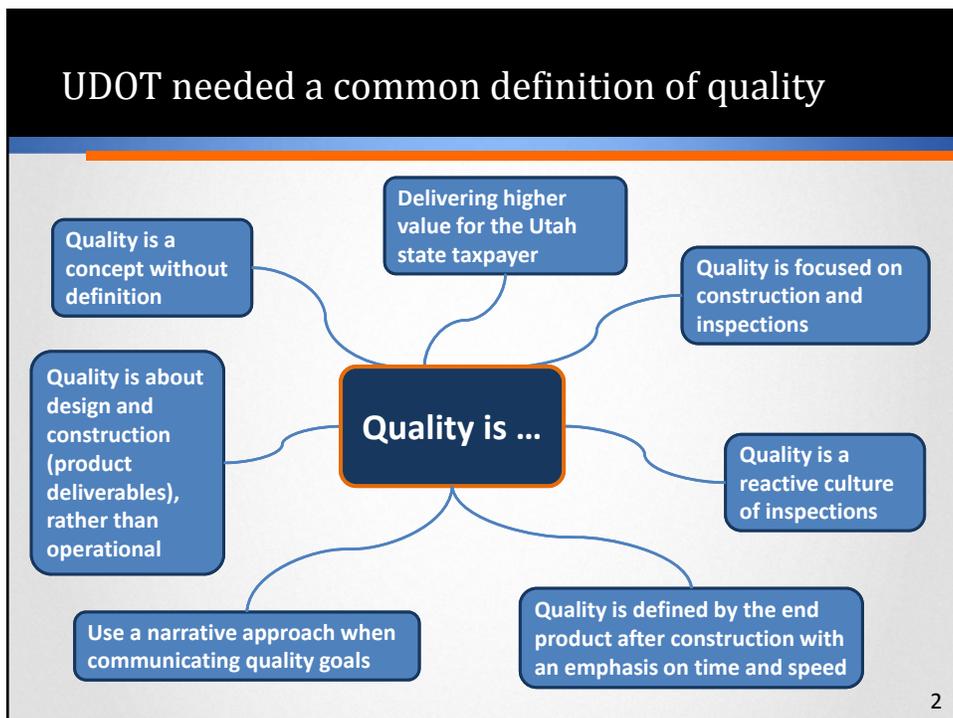


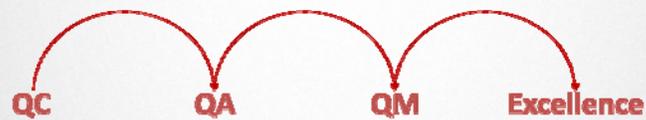
QUALITY BID FACTOR

By Curt McCuiston, PE



Quality (n) is a degree of excellence Quality (adj) is fitness for intended use

- A **quality (not Quality) person** is one who can create, follow, and improve quality processes, and solicit and anticipate customer needs
- A **quality process** is one that delivers a quality product as efficiently as possible
- A **quality product** is one that meets requirements ←



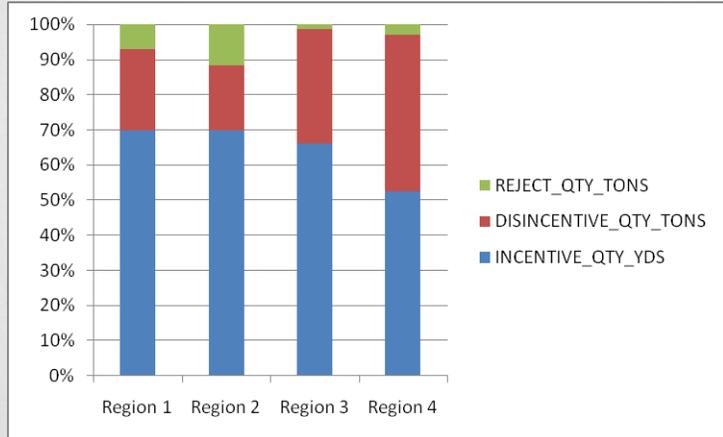
3

8 Principles of Quality Management

- Customer Focus
- Leadership
- Involvement of People
- Process Approach
- System Approach to Management
- Continual Improvement
- **Factual Approach to Decision Making**
- **Mutually Beneficial Supplier Relationships**
- Website: www.udot.utah.gov/go/quality ←

How is our product quality?

SMA material in disincentive



02744S – Stone Matrix Asphalt

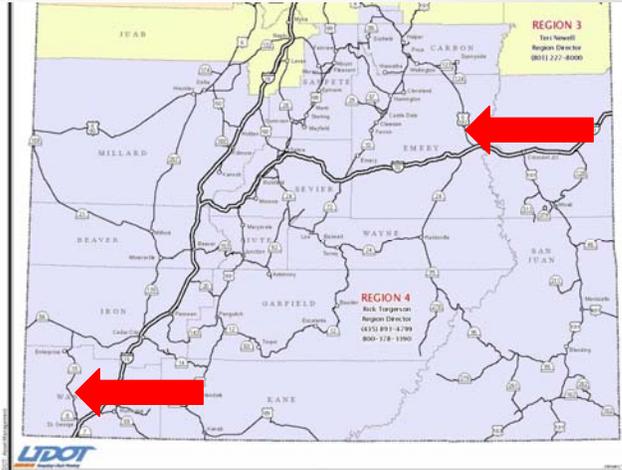
Incentive/Disincentive for Asphalt Binder Content, and Density	
PT Based on Min. Four Samples	Incentive/Disincentive (Dollars/Ton)
>99	1.50
96-99	1.00
92-95	0.60
88-91	0.00
84-87	-0.26
80-83	-0.60
76-79	-0.93
72-75	-1.27
68-71	-1.60
64-67	-1.93
60-63	-2.27
<60	Reject

Incentive/Disincentive for Gradation	
PT Based on Min. Four Samples	Incentive/Disincentive (Dollars/Ton)
>99	1.50
96-99	1.00
92-95	0.60
88-91	0.00
84-87	-0.26
80-83	-0.60
76-79	-0.93
72-75	-1.27
68-71	-1.60
64-67	-1.93
60-63	-2.27
56-59	-5.00
52-55	-10.00
<52	Reject

Special Experimental Project -14 Quality Bid Factor Work Plan

Two projects in Region 4

- PIN 13355,
SR-18, MP 6.3 to
MP 9.26, 1.5" mill/fill
SMA, \$2.24M
- PIN 12510,
US-6, MP 290.5 to
300.4, profile LL/1.5"
SMA overlay,
\$5.47M



Use only SMA data from Region 4

ASPHALT_SUPPLIER	QUANTITY_REPORTED	GRADATION_PT	BINDER_PT	CORE_PT	Quantity*Gradation	Quantity*Binder	Quantity*Core
Acme Coyote Asphalt	1000	58	62	88	58000	62000	88000
Acme Coyote Asphalt	1200	66	75	89	79200	90000	106800
Acme Coyote Asphalt	1500	55	63	90	82500	94500	135000
Acme Coyote Asphalt	10	48	56	10	480	560	100
Acme Coyote Asphalt	2000	60	70	87	120000	140000	174000
Sum	5710			Sum	340180	387060	503900

Calculate weighted Q factor

ASPHALT_SUPPLIER	QUANTITY_REPORTED	Quantity * Gradation	Quantity * Binder	Quantity * Core	Gradation PT	Binder PT	Core PT	Min PT	Q Factor
Acme Coyote Asphalt	5,710.00	340180	387060	503900	59.58	67.79	88.25	60.00	10.00

Asphalt Q factor table

PT(average)	Asphalt Quality Factor
>99	\$ -
96-99	\$ 1.67
92-95	\$ 3.00
88-91	\$ 5.00
84-87	\$ 5.57
80-83	\$ 6.32
76-79	\$ 7.05
72-75	\$ 7.80
68-71	\$ 8.52
64-67	\$ 9.25
60-63	\$ 10.00
<60	\$ 10.00

Pin 13355 – SR-18 Near St. George

Asphalt Quality Factor Bid Evaluation Pin 13355 February 9, 2016							
							
Contractor Name	Proposed Supplier	Quality Bid Factor	SMA Quantity Bid	Total to be Added	Bid Total "P+T" Section	Bid Total "P+T+Q" Section	Rank
<i>From Bid</i>	<i>From E-mail</i>	<i>From QBF Table</i>	<i>From Engr Est.</i>	<i>Calculated</i>	<i>From Bid</i>	<i>Calculated</i>	<i>Calculated</i>
Contractor A	Supplier A	\$ 7.05	11,043	\$77,853.15	\$ 1,500,981.00	\$ 1,578,834.15	1
Contractor B	Supplier B	\$ 5.57	11,043	\$61,509.51	\$ 1,677,877.91	\$ 1,739,387.42	2

Pin 12510 – SR-6 near Green River

Asphalt Quality Factor Bid Evaluation Pin 12510 March 15, 2016							
							
Contractor Name	Proposed Supplier	Quality Bid Factor	SMA Quantity Bid	Total to be Added	Bid Total "P+T" Section	Bid Total "P+T+Q" Section	Rank
<i>From Bid</i>	<i>From E-mail</i>	<i>From QBF Table</i>	<i>From Engr Est.</i>	<i>Calculated</i>	<i>From Bid</i>	<i>Calculated</i>	<i>Calculated</i>
Contractor A	Supplier A	\$ 5.00	19,580	\$97,900.00	\$ 3,531,108.10	\$ 3,629,008.10	1
Contractor B	Supplier B	\$ 5.00	19,580	\$97,900.00	\$ 3,720,697.85	\$ 3,818,597.85	2

Future performance based on past performance



Discussion/Questions

