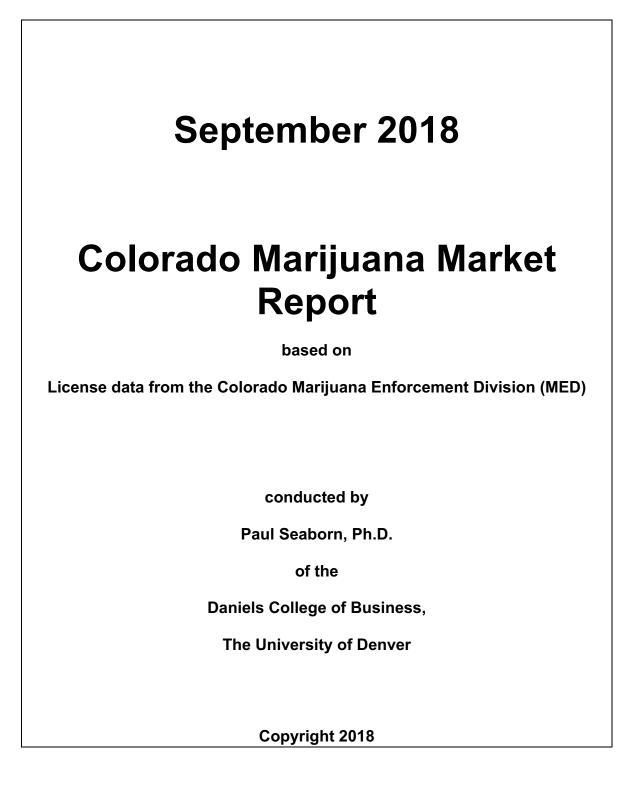
Colorado Marijuana Market Report

Paul Seaborn, Ph.D. Daniels College of Business September 2018







Executive Summary

- The total number of active Colorado marijuana business licenses is 3,069, slightly down from the all-time record high of 3,101 in May 2018. 52% of these licenses (1,597) are for the retail/recreational market and 48% (1,472) for the medical market.
- The number of retail/recreational licenses has exceeded the number of medical licenses since January 2018 and medical licenses have decreased each month since October 2017. Medical dispensaries have decreased from a high of 531 in August 2016 to 486 in September 2018 while retail stores have increased from 440 to 541 in the same period.
- Denver, Colorado Springs, Boulder, Pueblo and Pueblo West remain the top 5 cities for marijuana licenses as they have been for over a year. However, these five cities now account for only 63.64% of all state licenses, the lowest percentage on record. The City and County of Denver has over 38% of the state's active licenses but has experienced a decrease from 1,244 in Dec. 2016 to 1,181 in September 2018.
- 43 Colorado cities now have at least 10 active licenses and a number of small Colorado communities such as Moffat, Walsenburg, and Trinidad continue to appear within the top 15 cities for marijuana licenses.
- Native Roots and LivWell continue to have the largest number of licenses operating under a single name with Native Roots holding 61 licenses and LivWell holding 47. Six organizations have at least 20 active licenses, down from 8 in August 2017. Sweet Leaf, which once had the 3rd-most licenses in the state, no longer has any active licenses. No single organization name represents more than 1.7% of the state's licenses.
- Four new license categories were introduced in July 2017 Retail Transporter, Retail Operator, Medical Transporter and Medical Operator – but only 35 of these licenses are currently active.

Methodology: This analysis is based on raw license data provided by the Colorado MED on a monthly basis. Each business license represents a separate operating location for one of the twelve types of marijuana businesses (six medical, six retail). Data errors in the raw MED data have been checked and corrected where possible but some may remain. The largest license-holders have been identified based on common license names (e.g. Native Roots Vail, Native Roots Boulder). License totals do not directly reflect the level of economic activity in the Colorado marijuana industry.

About the Author: Paul Seaborn is an assistant professor at the Daniels College of Business, University of Denver. His research interests include non-



market strategy/corporate political activity, industry regulation & self-regulation, political economy, industry evolution, and the economics of information.

Prof. Seaborn teaches undergraduate, graduate and executive students. In Spring 2017 and 2018, he taught the first ever "<u>Business of Marijuana</u>" course at Daniels and at any AACSB-accredited business school. In August 2018, he was appointed as the business, commerce and environment section editor of the newly formed multi-disciplinary <u>Journal of Cannabis Research</u>. In 2017, he was recognized as one of <u>Poets & Quants Top 40 Undergraduate Business</u> <u>Professors</u>. In 2016, he was the recipient of the Daniels Excellence in Teaching Award. In 2014, he published one of the first academic teaching case on the marijuana industry in Case Research Journal, "<u>Medical Marijuana Industry</u> <u>Group: Outdoor Advertising in Denver</u>".

Prior to joining Daniels in 2011, Prof. Seaborn completed his doctoral studies in Strategic Management at the Rotman School of Management, University of Toronto. He has eight years of consulting experience with Mercer Management Consulting (now known as Oliver Wyman) and IBM Global Services. He holds an MBA from the Richard Ivey School of Business, University of Western Ontario and a Bachelor's Degree in Mathematics from Acadia University. He is a native of Corner Brook, Newfoundland, Canada.

Opportunities for Engagement:

Prof. Seaborn is actively involved in a wide variety of initiatives related to the cannabis industry including academic research, media appearances, speaking at academic and industry conferences and events, consulting and expert testimony.

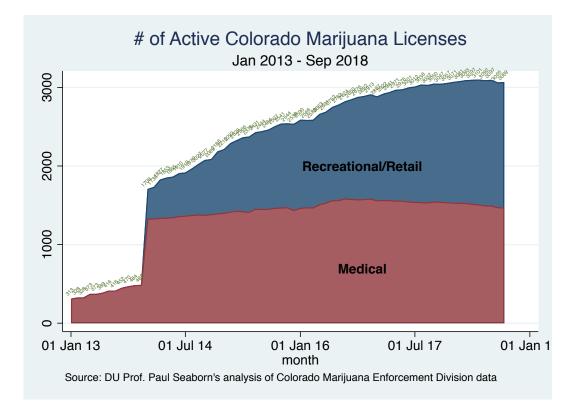
Two current priorities for Prof. Seaborn are:

- 1) Helping to connect stakeholders in the Colorado and Canadian cannabis industries.
- Exploring opportunities to expand the University of Denver's educational and research activities related to the cannabis industry and emerging industries more generally.

To inquire about any of these activities, receive a copy of future Colorado Marijuana Market Reports, or provide feedback, please contact:

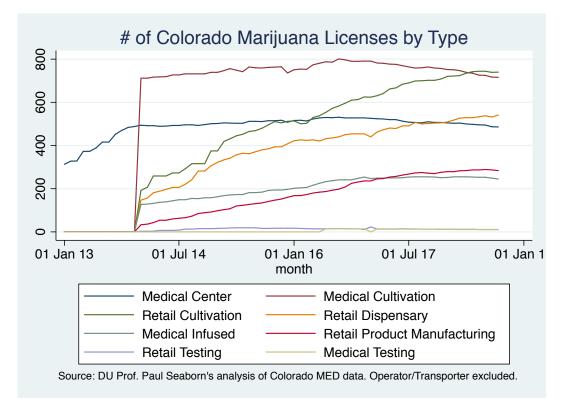
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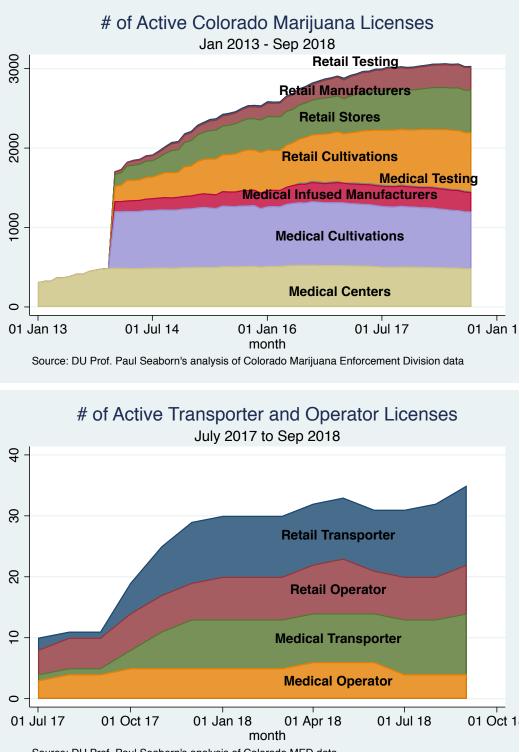


The total number of Colorado marijuana licenses grew steadily from 2013 until May 2018, with a significant one-month increase in January 2014 after the legalization of recreational marijuana as a result of the passing of Amendment 64. Since the start of 2017 the number of medical licenses has declined, particularly in cultivation. Note: The only state license data available prior to January 2014 was for Medical Centers.



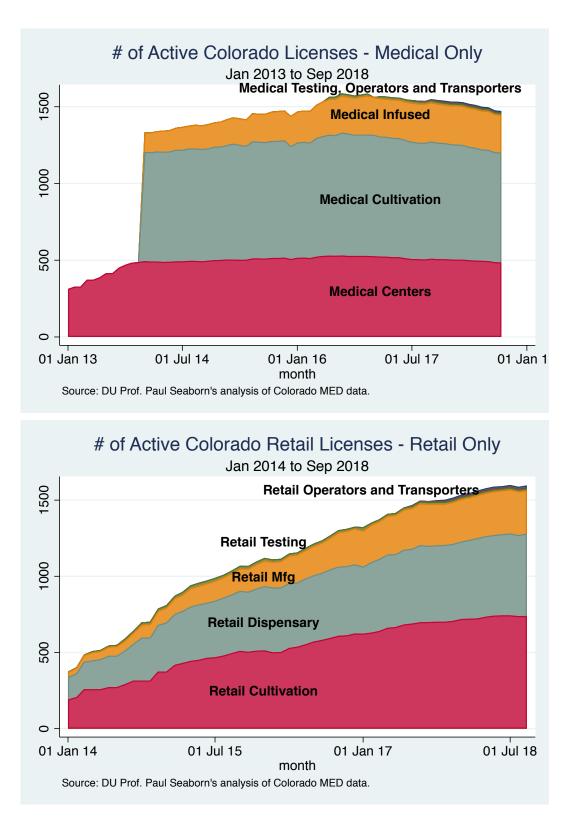




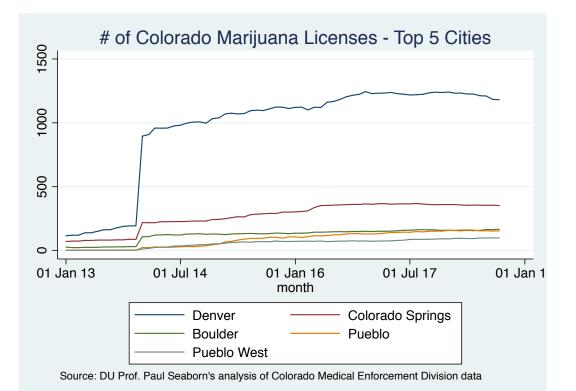


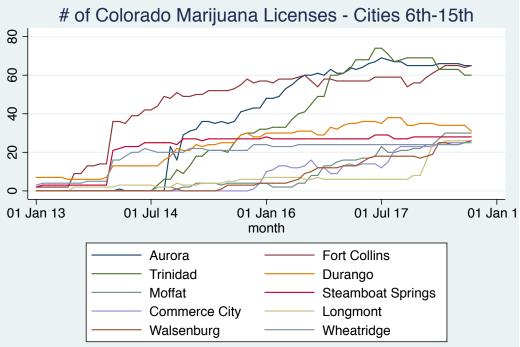
Source: DU Prof. Paul Seaborn's analysis of Colorado MED data.





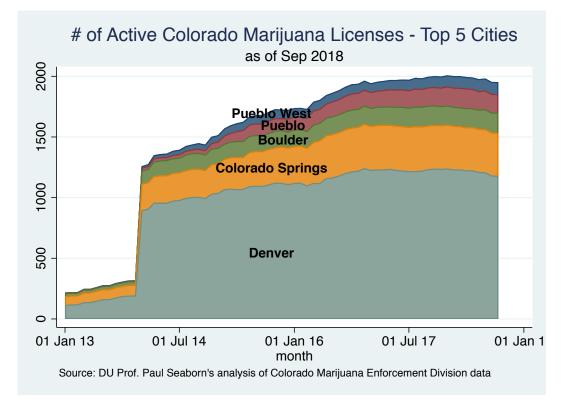




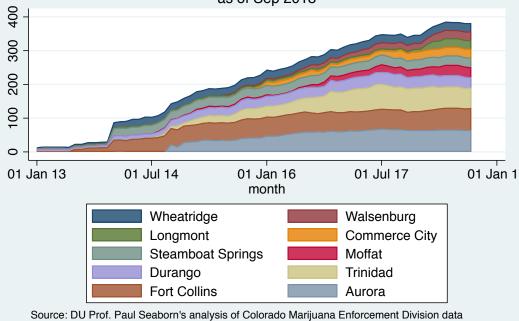


Source: DU Prof Paul Seaborn's analysis of Colorado MED data. Excludes Top 5 cities by # of licenses

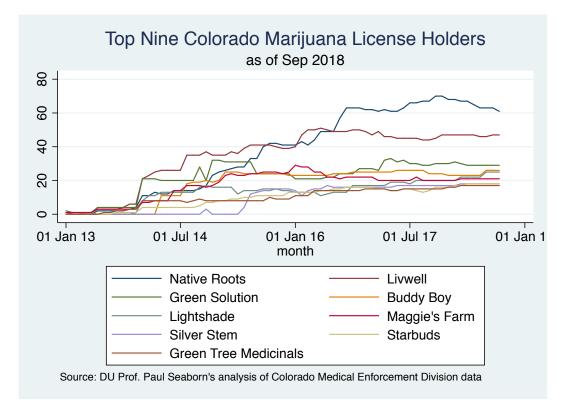


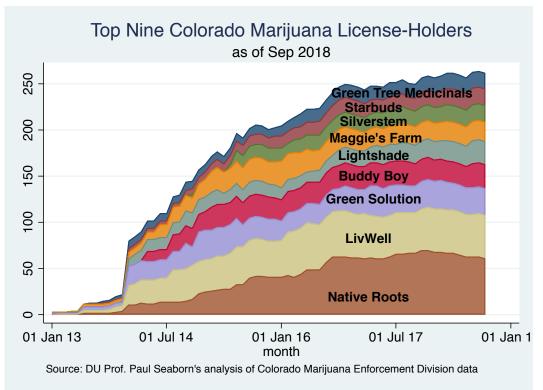


of Active Colorado Marijuana Licenses - Cities 6th-15th as of Sep 2018











<u> Colorado Marijuana Market Report – September 2018</u>

LICENSE TYPE Freq.	Dec 2016	April 2017	Aug 2017	Sept 2018
Medical Infused Product Manufacturer	254	250	255	245
Medical Licensed Center	528	520	507	486
Medical Marijuana Testing	14	14	14	11
Medical Marijuana Cultivation	791	777	759	716
Medical Marijuana Operator			4	4
Medical Marijuana Transporter			1	10
Retail Marijuana Dispensaries	454	481	507	541
Retail Marijuana Cultivation Facility	625	662	699	740
Retail Marijuana Products Mfg	235	254	273	284
Retail Marijuana Testing Facility	11	13	13	11
Retail Marijuana Operator			5	8
Retail Marijuana Transporter			1	13
Total	2,913	2,971	3,038	3,069

Top 15 Colorado Cities	Medical	Recreational	Total
AURORA	1	64	65
BOULDER	62	105	167
COLORADO SPRINGS	352	0	352
COMMERCE CITY	11	15	26
DENVER	656	525	1,181
DURANGO	9	22	31
FORT COLLINS	32	33	65
LONGMONT	6	20	26
MOFFAT	3	27	30
PUEBLO	36	118	154
PUEBLO WEST	33	66	99
STEAMBOAT SPRINGS	13	15	28
TRINIDAD	11	49	60
WALSENBURG	4	22	26
WHEAT RIDGE	11	14	25
Total	1,240	1,095	2,335



>10 Active Licenses	Freq.	Percent	Cum.
NATIVE ROOTS	61	1.99	1.99
LIVWELL	47	1.53	3.52
THE GREEN SOLUTION	29	0.94	4.46
BUDDY BOY	26	0.85	5.31
LIGHTSHADE	25	0.81	6.13
MAGGIES FARM	21	0.68	6.81
SILVER STEM FINE CANNABIS	18	0.59	7.40
STARBUDS	18	0.59	7.98
GREEN TREE MEDICINALS	17	0.55	8.54
ROCKY MOUNTAIN REMEDIES	16	0.52	9.06
THE GREEN SOURCE	16	0.52	9.58
GREEN DRAGON	15	0.49	10.07
HIGH LEVEL HEALTH	14	0.46	10.52
IGADI	14	0.46	10.98
PURE MEDICAL	14	0.46	11.44
EVERBLOOM	13	0.42	11.86
THE CLINIC	13	0.42	12.28
DOCTORS ORDERS	12	0.39	12.68
MMJ AMERICA	12	0.39	13.07
A CUT ABOVE	11	0.36	13.42
BEST BUDZ	11	0.36	13.78
DENVER CLONE STORE	11	0.36	14.14
MEDICINE MAN	11	0.36	14.50
ALTITUDE ORGANIC	10	0.33	14.83
SOUTH PARK FARMA	10	0.33	15.15
TERRAPIN CARE STATION	10	0.33	15.48



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COLORADO SPRINGS 352 11.47 49.95 BOULDER 167 5.44 55.39 PUEBLO 154 5.02 60.41 PUEBLO WEST 99 3.23 63.64 AURORA 65 2.12 65.75 FORT COLLINS 65 2.12 67.87 TRINIDAD 60 1.96 69.83 DURANGO 31 1.01 70.84 MOFFAT 30 0.98 71.81 STEAMBOAT SPRINGS 28 0.91 72.73 COMMERCE CITY 26 0.85 73.57 LONGMONT 26 0.85 74.42 WALSENBURG 26 0.85 75.27 WHEAT RIDGE 21 0.68 76.77 BOONE 19 0.62 77.39 LAFAYETTE 19 0.62 77.39 AVON 17 0.55 79.15 AVON 17 0.55 80.81 GUNNISON 15 0.49 81.30 HENDERSON 15 0.49	Cities with >10 licenses	Freq.	Percent	Cum.
BOULDER 167 5.44 55.39 PUEBLO 154 5.02 60.41 PUEBLO WEST 99 3.23 63.64 AURORA 65 2.12 65.75 FORT COLLINS 65 2.12 67.87 TRINIDAD 60 1.96 69.83 DURANGO 31 1.01 70.84 MOFFAT 30 0.98 71.81 STEAMBOAT SPRINGS 28 0.91 72.73 COMMERCE CITY 26 0.85 73.57 LONGMONT 26 0.85 74.42 WALSENBURG 26 0.85 74.73 WHEAT RIDGE 25 0.81 76.08 CARBONDALE 19 0.62 77.39 LAFAYETTE 19 0.62 78.59 AVON 17 0.55 79.15 AVON 17 0.55 79.70 PENROSE 17 0.55 80.25 SAGUACHE 17 0.55 80.25 SAGUACHE 17 0.55 8	DENVER	1,181	38.48	38.48
PUEBLO 154 5.02 60.41 PUEBLO WEST 99 3.23 63.64 AURORA 65 2.12 65.75 FORT COLLINS 65 2.12 67.87 TRINIDAD 60 1.96 69.83 DURANGO 31 1.01 70.84 MOFFAT 30 0.98 71.81 STEAMBOAT SPRINGS 28 0.91 72.73 COMMERCE CITY 26 0.85 73.57 LONGMONT 26 0.85 74.42 WALSENBURG 26 0.85 75.27 WHEAT RIDGE 25 0.81 76.08 CARBONDALE 21 0.62 77.39 LAFAYETTE 19 0.62 78.01 GARDEN CITY 18 0.59 78.59 AVON 17 0.55 79.15 AVONALE 17 0.55 79.70 PENROSE 17 0.55 80.25 SAGUACHE 17 0.55 80.25 SAGUACHE 17 0.55	COLORADO SPRINGS	352	11.47	49.95
PUEBLO WEST 99 3.23 63.64 AURORA 65 2.12 65.75 FORT COLLINS 65 2.12 67.87 TRINIDAD 60 1.96 69.83 DURANGO 31 1.01 70.84 MOFFAT 30 0.98 71.81 STEAMBOAT SPRINGS 28 0.91 72.73 COMMERCE CITY 26 0.85 73.57 LONGMONT 26 0.85 74.42 WALSENBURG 26 0.85 75.27 WHEAT RIDGE 25 0.81 76.08 CARBONDALE 21 0.68 76.77 BOONE 19 0.62 77.39 LAFAYETTE 19 0.62 78.01 GARDEN CITY 18 0.59 79.15 AVON 17 0.55 79.15 AVONDALE 17 0.55 80.25 SAGUACHE 17 0.55 80.25 SAGUACHE 17 0.55 80.25 SAGUACHE 15 0.49	BOULDER	167	5.44	55.39
AURORA652.1265.75FORT COLLINS652.1267.87TRINIDAD601.9669.83DURANGO311.0170.84MOFFAT300.9871.81STEAMBOAT SPRINGS280.9172.73COMMERCE CITY260.8573.57LONGMONT260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.64PAGOSA SPRINGS140.4683.64	PUEBLO	154	5.02	60.41
FORT COLLINS 65 2.12 67.87 TRINIDAD 60 1.96 69.83 DURANGO 31 1.01 70.84 MOFFAT 30 0.98 71.81 STEAMBOAT SPRINGS 28 0.91 72.73 COMMERCE CITY 26 0.85 73.57 LONGMONT 26 0.85 75.27 WHEAT RIDGE 25 0.81 76.08 CARBONDALE 21 0.68 76.77 BOONE 19 0.62 77.39 LAFAYETTE 19 0.62 78.01 GARDEN CITY 18 0.59 78.59 AVON 17 0.55 79.15 AVONDALE 17 0.55 80.25 SAGUACHE 17 0.55 80.81 GUNNISON 15 0.49 81.30 HENDERSON 15 0.49 82.77 IDAHO SPRINGS 14 0.46 83.64	PUEBLO WEST	99	3.23	63.64
TRINIDAD 60 1.96 69.83 DURANGO 31 1.01 70.84 MOFFAT 30 0.98 71.81 STEAMBOAT SPRINGS 28 0.91 72.73 COMMERCE CITY 26 0.85 73.57 LONGMONT 26 0.85 74.42 WALSENBURG 26 0.85 75.27 WHEAT RIDGE 25 0.81 76.08 CARBONDALE 21 0.68 76.77 BOONE 19 0.62 77.39 LAFAYETTE 19 0.62 78.01 GARDEN CITY 18 0.59 78.59 AVON 17 0.55 79.15 AVONDALE 17 0.55 80.25 SAGUACHE 17 0.55 80.25 SAGUACHE 17 0.55 80.21 IDAHO SPRINGS 14 0.46 82.73 LAKEWOOD 14 0.46 83.64	AURORA	65	2.12	65.75
DURANGO311.0170.84MOFFAT300.9871.81STEAMBOAT SPRINGS280.9172.73COMMERCE CITY260.8573.57LONGMONT260.8574.42WALSENBURG260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5580.25SAGUACHE170.5580.25SAGUACHE150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	FORT COLLINS	65	2.12	67.87
MOFFAT300.9871.81STEAMBOAT SPRINGS280.9172.73COMMERCE CITY260.8573.57LONGMONT260.8574.42WALSENBURG260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5580.25SAGUACHE170.5580.25SAGUACHE150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	TRINIDAD	60	1.96	69.83
STEAMBOAT SPRINGS280.9172.73COMMERCE CITY260.8573.57LONGMONT260.8574.42WALSENBURG260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4682.73LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	DURANGO	31	1.01	70.84
COMMERCE CITY260.8573.57LONGMONT260.8574.42WALSENBURG260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	MOFFAT	30	0.98	71.81
LONGMONT260.8574.42WALSENBURG260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	STEAMBOAT SPRINGS	28	0.91	72.73
WALSENBURG260.8575.27WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	COMMERCE CITY	26	0.85	73.57
WHEAT RIDGE250.8176.08CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	LONGMONT	26	0.85	74.42
CARBONDALE210.6876.77BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	WALSENBURG	26	0.85	75.27
BOONE190.6277.39LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	WHEAT RIDGE	25	0.81	76.08
LAFAYETTE190.6278.01GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	CARBONDALE	21	0.68	76.77
GARDEN CITY180.5978.59AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	BOONE	19	0.62	77.39
AVON170.5579.15AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	LAFAYETTE	19	0.62	78.01
AVONDALE170.5579.70PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	GARDEN CITY	18	0.59	78.59
PENROSE170.5580.25SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4683.19PAGOSA SPRINGS140.4683.64	AVON	17	0.55	79.15
SAGUACHE170.5580.81GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4682.73LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	AVONDALE	17	0.55	79.70
GUNNISON150.4981.30HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4682.73LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	PENROSE	17	0.55	80.25
HENDERSON150.4981.79LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4682.73LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	SAGUACHE	17	0.55	80.81
LOG LANE VILLAGE150.4982.27IDAHO SPRINGS140.4682.73LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	GUNNISON	15	0.49	81.30
IDAHO SPRINGS140.4682.73LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	HENDERSON	15	0.49	81.79
LAKEWOOD140.4683.19PAGOSA SPRINGS140.4683.64	LOG LANE VILLAGE	15	0.49	82.27
PAGOSA SPRINGS 14 0.46 83.64	IDAHO SPRINGS	14	0.46	82.73
	LAKEWOOD	14	0.46	83.19
ASPEN 13 0.42 84.07	PAGOSA SPRINGS	14	0.46	83.64
	ASPEN	13	0.42	84.07



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CENTER	13	0.42	84.49
CORTEZ	13	0.42	84.91
DUMONT	13	0.42	85.34
NORTHGLENN	13	0.42	85.76
ORDWAY	13	0.42	86.18
PARACHUTE	13	0.42	86.61
TELLURIDE	13	0.42	87.03
GLENWOOD SPRINGS	12	0.39	87.42
OAK CREEK	12	0.39	87.81
RIFLE	11	0.36	88.17
EVERGREEN	10	0.33	88.50
LEADVILLE	10	0.33	88.82
MONTROSE	10	0.33	89.15

