FY2022-2023 TAEP – Beef – EPD, Index & Accuracy Requirements

EPDs have changed for this application period and must be current as of October 1, 2022.

REQUIREMENTS – BULLS

1. **BVD-PI test – negative test results required** – see vet at time of BSE & 840 EID
2. **840 EID tag** – "840" are first 3 digits – see vet at time of BSE, BVD-PI, and Trich testing
3. **BSE** – performed by a licensed veterinarian within 90 days of purchase or reimbursement
4. **EPD, Index, and Accuracy requirements** – read below
5. **Receipt** – seller name, address, and phone, bull ID, price, sale date, and buyer name

RECOMMENDED – BULLS

- **Trichomoniasis testing** – "Trich" is a venereal disease of cattle caused by the protozoan Tritrichomoanas foetus, which is transmitted from cow to cow by infected bulls. **This disease reduces calf production by decreasing fertility and inducing abortions.** While heifers usually rid themselves of Trichomoniasis in three to six months, bulls carry the infection for life without showing any symptoms. With no medically approved cures available, detection and control of infected bulls is key to containing the disease. An official sample must be done by an accredited veterinarian who has been approved by the state. *Trichomoniasis testing is recommended during BSE exam along with submitting ear notch sample for BVD-PI test and securing 840 EID tag for bull.*
- **Trichomoniasis testing is highly recommended for non-virgin bulls during the BSE Exam.** All bulls purchased from out of state sources must meet import requirements as set forth by the State Veterinarian's Office.

Seedstock breeders are encouraged to print current bull pedigree once true NCE EPDs (min. 0.15 accuracy) are posted on the breed association website, October 1, 2022, or soon after, in order to keep a copy for buyers. Updated pedigree should be printed once GE-EPDs are posted.

Producers are encouraged to purchase registered bulls from trusted seedstock breeders who provide buyers with complete reimbursement documentation including bull type, receipt, 840 EID tag, BSE, negative BVD-PI test results and pedigree with current EPDs, index values, accuracies, genomic status and performance data. Visit with vet about Trich testing.

Eligible beef breeds for the TAEP Genetics program must have a national breed performance testing program that participates in a National Cattle Evaluation (NCE) program recognized by the Beef Improvement Federation. Genomic Enhanced or True NCE EPDs must be calculated and printed from the most prominent breed association.

EPD, INDEX & ACCURACY REQUIREMENTS

REQUIRED: TAEP has added **Index Values** as an additional option to meet requirements. A bull must meet or exceed EPD or Index, plus Accuracy requirements in **each of 2** Index/EPD groups (**Index or Growth + Calving Ease**) for one of the following three (1 of 3) bull types:

- **Maternal/Balanced Bull Type: (Maternal Index** or **WW** or **YW) + CED**
    - For breeding a combination of mature cows and a few replacement heifers
- **Maternal/Calving Ease Bull Type: (Maternal Index** or **WW** or **YW) + CED**
    - For breeding replacement heifers
- **End Product/Terminal Bull Type: (Terminal Index** or **WW** or **YW) + CED**
    - For breeding mature cows only
    - ***Not recommended to breed to heifers***

SUGGESTED: A *suggested* **Milk EPD range** lists the 15% - 85% Milk EPD values for each breed. Optimal Milk EPD range may be a useful tool for producers in selecting functional replacement females with appropriate maintenance requirements consistent with standard production systems.

SUGGESTED: A *suggested* **Docility EPD (Doc)** lists the 70th percentile Doc EPD value for each available breed. Selecting for bulls with a Doc EPD higher than the minimum *suggested* value may improve or maintain disposition by not utilizing bulls in the low 30% of their breed for docility.

EPD, Index, Accuracy, & Genomic Information

TAEP 2022 - 2023 EPD, Index, & Accuracy Requirements will be posted in September 2022, at www.tn.gov/taep in Producer Programs under Genetics and will be included in the reimbursement packet. **EPDs & Index values have changed for this application period and must be current as of October 1, 2022.**

- Eligible beef breeds for the TAEP Genetics program must have a national breed performance testing program that participates in a National Cattle Evaluation (NCE) program recognized by the Beef Improvement Federation. Genomic Enhanced or true NCE EPDs must be calculated and printed from the most prominent breed association.

$1,000 Maximum Reimbursement — Bulls with qualifying true NCE EPDs with a minimum 0.15 accuracy for *Index or Growth + Calving Ease groups* for one of the three eligible bull types

- Bulls must have true NCE EPDs with a minimum 0.15 accuracy complete on breed association pedigree to be eligible for either 35% or 50% cost share reimbursement up to $1,000.
- Breed association pedigree must be submitted with reimbursement request and includeEPDs, accuracies, and have a printed date between October 1, 2022, and June 1, 2023.

$1,800 Maximum Reimbursement — Bulls with eligible Genomic Enhanced EPDs for *Index or Growth + Calving Ease groups* for one of the three eligible bull types

- Genomic Enhanced EPD verification must be complete on breed association pedigree to be eligible for either 35% or 50% cost share reimbursement up to $1,800.
- Breed association pedigree must be submitted with reimbursement request and include EPDs, Index, accuracies, genomic verification, and have a printed date between October 1, 2022, and June 1, 2023.

Payment may be denied if individual bulls do not have true NCE EPDs with a minimum 0.15 accuracy calculated by their breed association by June 1, 2023.

- These EPDs must meet or exceed minimum TAEP EPD, Index Value & Accuracy requirements. Interim EPDs, pedigree estimates, pedigree index (ex. I, I+, P, P+ or 0.05 Accuracy), or parental averages are not eligible for reimbursement.

QUESTIONS

Genetics Coordinator: Ryan Betzelberger

Phone: 615-837-5382

Email: livestock.genetics@tn.gov

Breeds eligible for TAEP cost-share

Breed	Maternal Index	Terminal Index	Docility	GE-EPDs	$ Bull Max.
British breeds with Maternal Index, Terminal Index, GE-EPDs					
Angus	$M	$B	Doc	GE-EPDs	$1,800
Hereford	$BMI	$CHB	-	GE-EPDs	$1,800
Red Angus	$HB	$GM	-	GE-EPDs	$1,800
Shorthorn	$BMI	$F	-	GE-EPDs	$1,800
Continental, Hybrid breeds with Maternal Index, Terminal Index, GE-EPDs					
Simmental	$API	$TI	Doc	GE-EPDs	$1,800
Hybrid Simmental	$API	$TI	Doc	GE-EPDs	$1,800
Gelbvieh	$Cow	$FPI	Doc	GE-EPDs	$1,800
Gelbvieh Balancer	$Cow	$FPI	Doc	GE-EPDs	$1,800
Brahman influenced breeds with Maternal Index, Terminal Index, GE-EPDs					
Brangus (Black)	$Fertility	$TI	-	GE-EPDs	$1,800
Red Brangus	$Fertility	$TI	-	GE-EPDs	$1,800
Ultrablack	$Fertility	$TI	-	GE-EPDs	$1,800
Beefmaster	$M	$TI	-	GE-EPDs	$1,800
Brahman influenced, Continental breeds with Maternal Index, Terminal Index, GE-EPDs					
Santa Gertrudis	$Cow/Calf	$TI	-	GE-EPDs	$1,800
Brahman	$Queen	$Bull	Doc	GE-EPDs	$1,800
Braunvieh	$API	$TI	Doc	GE-EPDs	$1,800
Continental, Hybrid breeds with Terminal Index, GE-EPDs					
Charolais	-	$TSI	-	GE-EPDs	$1,800
Limousin	-	$MTI	Doc	GE-EPDs	$1,800
Lim-Flex	-	$MTI	Doc	GE-EPDs	$1,800
Continental, Hybrid, Japanese breeds with True NCE EPDs (minimum 0.15 accuracy required)					
Chiangus	-	-	Doc	-	$1,000
Maine-Anjou	-	-	-	-	$1,000
MaineTainer	-	-	-	-	$1,000
Salers	-	-	Doc	-	$1,000
Akaushi	-	-	-	-	$1,000
Wagyu	-	-	-	-	$1,000
British, Hybrid breeds with True NCE EPDs (minimum 0.15 accuracy required)					
Black Hereford	-	-	-	-	$1,000
Murray Grey	-	-	-	-	$1,000
Senepol	-	-	-	-	$1,000
South Devon	-	-	Doc	-	$1,000
Tarentaise	-	-	-	-	$1,000

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

British breeds with Maternal Index, Terminal Index, GE-EPDs

**EPDs for all breeds must meet or exceed 0.15 accuracy. **GE-EPDs are required to be reimbursed subject to the $1,800 maximum*

ANGUS

	INDEX		or	GROWTH			+	CALVING EASE	(suggested)	
	$M	$B		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	$63	-	or	54	or	85	+	5	21 - 32	14 +
Maternal / Calving Ease	$63	-	or	48	or	79	+	9	21 - 32	14 +
End Product / Terminal	-	$137	or	62	or	105	+	0	-	14 +

$M = $Maternal Index $B = $Beef Index Doc = Docility

HEREFORD

	INDEX		or	GROWTH			+	CALVING EASE	(suggested)	
	$BMI	$CHB		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	$338	-	or	50	or	78	+	0	20 - 32	-
Maternal / Calving Ease	$338	-	or	47	or	74	+	8	20 - 32	-
End Product / Terminal	-	$112	or	58	or	92	+	-3	-	-

$BMI = $Baldy Maternal Index $CHB = $Certified Hereford Beef Index

RED ANGUS

	INDEX		or	GROWTH			+	CALVING EASE	(suggested)	
	$HB	$GM		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	$52	-	or	54	or	80	+	12	21 - 29	-
Maternal / Calving Ease	$52	-	or	51	or	78	+	14	21 - 29	-
End Product / Terminal	-	$36	or	63	or	102	+	9	-	-

$HB = $HerdBuilder Index $GM = $GridMaster Index

SHORTHORN

	INDEX		or	GROWTH			+	CALVING EASE	(suggested)	
	$BMI	$F		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	$114	-	or	41	or	61	+	10	19 - 27	-
Maternal / Calving Ease	$114	-	or	39	or	58	+	14	19 - 27	-
End Product / Terminal	-	$50	or	48	or	74	+	4	-	-

$BMI = $British Maternal Index $F = $Feedlot Index

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

Continental, Hybrid breeds with Maternal Index, Terminal Index, GE-EPDs

**EPDs for all breeds must meet or exceed 0.15 accuracy. **GE-EPDs are required to be reimbursed subject to the $1,800 maximum*

SIMMENTAL	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$API	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$131	-	or	72	or 101	+	10	18 - 29	10 +
Maternal / Calving Ease	$131	-	or	68	or 99	+	14	18 - 29	10 +
End Product / Terminal	-	$78	or	79	or 117	+	6	-	10 +

$API = $All Purpose Index $TI = $Terminal Index Doc = Docility

HYBRID SIMMENTAL	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$API	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$131	-	or	70	or 101	+	11	18 - 28	10 +
Maternal / Calving Ease	$131	-	or	65	or 98	+	14	18 - 28	10 +
End Product / Terminal	-	$78	or	78	or 118	+	8	-	10 +

$API = $All Purpose Index $TI = $Terminal Index Doc = Docility

GELBVIEH	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$Cow	$FPI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$113	-	or	64	or 89	+	11	17 - 26	11 +
Maternal / Calving Ease	$113	-	or	62	or 85	+	15	17 - 26	11 +
End Product / Terminal	-	$75	or	71	or 104	+	9	-	11 +

$Cow = $Cow Index $FPI = $Feed Profit Index Doc = Docility

GELBVIEH BALANCER	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$Cow	$FPI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$104	-	or	66	or 94	+	12	16 - 24	12 +
Maternal / Calving Ease	$104	-	or	63	or 92	+	15	16 - 24	12 +
End Product / Terminal	-	$81	or	74	or 114	+	10	-	12 +

$Cow = $Cow Index $FPI = $Feed Profit Index Doc = Docility

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

Brahman influenced breeds with Maternal Index, Terminal Index, GE-EPDs

**EPDs for all breeds must meet or exceed 0.15 accuracy. **GE-EPDs are required to be reimbursed subject to the $1,800 maximum*

BRANGUS (Black)	INDEX		or	GROWTH		+	CALVING EASE	(suggested)	
	$Fert	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$0	-	or	20	or 34	+	4	4 - 8	-
Maternal / Calving Ease	$0	-	or	18	or 32	+	6	4 - 8	-
End Product / Terminal	-	$2	or	28	or 52	+	2	-	-

$Fert = $Fertility Index $TI = $Terminal Index

BRANGUS (Red)	INDEX		or	GROWTH		+	CALVING EASE	(suggested)	
	$Fert	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$0	-	or	16	or 22	+	4	3 - 10	-
Maternal / Calving Ease	$0	-	or	14	or 20	+	6	3 - 10	-
End Product / Terminal	-	$1	or	21	or 32	+	2	-	-

$Fert = $Fertility Index $TI = $Terminal Index

ULTRABLACK	INDEX		or	GROWTH		+	CALVING EASE	(suggested)	
	$Fert	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$1	-	or	28	or 51	+	4	4 - 12	-
Maternal / Calving Ease	$1	-	or	25	or 47	+	6	4 - 12	-
End Product / Terminal	-	$3	or	37	or 71	+	2	-	-

$Fert = $Fertility Index $TI = $Terminal Index

BEEFMASTER	INDEX		or	GROWTH		+	CALVING EASE	(suggested)	
	$M	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$15	-	or	17	or 33	+	3	7 - 12	-
Maternal / Calving Ease	$15	-	or	16	or 31	+	5	7 - 12	-
End Product / Terminal	-	$71	or	28	or 49	+	1	-	-

$M = $Maternal Index $TI = $Terminal Index

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

Brahman influenced, Continental breeds with Maternal Index, Terminal Index, GE-EPDs

**EPDs for all breeds must meet or exceed 0.15 accuracy. **GE-EPDs are required to be reimbursed subject to the $1,800 maximum*

SANTA GERTRUDIS	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$Cow/Calf	$TI		WW	YW		BW (Max.)	Milk Range	Doc
Maternal / Balanced	$15	-	or	2	or 6	+	1.6	-3 - 3	-
Maternal / Calving Ease	$15	-	or	-1	or 5	+	-0.9	-3 - 3	-
End Product / Terminal	-	$7	or	12	or 16	+	3.4	-	-

$Cow/Calf = $Cow/Calf Index $TI = $Terminal Index

BRAHMAN	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$Queen	$Bull		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$28	-	or	13	or 25	+	5	4 - 8	-0.59
Maternal / Calving Ease	$28	-	or	11	or 22	+	4	4 - 8	-0.59
End Product / Terminal	-	$55	or	23	or 40	+	7	-	-0.59

$Queen = $ Queen Index $Bull = $Bull Index Doc = Docility

BRAUNVIEH	INDEX		or	GROWTH		+	CALVING EASE	(*suggested*)	
	$API	$TI		WW	YW		CED	Milk Range	Doc
Maternal / Balanced	$113	-	or	50	or 69	+	12	8 - 16	9 +
Maternal / Calving Ease	$113	-	or	47	or 65	+	15	8 - 16	9 +
End Product / Terminal	-	$71	or	57	or 81	+	8	-	9 +

$API = $All Purpose Index $TI = $Terminal Index Doc = Docility

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

Continental, Hybrid breeds with Terminal Index, GE-EPDs

**EPDs for all breeds must meet or exceed 0.15 accuracy. **GE-EPDs are required to be reimbursed subject to the $1,800 maximum*

CHAROLAIS	INDEX	or	GROWTH			+	CALVING EASE	(*suggested*)	
	$TSI		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	-		51	or	88	+	7	17 - 28	-
Maternal / Calving Ease	-		49	or	87	+	11	17 - 28	-
End Product / Terminal	$247	or	59	or	104	+	1	-	-

$TSI = $Terminal Sire Index

LIMOUSIN	INDEX	or	GROWTH			+	CALVING EASE	(*suggested*)	
	$MTI		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	-		60	or	84	+	10	19 - 26	11 +
Maternal / Calving Ease	-		56	or	80	+	15	19 - 26	11 +
End Product / Terminal	$48	or	70	or	102	+	7	-	11 +

$MTI = $Mainstream Terminal Index

Doc = Docility

LIM-FLEX	INDEX	or	GROWTH			+	CALVING EASE	(*suggested*)	
	$MTI		WW		YW		CED	Milk Range	Doc
Maternal / Balanced	-		65	or	98	+	11	17 - 25	12 +
Maternal / Calving Ease	-		62	or	95	+	13	17 - 25	12 +
End Product / Terminal	$59	or	74	or	115	+	8	-	12 +

$MTI = $Mainstream Terminal Index

Doc = Docility

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

Continental, Hybrid, Japanese breeds with True NCE EPDs (minimum 0.15 accuracy required)

**EPDs for all breeds must meet or exceed 0.15 accuracy to be reimbursed subject to the $1,000 maximum*

CHIANGUS	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	45	or	68	+	8	11 - 18	Doc = 8 +
Maternal / Calving Ease	42	or	64	+	11	11 - 18	Doc = 8 +
End Product / Terminal	53	or	82	+	5	-	Doc = 8 +

MAINE-ANJOU	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	39	or	49	+	6	14 - 25	-
Maternal / Calving Ease	38	or	46	+	11	14 - 25	-
End Product / Terminal	46	or	59	+	-2	-	-

MAINETAINER	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	39	or	51	+	7	13 - 24	-
Maternal / Calving Ease	37	or	47	+	11	13 - 24	-
End Product / Terminal	46	or	63	+	2	-	-

SALERS	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	54	or	71	+	11	12 - 21	Doc = 8 +
Maternal / Calving Ease	51	or	69	+	14	12 - 21	Doc = 8 +
End Product / Terminal	62	or	88	+	9	-	Doc = 8 +

AKAUSHI	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	41	or	76	+	-3	27 - 30	-
Maternal / Calving Ease	40	or	75	+	1	27 - 30	-
End Product / Terminal	45	or	81	+	-5	-	-

WAGYU	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		BW (Max.)	Milk Range	Docility
Maternal / Balanced	-5	or	-6	+	0.1	-4 - 4	-
Maternal / Calving Ease	-8	or	-10	+	-1.5	-4 - 4	-
End Product / Terminal	3	or	5	+	2.9	-	-

FY2022-2023 TAEP - Beef - EPD, Index & Accuracy - minimum requirements by breed

British, Hybrid breeds with True NCE EPDs (minimum 0.15 accuracy required)

**EPDs for all breeds must meet or exceed 0.15 accuracy to be reimbursed subject to the $1,000 maximum*

BLACK HEREFORD	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	36	or	64	+	0	22 - 32	-
Maternal / Calving Ease	32	or	60	+	3	22 - 32	-
End Product / Terminal	44	or	74	+	-4	-	-

MURRAY GREY	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	23	or	36	+	-1	2 - 7	-
Maternal / Calving Ease	20	or	32	+	0	2 - 7	-
End Product / Terminal	30	or	48	+	-2	-	-

SENEPOL	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		BW (Max.)	Milk Range	Docility
Maternal / Balanced	6	or	6	+	1.6	1 - 8	-
Maternal / Calving Ease	5	or	5	+	-0.9	1 - 8	-
End Product / Terminal	13	or	16	+	3.4	-	-

SOUTH DEVON	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	57	or	81	+	9	12 - 21	Doc = 10 +
Maternal / Calving Ease	54	or	78	+	13	12 - 21	Doc = 10 +
End Product / Terminal	65	or	96	+	6	-	Doc = 10 +

TARENTAISE	GROWTH			+	CALVING EASE	(suggested)	
	WW		YW		CED	Milk Range	Docility
Maternal / Balanced	-3	or	3	+	0	-2 - 4	-
Maternal / Calving Ease	-5	or	1	+	3	-2 - 4	-
End Product / Terminal	10	or	20	+	-5	-	-