

## **Construction Sector**

SERIES OF 2019

## Construction Sector March 2019

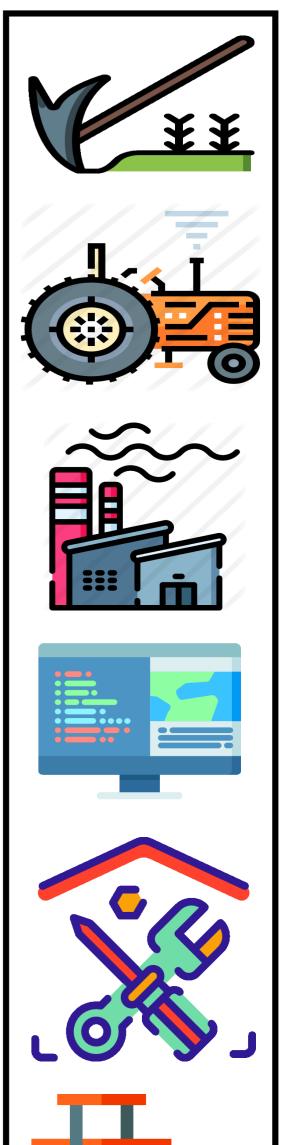
I. **Opportunities** (basis: Build,Build,Build Program, CIAP)

### Infrastructure for Development

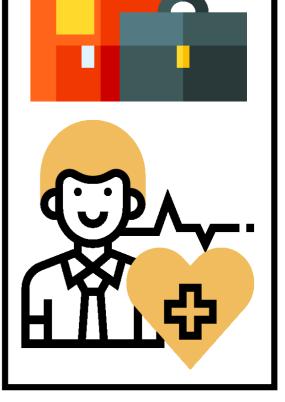
• According to Build.gov.ph, the official website for the Build Build Build Program, as of February 21, 2019 there are a total of 61 projects all over the country. Majority of the projects are the development of roads & bridges, airports, flood control and railways, and this are located in Regions NCR, III and IVA. (see attached list of projects)

Region	No. of Project
NCR	16
Ι	3
II	3
III	13
IVA	5
IVB	3
V	3
VI	3
VII	3
VIII	1
IX	4
Х	4
XI	4
XII	1
CAR	1
CARAGA	1
ARMM	0
<i>Nationwide (project to be implemented all over the country)</i>	1
Total	69

#### Distribution of Project by Region



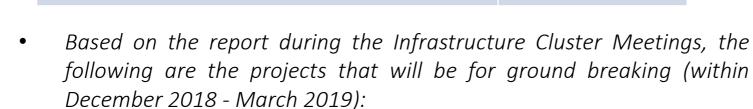
Note: Count is based on all the regions that will be part of the projects, e.g. Apayao Iloco Norte Road (Regions CAR and I)



## Construction Sector March 2019

Distribution of Project by Region by Type of Projects

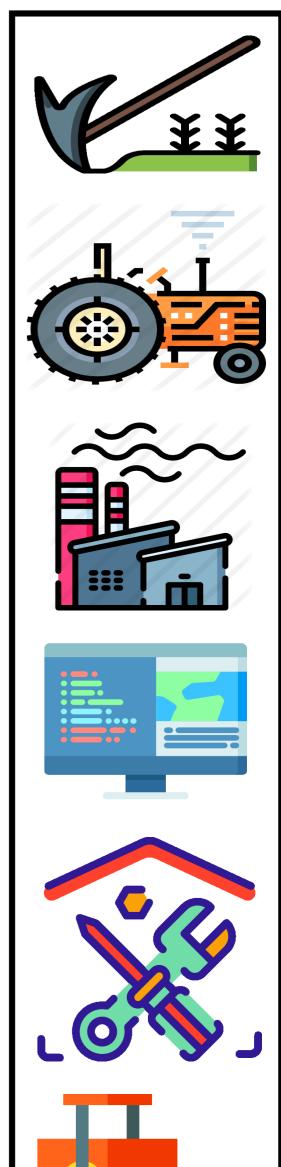
Type of Projects	No. of Projects
Roads and Bridges	21
Flood Control	3
Airports	17
Seaports	1
Mass Transit	4
Railways	11
New Cities	3
Communication & Information	1
Total	61



- 1. NLEX-SLEX Connector Road
- 2. SLEX Toll Road 4 (TR 4)
- 3. Metro Manila Subway-Phase 1
- 4. NLEX Harbor Link Segment 10 (McArthur Highway to C3)
- 5. Slaughter House Road until F. Torres Bridge Description
- 6. Laoag City By-Pass Road
- 7. Candon City By-Pass Road (Region I to Ilocos Sur)

### Number of Needed Skilled Workers

• According to In the press release of the Construction Industry Authority of the Philippines (CIAP) last February 21, 2019 it was stated the 10year roadmap for the construction industry will continue the aggressive infrastructure drive begun with the administration's Build Build Program. The Construction Industry Roadmap 2030 indicates the



expected 800 new jobs for the next years.

• Currently, in the Build.gov.ph, there are 25, 449 jobs posted by different contractors for the Build, Build, Build Program, which includes laborers, construction supervisors, welder, mason, carpenter, equipment operators

Note: Count is based on all the regions that will be part of the projects, e.g. Apayao Iloco Norte Road (Regions CAR and I)



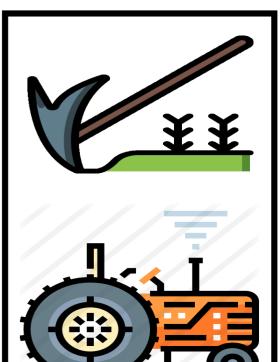
## Construction Sector March 2019

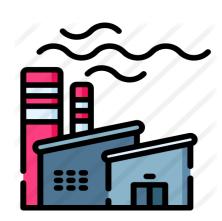
II. TVET Capacity

### Training Regulations – as of January 2019

TESDA has 63 Training Regulations on Construction related programs, these are the following:

No.	Qualification Title	No.	Qualification Title
1	Carpentry NC II	24	HEO (Rigid Off-Highway Dump Truck) NC II
2	Carpentry NC III	25	HEO (Road Roller) NC II
3	Masonry NC I	26	HEO (Transit Mixer) NC II
4	Masonry NC II	27	HEO (Rigid On-Highway Dump Truck) NC II
5	Masonry NC III	28	HEO (Backhoe Loader) NC II
6	Construction Painting NC II	29	HEO (Gantry Crane) NC II
7	Construction Painting NC III	30	HEO (Container Stacker) NC II
8	Heavy Equipment Servicing (Mechanical) NC II	31	HEO (Screed) NC I
9	Heavy Equipment Operation (Bulldozer) NC II	32	Structural Erection NC II
10	HEO (Crawler Crane) NC II	33	Pipefitting (Metallic) NC II
11	HEO (Forklift) NC II	34	Technical Drafting NC II
12	HEO (Hydraulic Excavator) NC II	35	Plumbing NC I
13	HEO (Motor Grader) NC II	36	Plumbing NC II
14	HEO (Rough Terrain Crane) NC II	37	Plumbing NC III
15	HEO (Tower Crane) NC II	38	PV System Design NC III
16	HEO (Truck Mounted Crane) NC II	39	PV Systems Installation NC II
17	HEO (Wheel Loader) NC II	40	PV Systems Servicing NC III
18	Scaffolding Works NC II (Supported Type Scaffold)	41	Construction Lift Passenger/Material Elevator Operation NC II
19	Tile Setting NC II	42	System Formworks Installation NC
20	HEO (Articulated Off-Higway Dump Truck) NC II	43	Reinforcing Steel Works NC II
21	HEO (Concrete Pump) NC II	44	Driving (Articulated Vehicle) NC III
22	HEO (Paver) NC II	45	Shielded Metal Arc Welding (SMAW) NC I
23	Rigging NC I	46	Shielded Metal Arc Welding (SMAW) NC III









## Construction Sector March 2019

II. TVET Capacity

### Training Regulations – as of January 2019

TESDA has 63 Training Regulations on Construction related programs, these are the following:

No.	Qualification Title	No.	Qualification Title
47	Shielded Metal Arc Welding (SMAW) NC IV	56	Gas Tungsten Arc Welding (GTAW) NC IV
48	Gas Metal Arc Welding (GMAW) NC I	57	Submerged Arc Welding (SAW) NC I
49	Gas Metal Arc Welding (GMAW) NC II	58	Submerged Arc Welding (SAW) NC II
50	Gas Metal Arc Welding (GMAW) NC III	59	Gas Welding NC I
51	Flux Cored Arc Welding (FCAW) NC I	60	Gas Welding NC II
52	Flux Cored Arc Welding (FCAW) NC II	61	Shielded Metal Arc Welding (SMAW) NC II
53	Flux Cored Arc Welding (FCAW) NC III	62	Electrical Installation and Maintenance NC II
54	Gas Tungsten Arc Welding (GTAW) NC II	63	Electrical Installation and Maintenance NC III
55	Electrical Installation and Maintenance NC IV		

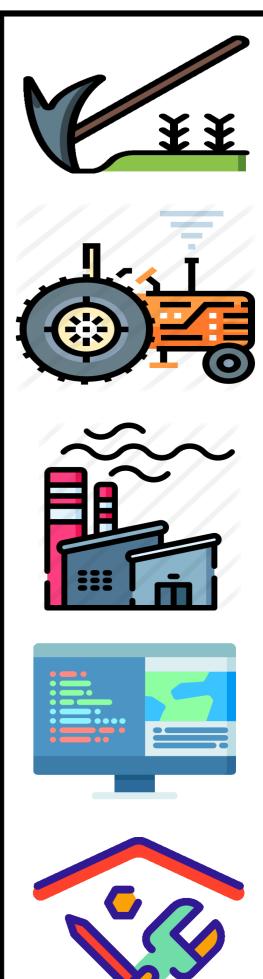
### Enrolled and Graduates on Construction Related Programs

Enrolled and Graduates on Construction Related Qualifications 2015–2019 (January – March)\*

INDICATOR/YEAR	2015	2016	2017	2018	2019*
ENROLEES	181,902	90,557	97,007	232,658	23,925
GRADUATES	164,894	89,315	83,649	234,546	21,233

Source: 2018 & 2019 data generated through T2MIS

*Note: 2015 – 2017 data includes TESDA Construction Sector Qualifications only;* 





2018 – 2019 data includes TESDA Construction Sector Qualifications and Other Related Qualifications such as Welding, EIM

The 1<sup>st</sup> quarter 2019 data shows a very sluggish start for the construction sector that translates to only 9% of the total output of the 2018 graduates.

Note: 2015 – 2017 data are from TESDA Construction Sector only while 2018 – 2019 data includes TESDA Construction Sector qualifications and other related TESDA qualifications

### Construction Sector March 2019

Top 10 Qualifications with the Most Number of Graduates on Construction Sector and Other Related Qualifications January – March 2019

No.	Qualification	No. of Graduates
1	Shielded Metal Arc Welding (SMAW) II	2,617
2	Electrical Installation and Maintenance II	1,817
3	Shielded Metal Arc Welding (SMAW) I	1,784
4	Electrical Installation and Maintenance NC II	986
5	Weld Carbon Steel Plates and Pipes Using SMAW	808
6	Carpentry II	747
7	Masonry II	654
8	Shielded Metal Arc Welding (SMAW) NC I	546
9	Scaffold Erection II	371
10	Erect and Dismantle Scaffolding	325

### Assessed and Certified

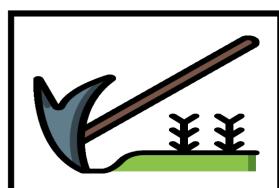
Assessed and Certified on Construction Related Qualifications 2015–2019 (January – March)\*

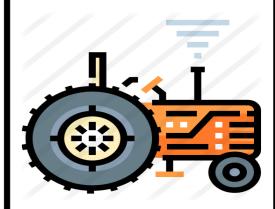
INDICATOR/YEAR	2015	2016	2017	2018	2019*
ASSESSED	127,815	85,820	75,532	302,478	63,658
CERTIFIED	115,753	80,853	71,808	279,237	59,928

Source: Certification Office and 2019 from T2MIS

Top 10 Qualifications with the Most Number of Certified on Construction Sector and Other Related Qualifications January – March 2019

No.	Qualification	No. of Certified
1	Electrical Installation and Maintenance NC II	13,459
2	Shielded Metal Arc Welding (SMAW) NC II	12,493











3	Shielded Metal Arc Welding (SMAW) NC I	8,659
4	Carpentry NC II	4,598
5	Masonry NC II	3,042
6	Scaffold Erection NC II	2,224
7	Technical Drafting NC II	2,200
8	HEO (Forklift) NC II	1,672
9	Pipefitting NC II	1,138
10	HEO (Hydraulic Excavator) NC II	1,006

Note: 2015 – 2017 data are from TESDA Construction Sector only while 2018 – 2019 data includes other related TESDA qualifications (Welding, EIM, and Driving Articulated Vehicle)

## Construction Sector March 2019

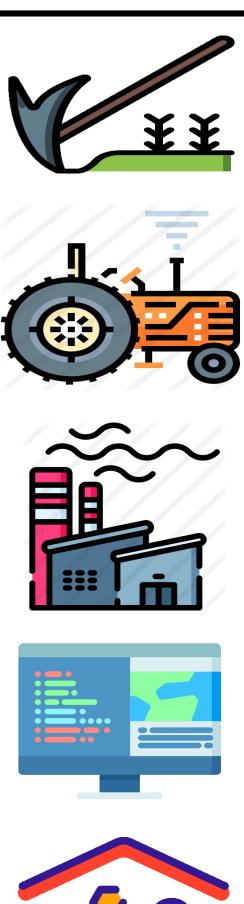
### Assessed and Certified

The number of assessed and certified output shows a better start compared to the number of enrolled and graduates. The number of certified attain a 21% output based on the total number of certified in 2018.

### Number of Trainers (NTTC Holders) and Assessor

NTTC Holders and Accredited Assessor by Region As of March 2019

REGION	NTTC HOLDER	ASSESSOR
1	333	135
П	239	97
Ш	686	316
IV-A	1,018	437
IV-B	401	171
V	345	114
VI	556	114
VII	645	304
VIII	624	224
IX	304	145
Х	626	300
XI	394	177
XII	451	224
ARMM	184	84
CAR	212	182
CARAGA	228	119
NCR	1,387	455







Source: Certification Office

There are 8,633 National TVET Trainer Certificate (NTTC) holder and 3,598 competency assessors in TESDA constructions sector and other related qualifications. Still, majority of the NTTC holders and assessors are from regions NCR, III, VII, and IV-A.

8,633

3,598

### Construction Sector March 2019

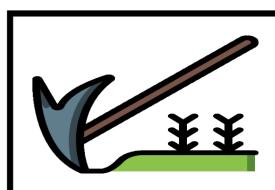
### Number of Trainers (NTTC Holders) and Assessor

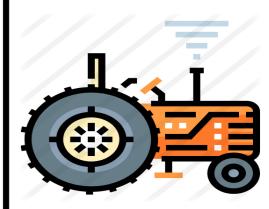
Top 10 Qualifications with the Most Number of NTTC Holders on Construction Sector and Other Related Qualifications as of March 2019

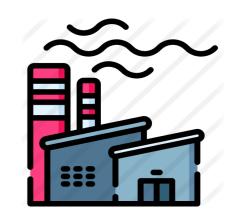
No.	Qualification	NTTC Holder
1	Shielded Metal Arc Welding (SMAW) NC II	1,999
2	Electrical Installation and Maintenance NC II	1,691
3	Carpentry NC II	554
4	Gas Metal Arc Welding (GMAW) NC II	394
5	Masonry NC II	366
6	Electrical Installation and Maintenance NC III	364
7	Plumbing NC II	326
8	Gas Tungsten Arc Welding (GTAW) NC II	302
9	Technical Drafting NC II	297
10	Shielded Metal Arc Welding (SMAW) NC III	268
Sourc	e: Certification Office	

Top 10 Qualifications with the Most Number of Assessor on Construction Sector and Other Related Qualifications as of March 2019

No.	Qualification	Assessor
1	Shielded Metal Arc Welding (SMAW) NC II	710
2	Electrical Installation and Maintenance NC II	620
3	Shielded Metal Arc Welding (SMAW) NC I	397
4	Carpentry NC II	208
5	Masonry NC II	143
6	Electrical Installation and Maintenance NC III	123
7		











/	Technical Drafting NC II	109
8	Plumbing NC II	105
9	Gas Metal Arc Welding (GMAW) NC II	101
10	Scaffold Erection NC II	97

Source: Certification Office

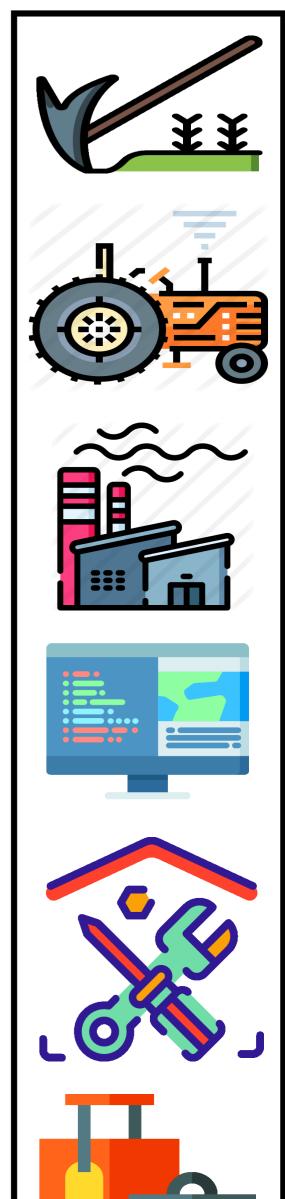
## Construction Sector March 2019

#### **Registered Program**

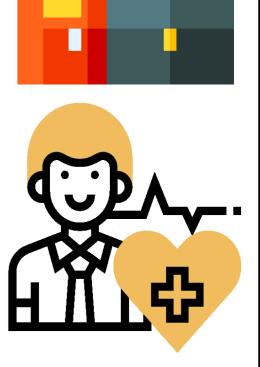
There are a total of 3,185 registered programs and 1,005 TVET Providers offering training in construction sector and other related qualifications. One hundred ninety-four (194) are newly registered programs accounted from January to March 2019. Most of the registered programs are from Shielded Metal Arc Welding (SMAW NC I and II), EIM NC II, Carpentry NC II, Masonry NC II, Tile Setting NC II, Plumbing NC II, GTAW NC II, GMAW NC II, and Scaffold Erection NC II. Majority of the registered programs are in regions III, IV-A, X, and NCR.

Number of Registered Programs and TVET Providers on Construction Sector and Other Related Qualifications by Region as of March 2019

Region	No. of Registered Programs	No. of TVET Provider ( <i>Warm Body</i> )	No. of TVET Provider with Newly Registered Program	
NCR	257	100	9	
CAR	72	20	-	
L	126	50	4	
П	84	22	1	
Ш	381	125	19	
IV-A	334	114	8	
IV-B	105	34	2	
V	173	59	5	
VI	177	46	2	
VII	234	64	5	
VIII	148	51	1	
IX	158	49	4	
Х	393	87	9	
XI	105	38	3	
XII	178	59	6	
CARAGA	90	34	-	
ARMM	170	59	17	
Grand Total	3,185	1,011 95		



Source: Certification Office, Compendium – March 2019



## Construction Sector March 2019

#### Program / Activities of TESDA

To expand the number of trained individuals in the construction related programs, TESDA undertaken the following initiatives:1) National TVET Enrollment Day for Construction Sector; 2) Focused Group Discussion to concern stakeholders (NGAs, Employers, and Labor groups) on the skills requirements; 3) Established partnership with industries, like the Philippine Contractor Associations, and 4) Free assessment for workers which includes the construction sector.

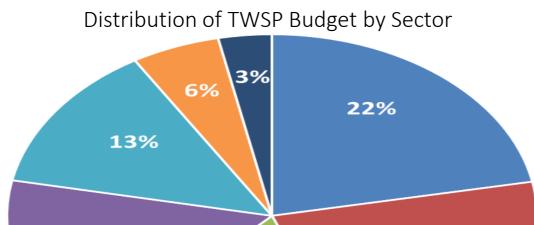
TESDA recently forged a Memorandum of Understanding with the Department of Public Works and Highways, which intends to facilitate the conduct of training and assessment of DPWH personnel in heavy equipment operations; use of DPWH-BOE Motorpool and its network of Base and Area Shops in the conduct of training; provide scholarship assistance to DPWH.

Another MOU with DPWH was signed for the implementation of a Project based On-site Learning on identified construction projects.

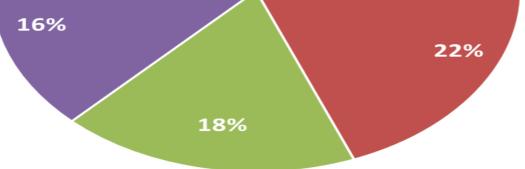
TESDA has also partnered with DTI-CMDF through a MOU, which intends to give support through funding programs; internal and external training for capacity building; and utilizing Construction Manpower Development Center as venue for training and assessment of construction related programs.

### Scholarship

For 2019, the 22% of the budget allocation of the Training for Work Scholarship is allocated to construction sector. This is expected to train 38,590 individuals.







- Agri-Fishery/Agri-Business/ Agro-Industrial
- General Infrastructure/ Construction/Housing
- Manufacturing
- Information Technology-Business Process Management (IT-BPM)
- Tourism
- New and Emerging & Other Priority Areas
- Logistics

## **Construction Sector** As of December 2018

Scholarship

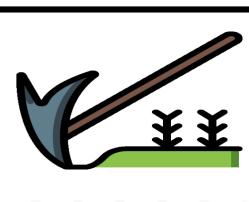
### FY 2019 Training for Work Scholarship Program (TWSP) Budget Distribution per Sector

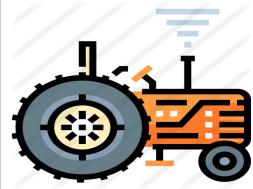
	Targets		•	
Sector	Enrolled	Graduates	Amount	% Distribution
Agri-Fishery/Agri- Business/Agro-Industrial	57,893	54,999	500M	22%
General Infrastructure/ Construction/Housing	38,590	36,661	500M	22%
Manufacturing	17,135	16,279	415M	18%
Information Technology- Business Process Management (IT-BPM)	22,852	21,709	362M	16%
Tourism	15,899	15,104	300M	13%
New and Emerging & Other Priority Areas	5,271	5,006	123M	5%
Logistics	6,032	5,730	74M	3%
Grand Total	163,672	155,488	2.274B	100%

### Issues and Challenges

Despite existing initiatives undertaken to address the issues in the implementation of the Build Build Build Program, there are still continuing issues that need immediate interventions, such as:

- 1. Lack of training facilities and equipment for training
- 2. Low compensation and hazardous working environments in the construction sector
- 3. TESDA-certified workers, or those with formal training, have job contracts abroad. While those not TESDA-certified are retained locally.
- 4. Low regard for construction-related training programs











## Construction Sector As of December 2018

#### **TESDA Programs / Interventions**

## Formulation of TESDA Circular No. 16. series 2018, Guidelines on the Implementation of the Train to Build Build Build

The guideline provides specific mechanism/strategy in conducting training for construction related programs that are relatively more flexible. Specifically, on training arrangements and models, scholarship provision, assessment and certification of training.

# Conduct of the Special National Enrollment Day and Jobs Bridging for the Construction Sector

On May 3-4, a Special National Enrollment Day and Jobs Bridging for Construction was conducted. This intends to encourage more individuals to take construction related programs, and to bridge TVET graduates and construction industry/enterprises for possible employment.

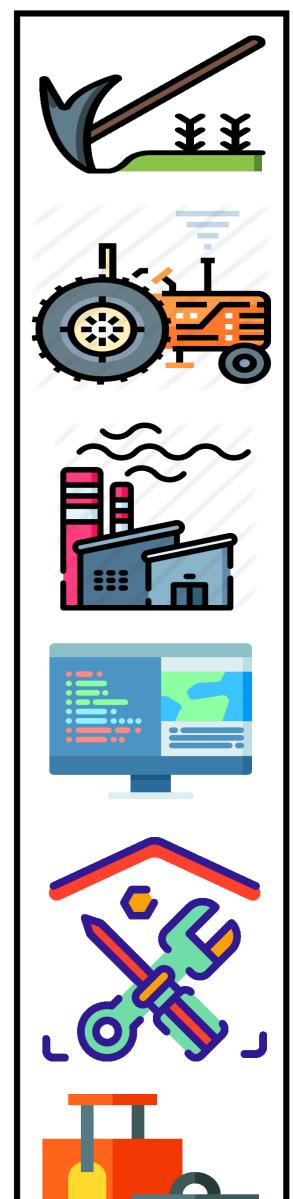
The event resulted to the enrollment/enlistment of 10,731 individuals. Majority indicates interest to take programs on SMAW NC II (2,469) and NC I (1,734); EIM NC II (1,557), Masonry NC II (1,072) and Carpentry NC II (1,049).

For the Jobs Bridging, 249 enterprises/companies participated, which catered a total of 6,121 applicants. Among the applicants 1,227 were reported Hired-On-the-Spot

#### Establish Partnership with Government, Industry and Labor Groups

To strengthen the implementation of the programs relative to the "Build Build Build", TESDA extended partnership with Department of Public Works (DPWH) through its Bureau of Equipment (BOE), Philippine Constructors Associations and Construction Industry Workers Council (CIWC). Generally, it opens opportunities for to establish better venue for the training of individuals for the construction related qualifications through the available resources of the partners, like the equipment, training and assessment venue, and trainers.

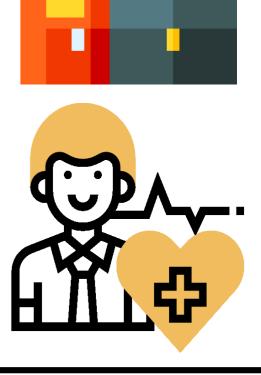
TESDA has also conducted a 2-day assessment for 81 heavy equipment operators and engineers of DPWH-BOE and Equipment Management Division (EMD) nationwide with a result of 100% certification rate. Assessment taken in the following Heavy Equipment Operation training qualifications: HEO (Backhoe Loader) NC II, HEO (Forklift) NC II, HEO (Hydraulic Excavation) NC II, HEO (Rigid On-Highway Dump Truck) NC II, HEO (Road Roller) NC II, HEO (Wheel Loader) NC II



TESDA and Philippine Constructors Association (PCA) signed a Memorandum of Agreement last July 20, 2018 that aims to train 2,000 construction supervisors under the Training for Work Scholarship Program.

Compentency Standards for Construction Trade Supervision Level IV and Construction Site Supervision Level IV has been developed and deployed.

At the regional level, the TESDA Vocational Institutions also initiated partnership with industries/companies. A total of 56 institutions and 112 partners were reported as of December 2018.



## **Construction Sector** As of December 2018

#### **TESDA Programs / Interventions**

# Conduct of Focused Group Discussion (FGD) on Skills Requirements for the Build Build Programs

On May 3, 2018, the Planning Office conducted the Focused Group Discussion (FGD). The FDG was undertaken to determine the skills requirements for the operationalization of the infrastructure projects under the "Build Build Build" Program. It was participated by representatives from the government agencies (NEDA, DOLE, DPWHR, DOTr, etc); industry partners (PCA, MGS, DMCI, etc.); and labor union.

The program resulted to the identification of hard-to-fill skills, emerging skills, and soft-skills required in the sector. The Heavy Equipment Operations, Masonry, Foreman are some of the identified qualifications considered as critical and hard-to-fill.



#### LABOR MARKET INFORMATION SERIES OF 2019

Policy Research and Evaluation Division - Planning Office Office of the Deputy Director General for Policies and Planning Technical Education and Skills Development Authority TESDA Complex, East Service Road, South Luzon Expressway (SLEX) Fort Bonifacio, Taguig City 1630, Metro Manila Land Line: (+632) 817-2675 / 893-1966 / 888-5652 www.tesda.gov.ph | contactcenter@tesda.gov.ph