Infrastructure and Increasing Local Street Funding Programs.







Representing +65,000 lane miles (97% of local agency network)

Local Agency	Paved Lane Miles	Year	Annual Asphalt Program Mill/Overlay + Preventive + Crack Seal		PCI	Public Works CIP
Adams County	1553	2023	\$10,000,000	\$6,439	69	\$15,000,000
Alamosa	118	2023	\$50,000	\$424	60	\$1,864,959
Alamosa County	430	2023	\$1,000,000	\$2,326		
Arapahoe County	1216	2024	\$7,475,400	\$6,148	64	
Arvada	1506	2024	\$10,000,000	\$6,640	44	
Aspen	72	2019	\$820,000	\$11,389		
Aurora	4522	2024	\$39,000,000	\$8,625	71	\$44,500,000
Avon	63	2023	\$4,357,000	\$69,159	83	
Basalt	43	2023	\$199,829	\$4,647	86	\$90,000
Boulder County	1049	2023	\$19,600,000	\$18,684	65	\$6,500,000
Boulder	628	2023	\$4,000,000	\$6,369	77	
Broomfield	750	2022	\$4,600,000	\$6,133	75	\$14,000,000
Breckenridge	120	2017	\$750,000	\$6,250	78	
Cañon City	194	2024	\$780,000	\$31,134	37	\$5,260,000
Castle Pines	110	2024	\$1,750,000	\$15,909	81	
Castle Rock	766	2024	\$20,800,000	\$27,154	81	\$7,300,000
Centennial	979	2017	\$7,700,000	\$7,865	79	
Cherry Hills Village	90	2024	\$65,000	\$722	83	\$250,000

.

6

\*

## PROGRAMS OF NOTE



+ \$8.7M Grant



120,000 tons



- \$9.3M Street Budget (-30%)



+ 20% Street Budget



- \$11M Road Budget (-37%)

## 2024 Local Agency Market

\$430 M

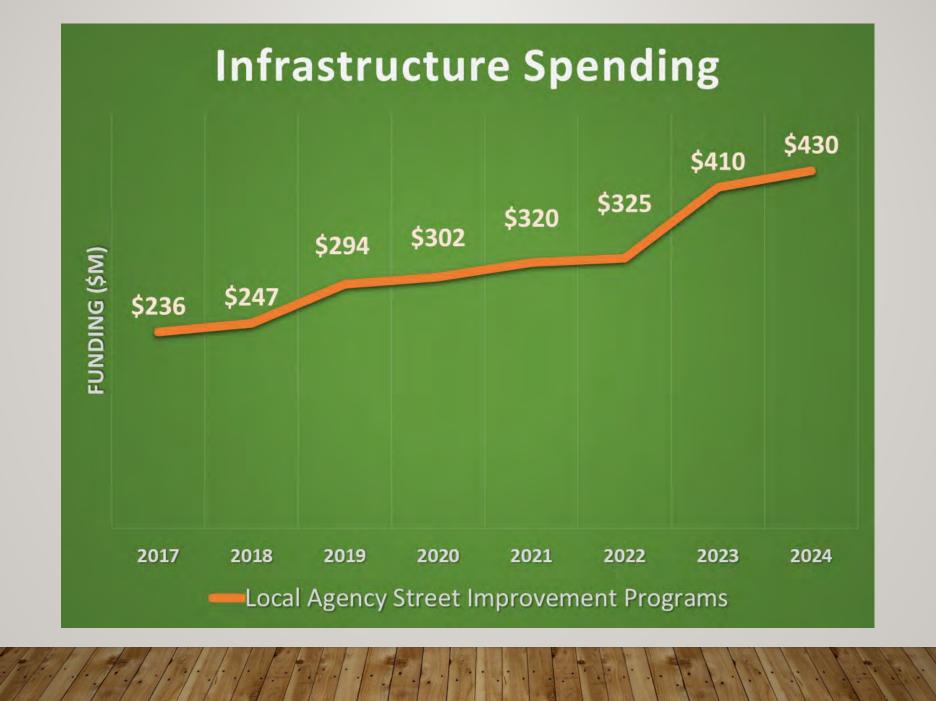
Street/Road Maintenance

\$324 M

**Public Works Capital Projects** 

\$754 M

**Local Agency 2024 Projects** 



## 2024 Local Agency Trends



Street/Road Maintenance





18 Agencies <sup>2023</sup> vs. 2024 **12 Agencies** (66%)

## 2024 Local Agency Trends

18 Agencies <sup>2023</sup> vs. 2024

2024

Δ 2024

2023

CIP	\$149.0	\$110.2	-26%
	44000	<b>6407 -</b>	
Mill & Overlay	\$128.8	\$127.5	-1%
Maintenance	\$43.6	\$39.4	-9.60%
iviaiiiteilaiite	<b>343.0</b>	<b>333.4</b>	-9.00/0

## 2024 Local Agency Trends

## Best Practices Asphalt Mixes

(gyrations, binders, % AC)



BUILDING BETTER COMMUNITIES
THROUGH SUSTAINABLE PRACTICES

**Expanding the use of** 

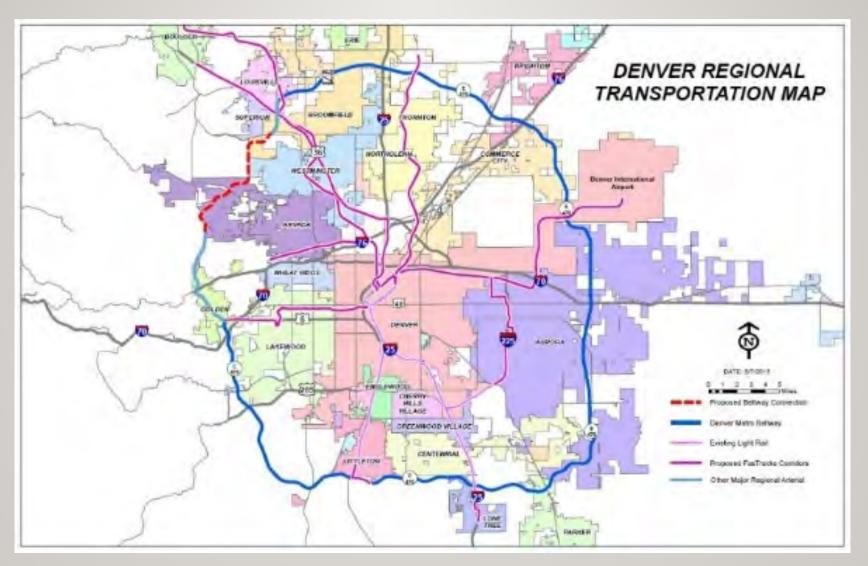
Green Asphalt in Colorado

**Balanced Mix Designs** 

## **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 180,000 tons of HMA expected in 2024 Kiewit Infrastructure, 2022 - 2024







## US FOREST SERVICE CONSTRUCTION OPPORTUNITIES

- Rio Grande NF 11 projects worth \$2.4 M
- San Juan NF 29 Projects worth \$11.1 M
- Grand Mesa-Uncompangre-Gunnison NF 32 Projects worth \$27.3 M
- White River NF 18 Projects worth \$19.9 M
- Medicine Bow-Routt NF & Thunder Basin NG 20 Projects worth \$12.5 M

Information: <a href="https://www.fs.usda.gov/managing-land/gaoa">https://www.fs.usda.gov/managing-land/gaoa</a>



#### In Development

Project #	Project Name	Location
CO FLAP MES 18(1)	18 Road	Mesa County
CO FLAP CR300(1)	Browns Canyon National Monument Access Road	Chaffee County
CO FTFW ROFL Trails (1)	Rocky Flats National Wildlife Refuge Trails	Jefferson County
CO FLAP JEF 128(1) Trail Crossing to Rocky Flats National Wildlife Refuge		Jefferson County

# 2024 Colorado Asphalt Pavement Materials Usage PROJECTION

<b>Construction Type</b>	% Market	Volume of Work Change
City/County:	40%	estimated 10% increase in volume
State DOT:	17%	estimated 4% increase in volume
Commercial:	1/3 of 33%	estimated no change in volume
Residential:	2/3 of 33%	estimated 6% increase 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, 9.0 M tons in 2023)

2024 Asphalt Quantity Projection - 9.2 Million tons This represents an estimated 2% increase in overall market for asphalt materials as compared to 2023.



COLORADO RIDES ON US

Asphalt.

## 2024 Outlook: Trends & New Developments

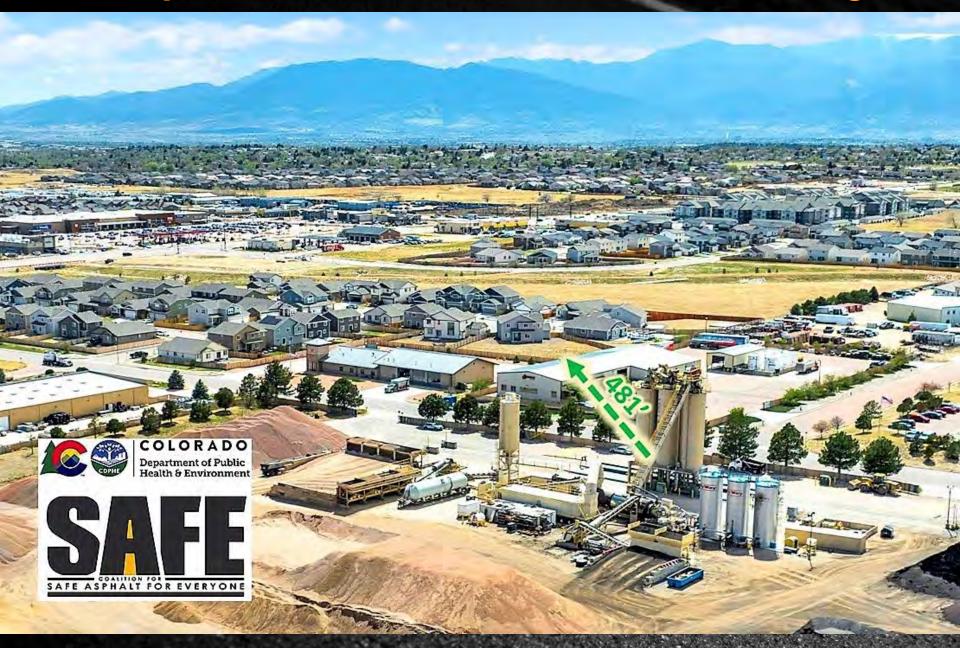
DISCLAIMER: It is understood that any number of the issues and factors presented may change with or without notice and could result in significant impacts on the accuracy of this information.



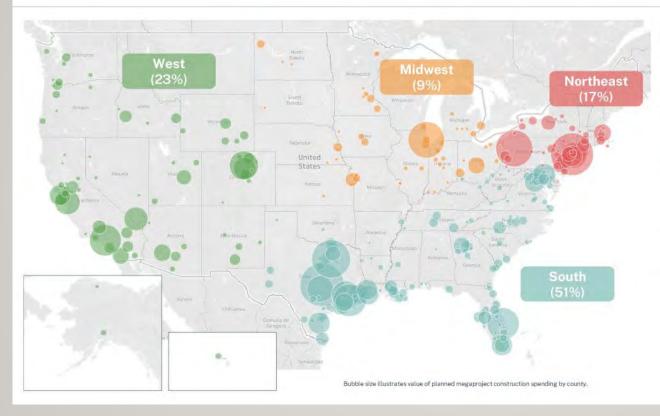
## **Industry Trends (Environmental Justice)**



## **Asphalt Plants in OUR Community**



#### **MEGAPROJECTS**

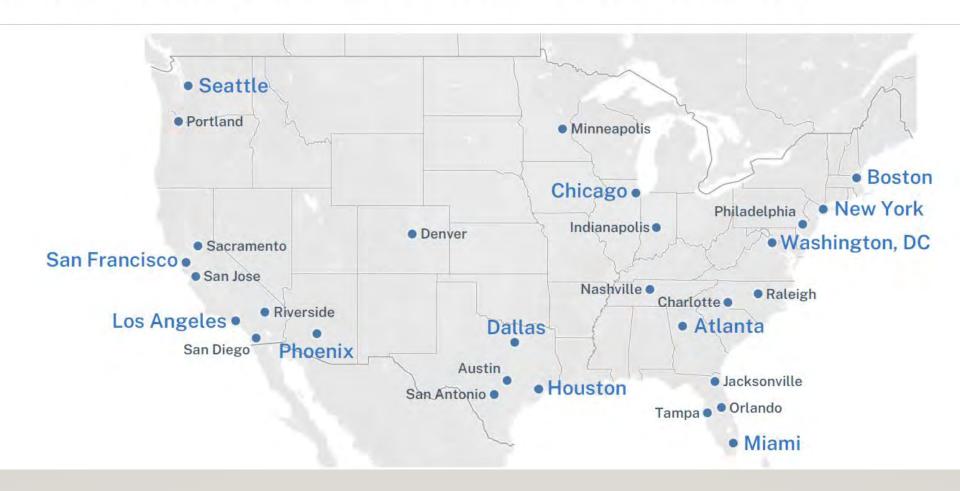


#### Notable Megaprojects Underway in the U.S.

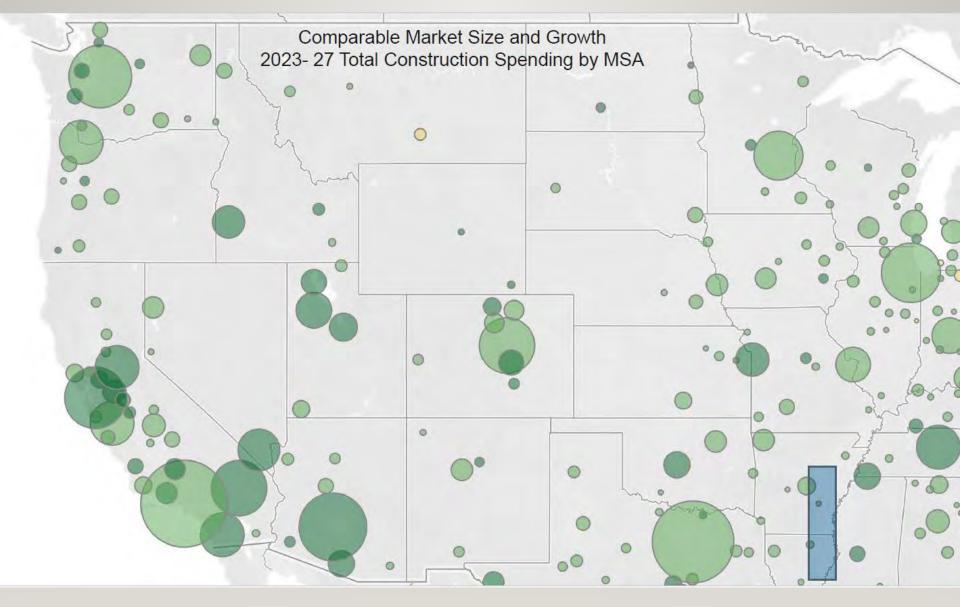
- Gordie Howe International Bridge Detroit, MI \$4.5 billion
- American Legion Bridge Replacement Bethesda, MD \$6 billion
- Related Santa Clara Development Santa Clara, CA \$8 billion
- Hudson Tunnel Project New York City, NY \$16 billion
- JFK Airport Expansion New York City, NY \$18 billion

Approximately 20% of construction spending in the US is on mega projects, ie. \$1 Billion or more. FMI Consulting, 12-2023

#### HALF OF ALL CONSTRUCTION CONCENTRATES IN DISTINCT REGIONS



FMI Consulting, 12-2023



FMI, 12-2023

### WHAT COULD BE...

Megatrend		Predictions	Impact on Contractors	
12	Technological advancements	<ul> <li>AI could replace more than one third of architecture and engineering jobs</li> <li>Design, BIM, estimating, scheduling and building product/ construction</li> </ul>	<ul> <li>Staffing needs could diminish over time, beginning with clerical jobs</li> <li>Bringing design in-house through AI could create new</li> </ul>	
		material procurement could combine into a single autonomous workflow	opportunities	
		The "gig" economy could extend to traditional workers that operate as temporary contractors (with few people being permanent employees of a	Agile business models could result in hiring teams for single jobs	
	Remote and flexible work	company)	· Industry players may not be able to distinguish themselves based	
		• A 50% decline in office space could devastate several major U.S. cities	on having the "best" people	
	E-commerce and digitization	Modular building and prefabrication could become part of the e-	Need to adopt greater modular and prefabrication capabilities	
		commerce world, starting with residential	· More competition with more non-traditional competitors	
ž		<ul> <li>A generation accustomed to "online" purchasing of products spills into professional services</li> </ul>	<ul> <li>Connection to customers becomes increasingly impersonal unless new strategies are adopted</li> </ul>	
<b>*</b>	Climate change and sustainability	<ul> <li>Contractors could be required to achieve a minimum ESG score (or similar) to pursue certain project opportunities (e.g., similar to an EMR)</li> </ul>	Fully electric job sites	
			Heightened need to monitor contract term evolutions	
		Contractors could be found liable for project impact to climate change		
血	Political polarization	Government deadlock could delay public funding for infrastructure		
		construction	Public sector work could suffer	
		<ul> <li>Having the "wrong" political view could blacklist people from market access</li> </ul>	Staff could create problems with social media	

#### A FEW PARTING THOUGHTS



Your success in life isn't based on your ability to simply change. It is based on your ability to change faster than your competition, customers and business.



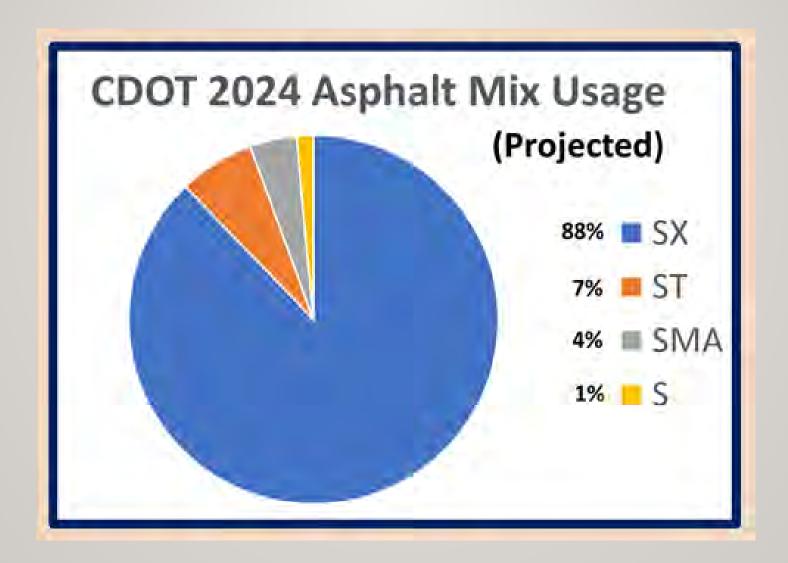
Build your network. All data and information have a shelf life.



Remember what's not going change in the next five to 10 years.

### Not Going To Change in 10 Years:

- More than 90% of all pavements will be asphalt.
- The need for surface treatment (maintenance, overlay, rehabilitation) will continue.
- The focus on environmental sustainability will continue.



## **Recycled Products:**

- rubber
- shingles
- plastic
- glass
- coal



### **Issues with Recycled Materials in Asphalt Pavement**

- availability
- cost
- performance
- quality control
- allowed vs. mandated
- engineered specifications
- proprietary vs. generic requirements

## Asphalt May Be A New Market For Struggling Wyoming Coal Industry

The state and Peabody Energy Corp. are among those investing millions of dollars into a demonstration project to show Wyoming coal can be made into asphalt for roads and parking lots.



January 8, 2024





### Aggregates:

In 2020, Colorado produced and consumed approximately 53 million tons of aggregate (sand, gravel, crushed stone). This was approximately equal to 2019.

Forecasts for 2022 suggest similar levels of production in Colorado, as all regions of the state show continued strong construction levels.

Local zoning regulations and land-development alternatives continue to have an expanding negative impact on surface mining. These issues are expected to continue and to cause new crushed stone quarries and sand and gravel deposits to locate further away from large population centers, where the material is needed. If this were to be the case, material transportation costs to the high usage centers will increase, and the opportunity to minimize the carbon impact will be increasingly difficult.

Source: CSSGA, January 5, 2022

NIMBY – Not In My Back Yard

BANANA – Build Absolutely Nothing Anywhere Near Anything

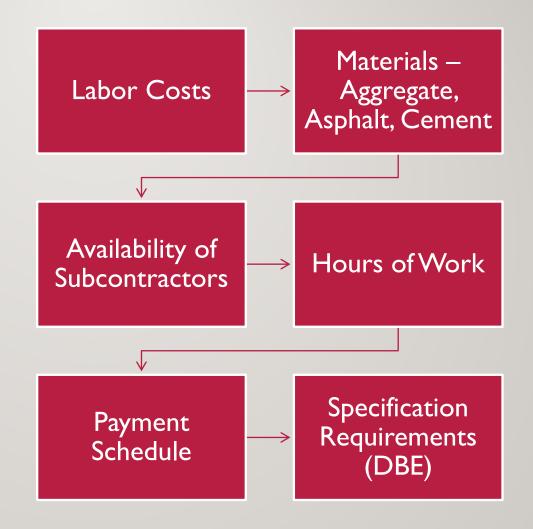


How much does asphalt cost? What is the cost of asphalt? We need to clarify cost:

Droicet Mix (Material Liquid Asphalt

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.

# 2024 Outlook: Technical Resources, Training & Professional Development





#### Plans for 2024 Rocky Mountain Asphalt Conference & Equipment Show:

- LOCATION: National Western Complex
- Focus on Construction Best Practices, Materials Engineering & Testing, Leadership,
   Maintenance & Rehab.

  2024 Conference
- Theme: Road to Adventure Asphalt Takes You There
- Keynote General Session

www.rmaces.org

February 6 & 7, 2024

- 24 breakout sessions, 18 Educational 101 sessions (materials, maintenance, and equipment
- CAPA "Best in Colorado" Asphalt Awards Program Feb. 6





Date: Whenever You want it

Location: At Your Office, or where you want it

Subjects: Asphalt A to Z





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



## **Asphalt Lunch & Learns**

Date: When, Where, How YOU

want it!

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

> Specification, **Technology Focus**



## "Introduction to PC/OA Testing Education Course"

(PC = Process Control, OA = Owners Acceptance)
 Testing"

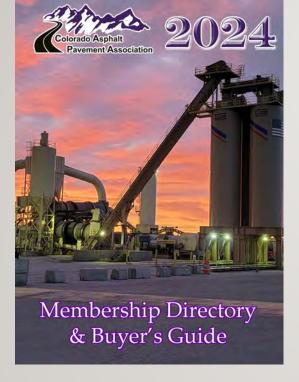
Introductory course

www.co-asphalt.com/education

- 1 to 4 days
- Inspectors, Engineers, new testing technicians
- Teach both QC and QA sampling and testing

procedures







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

needed to research almost any topic of Asphalt Construction.

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

Safe Asphalt

CAPA YouTube Channe





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

- Promoting ASPHALT
- Promoting our MEMBERS
- Promoting our INDUSTRY

More information: tomclayton@co-asphalt.com



ASPHALT INDUSTRY OF COLORADO









# 2024 ASPHALT INDUSTRY OUTLOOK "MARKET CONDITIONS, TRENDS, AND NEW DEVELOPMENTS" PROVIDED FOR CAPA MEMBERS & AGENCY PARTNERS

Thursday, January 11, 2024

Presented by Tom Peterson, P.E.

tompeterson@co-asphalt.com

Mike Skinner, P.E. <a href="mailto:mikeskinner@co-asphalt.com">mikeskinner@co-asphalt.com</a>

Tom Clayton, SET <a href="mailto:tomclayton@co-asphalt.com">tomclayton@co-asphalt.com</a>





