

# FY2024-2025 TAEP – Genomic Enhanced EPD (GE-EPD) & Index Requirements

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*GE-EPDs/Indexes have changed for this application period and must be current as of October 1, 2024.*

## **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. **Genomic Enhanced EPD (GE-EPD), Index & Pedigree Print Date requirements** – *read below*
5. **Receipt** – seller name, address, and phone, bull ID, price, sale date, and buyer name

**Buyer must communicate with the seller prior to purchasing to ensure the bull meets all TAEP eligibility requirements.** Bulls that do not meet all eligibility requirements between October 1, 2024 and **date of purchase** will be denied cost share reimbursement.

## **RECOMMENDED – BULLS**

- **Trichomoniasis testing** – “Trich” is a venereal disease of cattle caused by the protozoan *Tritrichomonas 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.

Producers are encouraged to purchase registered bulls from trusted seedstock breeders who provide buyers with complete reimbursement documentation at the point of sale. Complete TAEP reimbursement documentation includes: receipt, 840 EID tag, BSE, negative BVD-PI test results and pedigree with eligible current GE-EPDs (printed between October 1, 2024 and **date of purchase**), index values, accuracies, genomic status and performance data, TAEP bull type.

Visit with your local veterinarian about Trich testing.

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## GENOMIC ENHANCED EPD (GE-EPD), INDEX & PEDIGREE PRINT DATE REQUIREMENTS

**REQUIRED:** **Index Values** are multiple-trait options to meet requirements. GE-EPD or Index values must be printed on breed association pedigree between October 1, 2024 and **date of purchase**. Bull must meet or exceed GE-EPD or Index requirements in **each of 2** Index/GE-EPD groups (**Calving Ease Direct + Index or Growth**) for **one of** the following **two (1 of 2)** bull types:

- **Balanced Trait/Maternal Bull Type: CED + (Maternal Index or WW or YW)**
  - For breeding a combination of mature cows and only a few replacement heifers
- **Carcass Merit/Terminal Bull Type: CED + (Terminal Index or WW or YW)**
  - For breeding mature cows only
  - ***\*Not recommended to breed to heifers (due to lower CED requirement)***

**SUGGESTED:** *Suggested Minimum Calving Ease Direct (CED) GE-EPD for sires to be bred to open heifers = Required CED GE-EPD for TAEP Bred Beef Heifer Service Sire.*

**Recommended:** Replacement heifer producers should consider AI breeding open heifers to high accuracy calving ease sires.

- *TAEP Calving Ease/Maternal bull type is removed since a maximum of 1% (0% in some program years) of TAEP bulls qualified only under this bull type.*

**SUGGESTED:** *Suggested Maximum Mature Cow Weight GE-EPD:* Selecting for bulls with a Mature Cow Weight GE-EPD (Angus: MW, Hereford: MCW, Brangus: Cow Weight) lower than the maximum *suggested* value may help producers to select for optimum or moderate mature cow size in replacement females, thereby controlling annual cow maintenance feed cost.

**SUGGESTED:** *Suggested Milk GE-EPD range:* Optimal Milk GE-EPD range is a useful tool for producers selecting functional replacement females with appropriate maintenance requirements consistent with standard production systems.

**SUGGESTED:** *Suggested Docility GE-EPD (Doc):* Selecting for bulls with a Doc GE-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.

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## Genomic Enhanced EPD (GE-EPD), Index & Pedigree Print Date Information

Eligible beef breeds for the TAEP Genetics program must have a national breed performance testing program that participates in a National/International Cattle Evaluation (NCE) program using current methodology and compute Genomic Enhanced EPDs (GE-EPD). The GE-EPD and Index values submitted will be compared against the relevant guideline values from the most prevalent American beef breed association evaluation that computes for the particular breed of bull purchased (i.e. SimAngus GE-EPDs and Indexes will compare against the Simmental Association guidelines; Angus from Angus Association guidelines; etc.).

**TAEP 2024-2025 Genomic Enhanced EPD (GE-EPD), Index & Pedigree Print Date Requirements will be posted in September 2024 at [www.tn.gov/taep](http://www.tn.gov/taep) in Genetics and will be included in the reimbursement packet.**

**\$2,000 Maximum Reimbursement** — Bulls must have eligible **Genomic Enhanced EPDs (GE-EPD) and Indexes** or have a minimum accuracy value of .25 for the Calving Ease Direct (CED) EPD on breed association pedigree between October 1, 2024 & **date of purchase** and meet TAEP GE-EPD/Index requirements for **one of the two (1 of 2)** eligible bull types to be eligible for cost share reimbursement. Contact the breed association if you are unsure of the bull's status.

- **Breed**

- Angus
- Beefmaster
- Black Hereford
- Brangus/Ultrablack
- Braunvieh
- Chianina/Chiangus
- Charolais
- Gelbvieh/Balancer
- Hereford
- Limousin/Lim-Flex
- Maine-Anjou/MaineTainer
- Red Angus
- Salers/Optimizer
- Santa Gertrudis
- Senepol
- Shorthorn
- Simmental/Hybrid
- Wagyu

- Breed association pedigree must be submitted with reimbursement request and include eligible GE-EPDs, Indexes, accuracies, genomic status, and have a printed date between October 1, 2024 and **date of purchase**.

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- Reimbursement will be calculated based on purchase price at 50% (Master Certification required for all TAEP producers) up to \$2,000 maximum.
- Payment for these breeds will be denied if individual bulls do not have eligible Genomic Enhanced EPDs (GE-EPD) & Indexes or .25 accuracy for CED EPD calculated by their breed association between October 1, 2024 and **date of purchase**.

## Bull Type Options

Bulls and AI semen must meet or exceed GE-EPD and Index requirements in each of the two (2) GE-EPD/Index groups (Calving Ease + Index or Growth) for **one of** the following **two** bull types:

- Balanced Trait/Maternal — must meet **CED + (Maternal Index or WW or YW)**
- Carcass Merit/Terminal — must meet **CED + (Terminal Index or WW or YW)**

## QUESTIONS

Genetics Coordinator: Ryan Betzelberger

Phone: 615-837-5382

Email: [livestock.genetics@tn.gov](mailto:livestock.genetics@tn.gov)

# FY2024-2025 TAEP – Genomic Enhanced EPD (GE-EPD) & Index Requirements

## Breeds eligible for TAEP cost-share

\*with minimum CED required for Bred Beef Heifer Service Sire

Breed	Maternal Index	Terminal Index	*Bred Beef Heifer Service Sire CED
<b>British breeds - page 6</b>			
Angus	\$M	\$B	CED ≥ 7
Hereford	\$BMI	\$CHB	CED ≥ 6
Red Angus	\$HB	\$GM	CED ≥ 13
Shorthorn	\$BMI	\$F	CED ≥ 14
<b>Continental, Hybrid, AOB breeds - page 7</b>			
Gelbvieh/Balancer	\$Cow	\$FPI	CED ≥ 15
Simmental/Hybrid	\$API	\$TI	CED ≥ 13
Braunvieh	\$API	\$TI	CED ≥ 14
Black Hereford	\$API	\$TI	CED ≥ 13
<b>Brahman Hybrid, AOB breeds - page 8</b>			
Brangus/Ultrablack	\$Fertility	\$TI	CED ≥ 6
Beefmaster	\$M	\$TI	CED ≥ 5
Santa Gertrudis	\$Cow/Calf	\$TI	BW ≤ -1
Senepol	-	-	BW ≤ -1
Wagyu	-	-	BW ≤ -2
<b>Continental, Hybrid breeds - page 9</b>			
Charolais	-	\$TSI	CED ≥ 12
Limousin/Lim-Flex	-	\$MTI	CED ≥ 15
Chianina/Chiangus	-	-	CED ≥ 11
Maine-Anjou/Tainer	-	-	CED ≥ 11
Salers/Optimizer	-	-	CED ≥ 14

**\*Regarding TAEP Bred Beef Heifer Service Sire or sires to be bred to open heifers**

\* **Required** CED GE-EPD for TAEP Bred Beef Heifer Service Sire =

\* **Suggested** CED GE-EPD for sires to be bred to open heifers

· **Heifers: All bred** to a high accuracy calving ease sire is **recommended**

# FY2024-2025 TAEP – Genomic Enhanced EPD (GE-EPD) & Index Requirements

## FY2024-25 TAEP - Genomic Enhanced EPD (GE-EPD)/Index - minimum requirements

British breeds - Maternal & Terminal Indexes. GE-EPDs required.

Pedigree must be printed between 10/1/2024 - purchase date.

50% cost share up to \$2,000 reimbursement max. Master Producer required.

Suggested CED for sires to be bred to heifers = Required CED for Bred Beef Heifer Service Sire.

<b>ANGUS</b> <i>GE-EPDs Required</i>	<b>CALVING EASE</b> CED	+	<b>INDEX</b>	or	<b>GROWTH</b>	
					WW	YW
Balanced Trait / Maternal	4	+	\$M ≥ 61	or	56	or 101
Carcass Merit / Terminal	-2	+	\$B ≥ 143	or	64	or 114

Suggested Milk range: 20 - 33

Suggested CED for breeding heifers: CED ≥ 7

Suggested Max. Mature Weight: MW EPD ≤ 97

Suggested Docility: Doc ≥ 14

<b>HEREFORD</b> <i>GE-EPDs Required</i>	<b>CALVING EASE</b> CED	+	<b>INDEX</b>	or	<b>GROWTH</b>	
					WW	YW
Balanced Trait / Maternal	0	+	\$BMI ≥ 346	or	51	or 81
Carcass Merit / Terminal	-4	+	\$CHB ≥ 115	or	60	or 96

Suggested Milk range: 20 - 33

Suggested CED for breeding heifers: CED ≥ 6

Suggested Max. Mature Cow Weight: MCW EPD ≤ 112

<b>RED ANGUS</b> <i>GE-EPDs Required</i>	<b>CALVING EASE</b> CED	+	<b>INDEX</b>	or	<b>GROWTH</b>	
					WW	YW
Balanced Trait / Maternal	11	+	\$HB ≥ 53	or	60	or 95
Carcass Merit / Terminal	7	+	\$GM ≥ 35	or	70	or 113

Suggested Milk range: 21 - 30

Suggested CED for breeding heifers: CED ≥ 13

<b>SHORTHORN</b> <i>GE-EPDs Required</i>	<b>CALVING EASE</b> CED	+	<b>INDEX</b>	or	<b>GROWTH</b>	
					WW	YW
Balanced Trait / Maternal	8	+	\$BMI ≥ 115	or	38	or 53
Carcass Merit / Terminal	3	+	\$F ≥ 45	or	46	or 66

Suggested Milk range: 17 - 26

Suggested CED for breeding heifers: CED ≥ 14

# FY2024-2025 TAEP – Genomic Enhanced EPD (GE-EPD) & Index Requirements

## FY2024-25 TAEP - Genomic Enhanced EPD (GE-EPD)/Index - minimum requirements

Continental, Hybrid breeds - Maternal & Terminal Indexes. GE-EPDs required.

Pedigree must be printed between 10/1/2024 - purchase date.

50% cost share up to \$2,000 reimbursement max. Master Producer required.

Suggested CED for sires to be bred to heifers = Required CED for Bred Beef Heifer Service Sire.

<u>GELBIEH/BALANCER</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u>
Balanced Trait / Maternal	11	+	\$Cow ≥ 104	or	WW 65 or YW 97
Carcass Merit / Terminal	7	+	\$FPI ≥ 78	or	75 or 115

Suggested Milk range: 17 - 28

Suggested CED for breeding heifers: CED ≥ 15

Suggested Docility: Doc ≥ 11

<u>SIMMENTAL/HYBRID</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u>
Balanced Trait / Maternal	10	+	\$API ≥ 132	or	WW 73 or YW 107
Carcass Merit / Terminal	6	+	\$TI ≥ 80	or	80 or 120

Suggested Milk range: 18 - 29

Suggested CED for breeding heifers: CED ≥ 13

Suggested Docility: Doc ≥ 10

<u>BRAUNVIEH</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u>
Balanced Trait / Maternal	10	+	\$API ≥ 106	or	WW 50 or YW 66
Carcass Merit / Terminal	5	+	\$TI ≥ 65	or	63 or 100

Suggested Milk range: 10 - 20

Suggested CED for breeding heifers: CED ≥ 14

Suggested Docility: Doc ≥ 10

<u>BLACK HEREFORD</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u>
Balanced Trait / Maternal	10	+	\$API ≥ 110	or	WW 50 or YW 81
Carcass Merit / Terminal	7	+	\$TI ≥ 59	or	58 or 93

Suggested Milk range: 21 - 30

Suggested CED for breeding heifers: CED ≥ 13

Suggested Docility: Doc ≥ 11



# FY2024-2025 TAEP – Genomic Enhanced EPD (GE-EPD) & Index Requirements

## FY2024-25 TAEP - Genomic Enhanced EPD (GE-EPD)/Index - minimum requirements

Brahman Hybrid, AOB - Maternal & Terminal Indexes. GE-EPDs required.

Pedigree must be printed between 10/1/2024 - purchase date.

50% cost share up to \$2,000 reimbursement max. Master Producer required.

Suggested CED for sires to be bred to heifers = Required CED for Bred Beef Heifer Service Sire.

<u>BRANGUS/ULTRABLACK</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u> WW	or	<u>GROWTH</u> YW
Balanced Trait / Maternal	4	+	\$Fert ≥ 3	or	17	or	34
Carcass Merit / Terminal	2	+	\$TI ≥ 2	or	26	or	48

Suggested Milk range: 4 - 13

Suggested CED for breeding heifers: CED ≥ 6

Suggested Max. Cow Weight: Cow Weight EPD ≤ 8

<u>BEEFMASTER</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u> WW	or	<u>GROWTH</u> YW
Balanced Trait / Maternal	3	+	\$M ≥ 15	or	18	or	25
Carcass Merit / Terminal	1	+	\$TI ≥ 69	or	28	or	39

Suggested Milk range: 7 - 12

Suggested CED for breeding heifers: CED ≥ 5

<u>SANTA GERTRUDIS</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> BW (Max.)	+	<u>INDEX</u>	or	<u>GROWTH</u> WW	or	<u>GROWTH</u> YW
Balanced Trait / Maternal	BW ≤ 0	+	\$Cow/Calf ≥ 18	or	6	or	6
Carcass Merit / Terminal	BW ≤ 1	+	\$TI ≥ 10	or	15	or	19

Suggested Milk range: -4 - 4

Suggested BW (Max.) for breeding heifers: BW ≤ -1

<u>SENPOL</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> BW (Max.)	+	<u>GROWTH</u>			
			WW	or	YW	
Balanced Trait / Maternal	BW ≤ 1	+	6	or	6	
Carcass Merit / Terminal	BW ≤ 3	+	13	or	17	

Suggested Milk range: 1 - 8

Suggested BW (Max.) for breeding heifers: BW ≤ -1

<u>WAGYU</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> BW (Max.)	+	<u>GROWTH</u>			
			WW	or	YW	
Balanced Trait / Maternal	BW ≤ 0	+	-4	or	-6	
Carcass Merit / Terminal	BW ≤ 3	+	4	or	6	

Suggested Milk range: -5 - 3

Suggested BW (Max.) for breeding heifers: BW ≤ -2



# FY2024-2025 TAEP – Genomic Enhanced EPD (GE-EPD) & Index Requirements

## FY2024-25 TAEP - Genomic Enhanced EPD (GE-EPD)/Index - minimum requirements

Continental, Hybrid breeds - Terminal Index. GE-EPDs required.

Pedigree must be printed between 10/1/2024 - purchase date.

50% cost share up to \$2,000 reimbursement max. Master Producer required.

Suggested CED for sires to be bred to heifers = Required CED for Bred Beef Heifer Service Sire.

<u>CHAROLAIS</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u> WW	or	<u>YW</u>
Balanced Trait / Maternal	8	+	-		55	or	100
Carcass Merit / Terminal	2	+	\$TSI ≥ 253	or	65	or	117

Suggested Milk range: 17 - 30

Suggested CED for breeding heifers: CED ≥ 12

<u>LIMOUSIN/LIM-FLEX</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>INDEX</u>	or	<u>GROWTH</u> WW	or	<u>YW</u>
Balanced Trait / Maternal	10	+	-		57	or	86
Carcass Merit / Terminal	6	+	\$MTI ≥ 54	or	68	or	106

Suggested Milk range: 20 - 30

Suggested CED for breeding heifers: CED ≥ 15

Suggested Docility: Doc ≥ 11

<u>CHIANINA/CHIANGUS</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>GROWTH</u> WW	or	<u>YW</u>
Balanced Trait / Maternal	8	+	43	or	62
Carcass Merit / Terminal	5	+	51	or	78

Suggested Milk range: 10 - 20

Suggested CED for breeding heifers: CED ≥ 11

Suggested Docility: Doc ≥ 8

<u>MAINE-ANJOU/TAINER</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>GROWTH</u> WW	or	<u>YW</u>
Balanced Trait / Maternal	6	+	36	or	45
Carcass Merit / Terminal	0	+	47	or	64

Suggested Milk range: 14 - 25

Suggested CED for breeding heifers: CED ≥ 11

<u>SALERS/OPTIMIZER</u> <i>GE-EPDs Required</i>	<u>CALVING EASE</u> CED	+	<u>GROWTH</u> WW	or	<u>YW</u>
Balanced Trait / Maternal	11	+	48	or	65
Carcass Merit / Terminal	7	+	56	or	81

Suggested Milk range: 9 - 22

Suggested CED for breeding heifers: CED ≥ 14

Suggested Docility: Doc ≥ 5