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**ESTIMATED HOUSING NEEDS BASED ON 2010 CENSUS
OF POPULATION AND HOUSING**

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ABSTRACT

In an earlier technical paper, housing needs framework was redefined based on principles prescribed by the United Nations (UN). On its dimension for the construction of housing units, housing needs has two components, namely Accumulated or current needs and Recurrent or future needs. Accumulated needs comprise the provision of conventional housing units for households occupying living quarters of an unacceptable type and those doubled-up with other households living in acceptable housing units. Recurrent or future needs comprise housing needs expected to arise during the Plan period covered by the estimates which include housing units for (a) new households formed, and (b) households whose housing units were lost due to obsolescence, floods, fire, urban renewal/slum clearance, etc. This study provides estimates of the two components using the 2010 Census of Population and Housing and comes up with annual forecast until 2017 at the levels national, regional and highly urbanized cities.

Key words and phrases: housing needs, replacement rate, forecast

I. Introduction/Rationale

In 2009-2010, the Statistical Research and Training Center (SRTC), as the research and training arm of the Philippine Statistical System (PSS), in collaboration with Housing and Urban Development and Coordinating Council (HUDCC), conducted a research entitled "Housing Backlog Study" under the "Development of Shelter Monitoring Information System (DSMIS) Project." Two of the expected outputs were: (i) review of the framework on housing needs vis-à-vis backlog and (ii) make recommendations of an alternative framework of housing needs. From the recommended framework, better estimate of housing needs vis-à-vis backlog is generated. As per recommendation and eventual institutionalization of project output, SRTC came up with an improved framework of housing needs. The proposed framework for housing needs is an adaptation of the UN Component method to suit local conditions. It has two dimensions: (i) construction of housing units; and (ii) housing support and services. The rationale for the proposed framework is to identify the "physical" aspect of the housing industry and the "social" aspect of housing to improve the environment for healthy living.

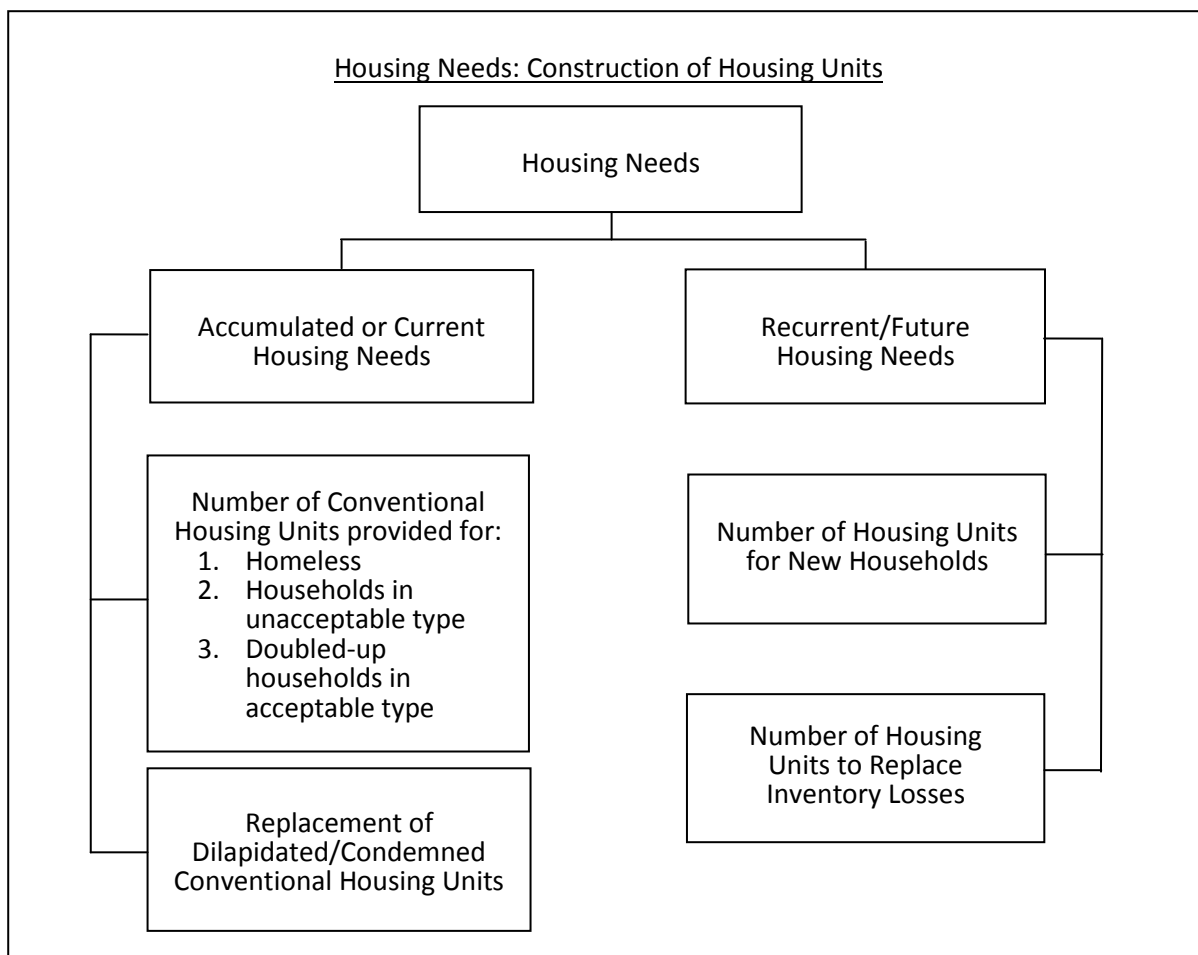
As a future direction of the project, housing needs estimates will be improved with the use of the 2010 Census of Population and Housing and derivation of allowance for inventory losses will be refined, hence this study.

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II. Review Of The Framework

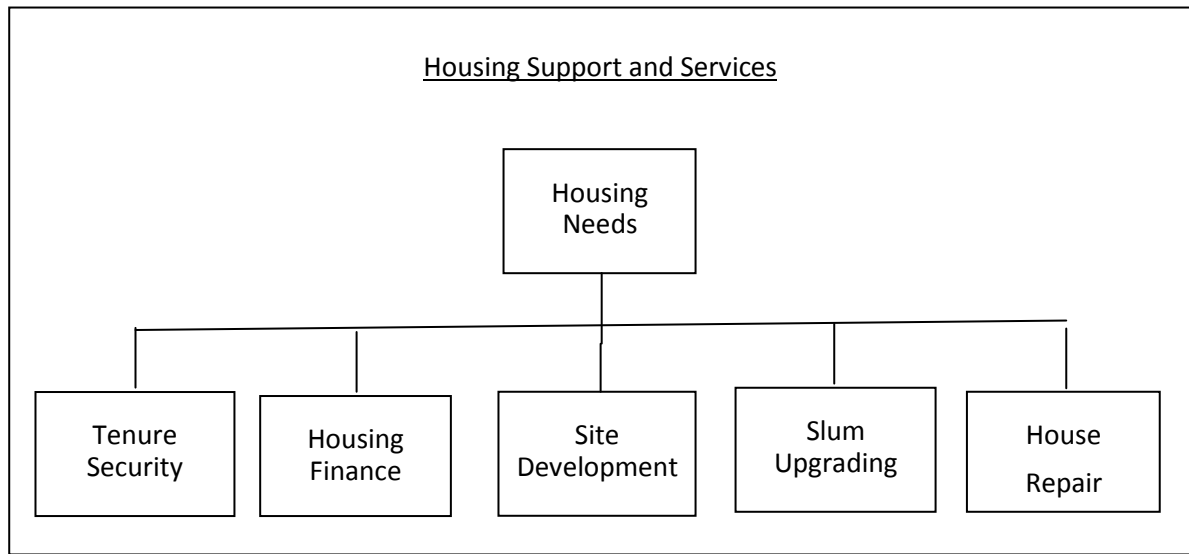
The physical aspect of housing needs would be the construction of acceptable dwellings as living quarters, therefore, the unit of reporting the housing need would be in terms of housing units constructed, regardless of the type of building. This is composed of:

1. Accumulated or current needs - defined as housing needs that exist at the beginning of the Plan Period covered by the estimate, and include the following components:
 - a. Number of conventional Housing Units (HUs) required to provide for:
 - Households without shelter (homeless)
 - Households occupying living quarters of an unacceptable type, e.g., barong-barong, houses made of makeshift or salvaged materials, and those residing in non-conventional dwellings.
 - Households that are doubled-up with other households in acceptable dwelling units with the assumption that all those doubled-up households are in need of separate housing accommodation.
 - b. Number of conventional housing units which are dilapidated or condemned to be replaced.
2. Recurrent or Future needs – housing needs expected to arise during the Plan Period covered by the estimates, it could be annual, medium term, or long term.
 - a. Number of housing units required to provide to new households covered by the Plan Period.
 - b. Replacement of housing units of acceptable type that were lost during the period covered by the estimates. Losses include housing units lost due to obsolescence, floods, fire, urban renewal/slum clearance, etc. This can be done by age and construction materials based on trends observed between censuses.



The UN components pertaining to “Reduction in levels of density in acceptable living quarters to a desired level” and “allowance for vacant dwellings” are not considered. There is no need to consider the “reduction of density to a desired level,” because all doubled-up households have already been considered, therefore, the overcrowding due to doubling-up may have been eased. In the “allowance for vacant dwellings,” it was observed that in all census years 1970, 1980, 1990 and 2000 there are always vacant housing units counted. Therefore, estimates would be limited to occupied dwellings/housing units.

For the Housing Support and Services, the proposed framework which is not be discussed in this paper, involves Tenure Security, Housing Finance, Site Development, Slum Upgrading and House Repair.



III. Estimation Methodology

The methodology used for this study deviates slightly with the previous one. For this study, the estimation made use of 2010 Census of Population and Housing (CPH) results as benchmark data for extrapolating estimates of housing needs from year 2011 to 2017. Special tabulation based from the census data is disaggregated by region, province, highly urbanized city and rural-urban areas. Estimation was made at regional level and added up to national. Unlike before, the characteristics on housing obtained in the 2000 Census of Population and Housing were used to compute indicators that were applied to the 2007 Population Census (PopCen) to estimate housing units and other selected indicators by region because the 2007 PopCen did not include housing characteristics. Due to difficulty of estimating the urban-rural level, the authors decided to come up with that for highly urbanized cities instead, with cities/municipality of the National Capital Region lumped together as one area. Another difference is the use of replacement rate which varies per region. Before, replacement rate utilized was that of the National Capital Region only applied to all regions.

As before, the step by step procedure in the estimation of housing needs for 2010 is enumerated below:

1. The 2010 CPH complete census file (100% coverage) was re-tabulated into the following tabulations with the purpose of identifying the year built of housing units, the identification of selected indicators as input to the identification of unacceptable structures or housing units and households and the actual number of households residing in these housing units.

Table A. Type of Construction Materials of Housing Units (HUs) by Year built

Table B. Type of Construction Materials by Selected Indicators of HUs

Table C. Number of Households by Type of Construction Materials of HUs by Selected Indicators

All housing units were cross-classified into a matrix of the construction materials category for roof and walls and reclassified the subgroups into: 1) Strong materials; 2) Light materials; 3) Salvaged/makeshift materials; 4) Mixed but predominantly strong materials; 5) Mixed but predominantly light materials; and 6) Mixed but predominantly salvaged materials. The reclassification was done in order to describe the housing unit based on the combination of the construction materials of the walls and roof. This classification can be used to tabulate the characteristics of the housing units in accordance with selected indicators that are needed as basic input to the estimation process, using the type of construction materials as the common variable.

2. Four selected indicators are identified from the census data file in the following hierarchical manner:

Indicator No. 1 - Informal settlers – these were identified through the tenure status of the lot occupied by the housing unit. All those found to be under tenure status of rent-free lot without consent of the owner are identified as belonging to the informal settlers. In previous study, this indicator is third in hierarchy. This time, priority is given since this indicator is the main concern of policies formulated and programs/projects being implemented by key shelter agencies spearheaded by the Housing and Urban Development Coordinating Council.

Indicator No. 2 - Homeless - the housing units were identified by their codes in the type of building under the “Others” category. The housing units under this category are those living quarters found during the census that were not intended for human habitation like those staying under the bridge, in caves, sleeping in *kariton*², or those staying in abandoned buses, in agricultural/industrial/ commercial structures, etc.

Indicator No. 3 – Dilapidated/condemned - the structures were identified by looking at the Type of Repair categories under Dilapidated and condemned as collected in the Census. These structures are to be replaced during the planning period.

Indicator No. 4 - Marginal housing units – This include those classified under “Others HUs” category (that is, neither falling under any of the above indicators) and at the same time, classified in the type of construction materials used under the “makeshift/salvage materials” and “mixed but predominantly makeshift/salvaged materials” categories. Hence includes those “not reported – roof,” “not reported – wall,” and “not elsewhere classified” Reason is that in the enumeration, any housing units that cannot be identified, described and classified by the enumerators are seemingly of marginal type.

In the tabulation process, when a housing unit is classified in any of these indicators, then they are no longer counted anywhere else. This makes the housing unit count mutually exclusive from the rest as far as the selected indicators are concerned. The rest of the housing units are classified under Other HUs, which is a residual estimate from the total housing units. In the report, number of informal settlers and households living in marginal housing are combined as one of those under unacceptable housing units. Reason is that the operational definition of the term “informal settlers” is not yet officially adopted in the PSS. Definitions of housing terms together with the housing needs estimation procedure are yet to be presented for approval at the NSCB Executive Board. Though with this study, methodology is already firmed up because of use of the actual housing census data in 2010 which were not available in 2007 PopCen, thus the

² Sleeping in cariton is not anymore considered as part of “Homeless” in succeeding censuses.

necessity of using 2000 CPH housing characteristics to impute estimates of housing needs in 2007 onwards.

3. Based on the regional tabulations of the three tables, national totals were obtained by selected indicators.
4. The results of Table 3 (Number of households) minus the results in Table 2 (Number Housing Units) in the special tabulation by construction materials yielded the doubled-up households also classified by construction materials.
5. Replacement rate was generated based on the cohort population of buildings anchored on the year the housing unit was constructed. This means, the percent change is computed by year built, by construction materials from 2000 and 2010 CPHs. Only the strong, mixed but predominantly strong, light, and mixed but predominantly light categories of construction materials were considered in the computation as acceptable housing units since they are the ones to be replaced or upgraded. The marginal type of housing units is assumed to be washed out in a few years only. Average of percent changes by year group (1970 or earlier, 1971-1980, 1981-1990 and 1991-2000) by region were computed. Replacement rate is the absolute value of the annual changes. Lifespan of the housing units is the reciprocal of the replacement rate. Below is the result:

Table 1: Replacement Rate and Lifespan of Housing Units
by Region: 2000-2010

Region	2000-2010	
	Replacement rate	Lifespan in years
Phil	1.62%	62
NCR	0.12%	100
CAR	0.66%	100
Region 1	1.58%	63
Region 2	1.69%	59
Region 3	0.93%	100
Region 4A	1.42%	70
Region 4B	2.74%	36
Region 5	2.37%	42
Region 6	1.78%	56
Region 7	1.52%	66
Region 8	2.48%	40
Region 9	2.50%	40
Region 10	2.02%	50
Region 11	2.36%	42
Region 12	2.14%	47
CARAGA	2.77%	36
ARMM	2.80%	36

6. Summary of the consolidated results of the selected indicators by region was generated showing the total number of housing units. The purpose of the table showing the type of construction materials is to identify which structures are unacceptable based on minimum standard of quality. The type of construction materials is used as the minimum standard of quality in the meantime that other quality measures, like number of persons per room or area occupied per person, are not yet considered.

7. Using the number of housing units and households by region by housing indicator, the housing densities are computed (households divided by housing units).
8. Household ratio by region by housing indicator is then computed. These two were used in the derivation of housing units and households by region and by housing indicators for the period 2011-2017.

Projection of Household and Housing Units

9. Average household size is derived by taking the ratio of the household population and the number of households by region. This is taken separately from 2010 CPH.
10. Since the official population projection is not yet released during the study period, such is derived by effecting the national growth rate of 1.90% to household population. For January 2011, formula used is:

$$\frac{\text{national household population} \times 1.019}{365 \text{ days}} \times 245 \text{ days from May 1, 2010 to January 1, 2011}$$

or:
$$P_{n(\text{Jan 1, 2011})} = P_{0(\text{May 1, 2010})} \times r (1.90)^t (245/365)$$

Projected value is distributed to the regional levels based on regional proportion.

11. Projected number of households for 2011-2017 is derived by taking the ratio of the projected household population and the derived average household size by region from 2010 CPH.
12. Projected number of housing units for 2011-2017 is derived by taking the ratio of the projected households and the derived ratios by region from 2010 CPH.

Computation of Housing Needs

13. For the initial housing needs as of January 1, 2011, accumulated needs by housing indicators are derived by taking the product of the projected households at the national level and the resulting values in item 8 above.
14. Incremental needs (January 2 to December 31) of every year are computed by taking the difference of households by housing indicators of proceeding year's estimate and the current year.
15. Future Needs, on the other hand, is the sum of the allowance for inventory losses and the number of household increases every year. Allowance of inventory losses is the product of the replacement rate and acceptable housing needs per region per year. On the other hand, number of household increases is the difference of the preceding years' number of households living in acceptable housing units other than those doubled-up households in the same structure.
16. For the purpose of generating 2017 housing needs, the accumulated housing needs for 2018 was also generated.
17. Similar tabulations are generated as mentioned for highly urbanized cities.

IV. Estimation Results

Following table shows the Housing Needs (accumulated needs) estimates as of May 1, 2010 with regional breakdown as well as for the highly urbanized cities. This shows that as of that point in time, total accumulated housing needs is at 1,209,912 households with those rent-free without consent of owners comprise (informal settlers) 39% of the need. Among regions, it is in NCR, Regions 3 and 4A that comprise about 43% of total households with needs reside. Region with the least accumulated needs is found in CAR. Besides NCR, highly

urbanized cities that posted high needs are Davao City, Cebu City and Bacolod City while least are in Olongapo City, Baguio City and Iligan City.

Table 2: Housing Needs Estimates by Housing Indicator by Region and HUCs:
As of May 1, 2010

(Unit in Household)

Region/Total/ HUCs/Others	ACCUMULATED NEEDS					
	Rent-free w/o consent of owners	Homeless (Other type of HUs)	Dilapidated/ Condemned	Marginal Housing	Doubled-up HHs in Acceptable HUs	TOTAL
TOTAL						
Philippines	471,481	4,739	81,651	219,940	432,101	1,209,912
NCR	140,308	2,085	8,272	20,732	117,157	288,554
CAR	2,658	6	696	2,376	4,988	10,724
Region 1	7,209	85	2,534	10,590	34,197	54,615
Region 2	5,783	155	3,131	7,065	13,807	29,941
Region 3	31,802	590	5,458	20,933	41,381	100,164
Region 4A	46,508	530	6,174	24,945	55,210	133,367
Region 4B	11,813	28	2,925	9,570	4,231	28,567
Region 5	23,056	110	6,342	22,366	9,087	60,961
Region 6	41,128	150	8,855	16,668	17,548	84,349
Region 7	34,331	405	6,666	18,236	19,172	78,810
Region 8	17,418	51	6,474	10,038	6,583	40,564
Region 9	15,726	7	4,145	6,148	11,813	37,839
Region 10	21,388	40	4,598	8,481	16,931	51,438
Region 11	26,163	178	4,918	14,907	19,101	65,267
Region 12	22,652	105	4,189	12,360	14,450	53,756
CARAGA	12,637	28	3,439	4,196	8,900	29,200
ARMM	10,901	186	2,835	10,329	37,545	61,796
NCR and other HUCs						
TOTAL	227,491	2,695	16,315	46,392	163,536	456,429
NCR	140,308	2,085	8,272	20,732	117,157	288,554
Baguio City	1,104	-	65	297	1,371	2,837
Angeles City	1,652	12	108	396	1,637	3,805
Olongapo City	187	38	90	781	1,359	2,455
Lucena City	1,967	4	219	517	1,305	4,012
Iloilo City	7,319	13	622	1,559	2,986	12,499
Bacolod City	9,242	105	482	1,843	3,768	15,440
Cebu City	12,197	183	722	2,614	6,980	22,696
Lapu-lapu City	2,591	6	171	1,225	911	4,904
Mandaue City	5,475	17	127	1,483	1,395	8,497
Tacloban City	3,545	6	597	826	777	5,751
Zamboanga City	6,256	3	838	2,200	4,995	14,292
Iligan City	1,788	2	303	304	829	3,226
CDO City	8,681	13	811	1,290	3,794	14,589
Davao City	13,750	112	1,485	5,141	7,286	27,774
Cotabato City	2,990	84	305	1,183	4,227	8,789
Gen. Santos City	5,794	9	647	3,732	1,516	11,698
Butuan City	2,645	3	451	269	1,243	4,611

Estimates of Housing Needs at National Level: 2011-2017

The following table presents in detail the different components of Housing Needs. It includes estimates of housing needs showing the major components of accumulated needs and recurrent or future needs for 2010-2017. The estimated unmet housing needs which is popularly called "backlog" as of January 1, 2011 totalled 1.225 million housing units, the bulk of which are intended for informal settlers households comprising 57.15% while the doubled

up households consisted 35.7% of the total unmet needs. Incremental needs from 2011 to 2017 averages about 729,000 households. Come 2017, total housing needs already reached 6.3 million households.

Table 3: Housing Needs Estimates by Housing Indicator: 2011 – 2017
(Unit in Household)

Components of Housing Needs	Initial Needs (As of Jan 1, 2011) BACKLOG	Incremental Needs as of December 31							Total Housing Needs CY 2011-2017
		2011 (Jan 2-Dec 31)	CY2012	CY2013	CY2014	CY2015	CY2016	CY2017	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Total Housing Needs	1,225,343	688,318	701,396	714,723	728,302	742,140	756,241	770,609	6,327,072
A. Accumulated Needs	1,225,343	23,282	23,724	24,175	24,634	25,102	25,579	26,065	1,397,902
1. HH in Unacceptable Housing	787,731	14,967	15,251	15,541	15,836	16,137	16,444	16,756	898,663
a. Rent-free without consent of owners + Marginal Housing	700,239	13,305	13,557	13,815	14,077	14,345	14,617	14,895	798,851
b. Homeless	4,799	91	93	95	96	98	100	102	5,475
c. Dilapidated/condemned	82,692	1,571	1,601	1,631	1,662	1,694	1,726	1,759	94,338
2. Doubled-up HH in Acceptable HU	437,612	8,315	8,473	8,634	8,798	8,965	9,135	9,309	499,239
B. Future/Recurrent Needs		665,037	677,672	690,548	703,668	717,038	730,662	744,544	4,929,170
1. Allowance for Inventory losses		306,515	312,338	318,273	324,320	330,482	336,761	343,160	2,271,849
2. Increase in HHs (likely to afford to own acceptable HU)		358,522	365,334	372,275	379,348	386,556	393,901	401,385	2,657,320

Annexes A and B show regional and HUCs breakdown respectively, also from 2011 to 2017.

V. Informal Settler Families

Another component of the research project with HUDCC is the identification of Informal Settler Families (ISFs). The SRTC, in collaboration with the Technical Working Group on Housing Statistics of the Technical Committee on Population and Housing Statistics coordinated by NSCB, proposed for its operational definition:

Informal settlers - individuals/households living under any of the following conditions:

- i. Lot without consent of the property owner (informal settler);
- ii. Danger areas (along riverbanks, railways, under the bridge, etc);
- iii. Areas for government infrastructure projects;
- iv. Protected/forest areas (except for indigenous peoples);
- v. Areas for Priority Development (APDs), if applicable;
- vi. Other government/public lands or facilities not intended for human habitation

Except for item *i*, the data support for the definition is not provided in any existing census or survey. The recommendation then was through a post-census activity (Cruz, 2010). HUDCC should also develop maps that delineate boundaries of barangays, limits of danger areas, and even extent of right-of-way to guide the post-census validation through an overlay of said maps unto the enumeration area (EA) maps used in census-taking.

Since the resolution has yet to be signed by the NSCB Executive Board and the operational definition of danger areas still needs to be developed, the following discussion will focus on the data gathered on informal settlers (rent-free without the consent of the lot owner) in the 2000 and 2010 CPH.

Table 4: Number of Households and Informal Settlers by Region and HUCs: 2000, 2010

(Unit in Household)

Region	2000				2010			
	Number of HHs	HHs occupying Lot rent-free without Consent of Owner	Incidence (Percent)	Ranked Incidence	Number of HHs	HHs occupying Lot rent-free without Consent of Owner	Incidence (Percent)	Ranked Incidence
Phil	14,887,731	455,574	3.06	-	19,841,864	471,481	2.38	-
NCR	2,001,681	159,991	7.99	1	2,759,761	140,308	5.08	1
CAR	259,890	2,120	0.82	16	352,403	2,658	0.75	16
Reg 1	808,126	5,429	0.67	17	1,050,605	7,209	0.69	17
Reg 2	544,524	5,487	1.01	15	727,327	5,783	0.80	15
Reg 3	1,635,546	32,615	1.99	12	2,239,011	31,802	1.42	14
Reg 4A	1,880,006	52,582	2.80	5	2,503,628	46,508	1.86	13
Reg 4B	454,892	9,823	2.16	9	602,131	11,813	1.96	12
Reg 5	883,175	17,917	2.03	11	1,111,753	23,056	2.07	9
Reg 6	1,192,185	31,335	2.63	6	1,526,587	41,128	2.69	2
Reg 7	1,117,462	26,389	2.36	8	1,487,710	34,331	2.31	7
Reg 8	707,560	14,604	2.06	10	865,657	17,418	2.01	11
Reg 9	526,630	9,772	1.86	14	726,272	15,726	2.17	8
Reg 10	673,370	16,489	2.45	7	917,840	21,388	2.33	6
Reg 11	739,420	27,402	3.71	3	1,011,943	26,163	2.59	3
Reg 12	634,027	18,366	2.90	4	916,038	22,652	2.47	5
CARAGA	386,283	16,978	4.40	2	504,257	12,637	2.51	4
ARMM	442,954	8,275	1.87	13	538,941	10,901	2.02	10
HUCs	3,243,011	234,105	-	-	4,587,966	227,491	4.96	-
NCR	2,001,681	159,991	7.99	5	2,759,761	140,308	5.08	8
Baguio City	63,123	213	0.34	15	78,313	1,104	1.41	17
Angeles City	56,575	968	1.71	14	74,510	1,652	2.22	16
Olongapo City	43,107	130	0.30	16	52,242	187	0.36	18
Lucena City	40,261	3,474	8.63	2	54,488	1,967	3.61	12
Iloilo City	72,333	4,581	6.33	9	90,681	7,319	8.07	1
Bacolod City	87,441	6,803	7.78	7	116,591	9,242	7.93	2
Cebu City	147,600	12,569	8.52	3	195,461	12,197	6.24	6
Lapu-lapu City	-	-	-	-	80,913	2,591	3.20	14
Mandaue City	54,882	5,151	9.39	1	78,394	5,475	6.98	4
Tacloban City	-	-	-	-	45,478	3,545	7.79	3
Zamboanga City	117,152	3,922	3.35	13	175,050	6,256	3.57	13
Iligan City	57,179	2,241	3.92	12	67,965	1,788	2.63	15
CDO City	93,525	5,310	5.68	11	137,465	8,681	6.32	5
Davao City	240,057	16,854	7.02	8	334,473	13,750	4.11	10
Cotabato City	31,227	2,627	8.41	4	55,171	2,990	5.42	7
Gen. Santos City	86,595	5,344	6.17	10	125,368	5,794	4.62	9
Butuan City	50,273	3,927	7.81	6	65,642	2,645	4.03	11

At the national level, there has been a reduction in the incidence of informal settlers by 28.6% although it is observed that there was a slight increase in their number by 3.5%. While NCR reported the largest number of informal settlers as gathered from the two censuses, there was a reduction in the incidence by 57.3%, from incidence of 7.99% in 2000 relative to the total NCR households to 5.08% in 2010. Other regions that registered decreases in incidence and led to decrease in the number of informal settlers are: CAR, Regions 2, 3, 4A, 4B, 11 and CARAGA. Other regions that had slight decrease in incidence

of informal settlers but whose informal settlers increased in number are: Regions 7, 8, 10, and 12. The rest of the regions with increased incidence of informal settlers also had increased in number are: Region 1, 5, 6, 9 and ARMM. The results of these two censuses may be considered as comparable considering that the same definition was used so that the regions with increasing number of informal settlers as well as their incidence should be noted with concern especially when the increases are sizeable.

Among the highly urbanized areas, Davao City registered the highest number of 16854 with an incidence of 7.02% but a reduction was noted in 2010 to 13,750 with a corresponding reduction in number to 13,750 or 4.11% incidence, a decrease by 41.45%. While many HUCs are decreasing in incidence, like Cebu City, Mandaue City, Lucena City, etc., what is disturbing is the high increases in the incidence of informal settlers from 2000 to 2010, specifically Iloilo City from 6.33% to 8.07%, an increase of almost 60% in a span of 10 years; Bacolod city from 7.78% to 7.93%; Tacloban City from zero informal settlers in 2000 to 7.79% in 2010. Cagayan de Oro city is in the uptrend also from 5.68% to 6.32%. The uptrend in incidence is seen for growth centers in the Visayas and Mindanao regions.

V. Future Directions:

1. Housing needs estimates can further be improved in future studies given the utilization of official population and household projections.
2. Since the focus of government housing program is geared towards urban areas, it is hoped that urban-rural classification of barangay be firmed up soon.
3. It is hoped to have data capture of total informal settlers following the approval of the operational definition, including the danger areas.
4. Come up with a study on grouping of barangays by danger areas using cluster analysis so as to generate housing needs estimates based on said grouping.
5. Eventual presentation and approval of estimation methodology and concepts and definition to the Board of the Philippine Statistics Authority for adoption of the PSS.

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4. Census of Population and Housing 2000 and 2010, National Statistics Office
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Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +b Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2011														
PHILIPPINES	700,239	4,799	82,692	437,612	1,225,343	13,305	91	1,571	8,315	23,282	306,515	358,522	665,037	688,318
NCR	163,094	2,112	8,377	118,651	292,234	3,099	40	159	2,254	5,552	2,983	47,552	50,535	56,087
CAR	5,098	6	705	5,052	10,861	97	0	13	96	206	2,279	6,575	8,854	9,060
Reg 1	18,026	86	2,566	34,633	55,312	342	2	49	658	1,051	15,919	19,165	35,084	36,135
Reg 2	13,012	157	3,171	13,983	30,323	247	3	60	266	576	11,968	13,419	25,388	25,964
Reg 3	53,408	598	5,528	41,909	101,441	1,015	11	105	796	1,927	20,068	41,156	61,224	63,151
Reg 4A	72,364	537	6,253	55,914	135,068	1,375	10	119	1,062	2,566	34,075	45,609	79,684	82,250
Reg 4B	21,656	28	2,962	4,285	28,931	411	1	56	81	550	15,905	11,037	26,941	27,491
Reg 5	46,001	111	6,423	9,203	61,738	874	2	122	175	1,173	25,206	20,220	45,425	46,599
Reg 6	58,533	152	8,968	17,772	85,425	1,112	3	170	338	1,623	26,051	27,752	53,803	55,426
Reg 7	53,237	410	6,751	19,417	79,815	1,012	8	128	369	1,516	21,621	27,110	48,732	50,248
Reg 8	27,806	52	6,557	6,667	41,081	528	1	125	127	781	20,723	15,877	36,599	37,380
Reg 9	22,153	7	4,198	11,964	38,322	421	0	80	227	728	17,435	13,247	30,682	31,411
Reg 10	30,250	41	4,657	17,147	52,094	575	1	88	326	990	17,686	16,672	34,358	35,347
Reg 11	41,594	180	4,981	19,345	66,099	790	3	95	368	1,256	22,667	18,216	40,884	42,139
Reg 12	35,459	106	4,242	14,634	54,442	674	2	81	278	1,034	18,718	16,592	35,310	36,344
CARAGA	17,048	28	3,483	9,014	29,572	324	1	66	171	562	13,308	9,141	22,449	23,011
ARMM	21,501	188	2,871	38,024	62,584	409	4	55	722	1,189	13,516	9,181	22,697	23,886

Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2012														
PHILIPPINES						13,557	93	1,601	8,473	23,724	312,338	365,334	677,672	701,396
NCR						3,158	41	162	2,297	5,658	3,040	48,455	51,495	57,153
CAR						99	0	14	98	210	2,323	6,700	9,022	9,233
Reg 1						349	2	50	671	1,071	16,221	19,529	35,751	36,822
Reg 2						252	3	61	271	587	12,196	13,674	25,870	26,457
Reg 3						1,034	12	107	811	1,964	20,449	41,938	62,387	64,351
Reg 4A						1,401	10	121	1,083	2,615	34,722	46,476	81,198	83,813
Reg 4B						419	1	57	83	560	16,207	11,246	27,453	28,013
Reg 5						891	2	124	178	1,195	25,685	20,604	46,289	47,484
Reg 6						1,133	3	174	344	1,654	26,546	28,279	54,825	56,479
Reg 7						1,031	8	131	376	1,545	22,032	27,626	49,658	51,203
Reg 8						538	1	127	129	795	21,116	16,178	37,295	38,090
Reg 9						429	0	81	232	742	17,767	13,499	31,265	32,007
Reg 10						586	1	90	332	1,009	18,022	16,988	35,010	36,019
Reg 11						805	3	96	375	1,280	23,098	18,562	41,660	42,940
Reg 12						687	2	82	283	1,054	19,073	16,908	35,981	37,035
CARAGA						330	1	67	175	573	13,561	9,315	22,875	23,448
ARMM						416	4	56	736	1,212	13,772	9,356	23,128	24,340

Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2013														
PHILIPPINES						13,815	95	1,631	8,634	24,175	318,273	372,275	690,548	714,723
NCR						3,218	42	165	2,341	5,765	3,098	49,376	52,474	58,239
CAR						101	0	14	100	214	2,367	6,827	9,194	9,408
Reg 1						356	2	51	683	1,091	16,530	19,900	36,430	37,521
Reg 2						257	3	63	276	598	12,428	13,934	26,362	26,960
Reg 3						1,054	12	109	827	2,001	20,837	42,735	63,573	65,574
Reg 4A						1,428	11	123	1,103	2,665	35,382	47,359	82,741	85,406
Reg 4B						427	1	58	85	571	16,515	11,460	27,975	28,546
Reg 5						908	2	127	182	1,218	26,173	20,995	47,168	48,386
Reg 6						1,155	3	177	351	1,685	27,050	28,817	55,867	57,552
Reg 7						1,050	8	133	383	1,575	22,451	28,150	50,601	52,176
Reg 8						549	1	129	132	810	21,518	16,486	38,003	38,814
Reg 9						437	0	83	236	756	18,104	13,755	31,859	32,615
Reg 10						597	1	92	338	1,028	18,365	17,311	35,676	36,703
Reg 11						821	4	98	382	1,304	23,537	18,915	42,452	43,756
Reg 12						700	2	84	289	1,074	19,436	17,229	36,665	37,739
CARAGA						336	1	69	178	583	13,818	9,492	23,310	23,894
ARMM						424	4	57	750	1,235	14,034	9,534	23,568	24,802

Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2014														
PHILIPPINES						14,077	96	1,662	8,798	24,634	324,320	379,348	703,668	728,302
NCR						3,279	42	168	2,385	5,875	3,157	50,314	53,471	59,346
CAR						102	0	14	102	218	2,412	6,957	9,368	9,587
Reg 1						362	2	52	696	1,112	16,844	20,278	37,122	38,234
Reg 2						262	3	64	281	610	12,664	14,199	26,863	27,472
Reg 3						1,074	12	111	843	2,039	21,233	43,547	64,780	66,820
Reg 4A						1,455	11	126	1,124	2,715	36,054	48,259	84,313	87,028
Reg 4B						435	1	60	86	582	16,829	11,678	28,506	29,088
Reg 5						925	2	129	185	1,241	26,670	21,394	48,064	49,305
Reg 6						1,177	3	180	357	1,717	27,564	29,364	56,929	58,646
Reg 7						1,070	8	136	390	1,605	22,877	28,685	51,562	53,167
Reg 8						559	1	132	134	826	21,926	16,799	38,725	39,551
Reg 9						445	0	84	241	770	18,448	14,017	32,465	33,235
Reg 10						608	1	94	345	1,047	18,713	17,640	36,354	37,401
Reg 11						836	4	100	389	1,329	23,984	19,274	43,259	44,587
Reg 12						713	2	85	294	1,094	19,805	17,556	37,361	38,456
CARAGA						343	1	70	181	595	14,081	9,672	23,753	24,347
ARMM						432	4	58	764	1,258	14,301	9,715	24,015	25,274

Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2015														
PHILIPPINES						14,345	98	1,694	8,965	25,102	330,482	386,556	717,038	742,140
NCR						3,341	43	172	2,431	5,987	3,216	51,270	54,486	60,473
CAR						104	0	14	103	222	2,458	7,089	9,546	9,769
Reg 1						369	2	53	709	1,133	17,164	20,664	37,827	38,961
Reg 2						267	3	65	286	621	12,904	14,469	27,373	27,994
Reg 3						1,094	12	113	859	2,078	21,637	44,375	66,011	68,089
Reg 4A						1,482	11	128	1,145	2,767	36,739	49,176	85,915	88,682
Reg 4B						444	1	61	88	593	17,148	11,900	29,048	29,641
Reg 5						942	2	132	189	1,265	27,177	21,801	48,977	50,242
Reg 6						1,199	3	184	364	1,750	28,088	29,922	58,010	59,760
Reg 7						1,091	8	138	398	1,635	23,312	29,230	52,542	54,177
Reg 8						570	1	134	137	842	22,343	17,118	39,461	40,303
Reg 9						454	0	86	245	785	18,799	14,283	33,082	33,867
Reg 10						620	1	95	351	1,067	19,069	17,975	37,044	38,111
Reg 11						852	4	102	396	1,354	24,440	19,641	44,080	45,435
Reg 12						726	2	87	300	1,115	20,181	17,890	38,071	39,186
CARAGA						349	1	71	185	606	14,348	9,856	24,204	24,810
ARMM						440	4	59	779	1,282	14,572	9,899	24,472	25,754

Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2016														
PHILIPPINES						14,617	100	1,726	9,135	25,579	336,761	393,901	730,662	756,241
NCR						3,405	44	175	2,477	6,100	3,278	52,244	55,522	61,622
CAR						106	0	15	105	227	2,504	7,223	9,728	9,954
Reg 1						376	2	54	723	1,155	17,490	21,056	38,546	39,701
Reg 2						272	3	66	292	633	13,149	14,744	27,893	28,526
Reg 3						1,115	12	115	875	2,118	22,048	45,218	67,265	69,383
Reg 4A						1,511	11	131	1,167	2,820	37,437	50,110	87,547	90,367
Reg 4B						452	1	62	89	604	17,474	12,126	29,600	30,204
Reg 5						960	2	134	192	1,289	27,693	22,215	49,908	51,197
Reg 6						1,222	3	187	371	1,783	28,622	30,491	59,112	60,896
Reg 7						1,111	9	141	405	1,666	23,755	29,786	53,540	55,207
Reg 8						580	1	137	139	858	22,768	17,443	40,211	41,069
Reg 9						462	0	88	250	800	19,156	14,554	33,710	34,510
Reg 10						631	1	97	358	1,087	19,431	18,317	37,748	38,836
Reg 11						868	4	104	404	1,380	24,904	20,014	44,918	46,298
Reg 12						740	2	89	305	1,136	20,565	18,230	38,794	39,931
CARAGA						356	1	73	188	617	14,621	10,043	24,664	25,281
ARMM						449	4	60	794	1,306	14,849	10,087	24,937	26,243

Housing Needs Estimates, by Housing Indicator, by Region: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2017														
PHILIPPINES						14,895	102	1,759	9,309	26,065	343,160	401,385	744,544	770,609
NCR						3,469	45	178	2,524	6,216	3,340	53,237	56,577	62,793
CAR						108	0	15	107	231	2,552	7,361	9,913	10,144
Reg 1						383	2	55	737	1,177	17,822	21,456	39,279	40,455
Reg 2						277	3	67	297	645	13,399	15,024	28,423	29,068
Reg 3						1,136	13	118	891	2,158	22,467	46,077	68,544	70,701
Reg 4A						1,539	11	133	1,189	2,873	38,149	51,062	89,211	92,084
Reg 4B						461	1	63	91	615	17,806	12,356	30,162	30,778
Reg 5						979	2	137	196	1,313	28,219	22,637	50,856	52,170
Reg 6						1,245	3	191	378	1,817	29,166	31,070	60,235	62,053
Reg 7						1,132	9	144	413	1,698	24,206	30,352	54,558	56,256
Reg 8						591	1	139	142	874	23,200	17,775	40,975	41,849
Reg 9						471	0	89	254	815	19,520	14,831	34,351	35,166
Reg 10						643	1	99	365	1,108	19,801	18,665	38,465	39,573
Reg 11						885	4	106	411	1,406	25,377	20,394	45,771	47,177
Reg 12						754	2	90	311	1,158	20,956	18,576	39,531	40,690
CARAGA						363	1	74	192	629	14,899	10,234	25,133	25,762
ARMM						457	4	61	809	1,331	15,131	10,279	25,411	26,742

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2011														
PHILIPPINES	700,239	4,799	82,692	437,612	1,225,343	13,305	91	1,571	8,315	23,282	306,515	358,522	665,037	688,318
NCR	163,094	2,112	8,377	118,651	292,234	3,099	40	159	2,254	5,552	2,983	47,552	50,535	56,087
Baguio City	1,419	0	66	1,388	2,873	27	0	1	26	55	503	1,452	1,956	2,010
Angeles City	2,074	12	109	1,658	3,854	39	0	2	31	73	663	1,361	2,024	2,097
Olongapo City	980	38	91	1,376	2,486	19	1	2	26	47	467	958	1,425	1,472
Lucena City	2,516	4	222	1,322	4,063	48	0	4	25	77	726	971	1,697	1,774
Iloilo City	8,991	13	630	3,024	12,658	171	0	12	57	241	1,412	1,504	2,917	3,157
Bacolod City	11,226	106	488	3,816	15,637	213	2	9	73	297	1,827	1,946	3,773	4,071
Cebu City	15,000	185	731	7,069	22,985	285	4	14	134	437	2,651	3,324	5,976	6,412
Lapu-lapu City	3,865	6	173	923	4,967	73	0	3	18	94	1,166	1,463	2,629	2,723
Mandaue City	7,047	17	129	1,413	8,605	134	0	2	27	164	1,073	1,345	2,418	2,581
Tacloban City	4,427	6	605	787	5,824	84	0	11	15	111	998	764	1,762	1,873
Zamboanga City	8,564	3	849	5,059	14,474	163	0	16	96	275	4,071	3,093	7,165	7,440
Iligan City	2,119	2	307	840	3,267	40	0	6	16	62	1,322	1,246	2,567	2,629
CDO City	10,098	13	821	3,842	14,775	192	0	16	73	281	2,508	2,364	4,873	5,153
Davao City	19,132	113	1,504	7,379	28,128	364	2	29	140	534	7,344	5,902	13,245	13,780
Cotabato City	4,226	85	309	4,281	8,901	80	2	6	81	169	1,007	892	1,899	2,068
Gen.Santos City	9,647	9	655	1,535	11,847	183	0	12	29	225	2,467	2,187	4,655	4,880
Butuan City	2,951	3	457	1,259	4,670	56	0	9	24	89	1,710	1,174	2,884	2,973

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2012														
PHILIPPINES						13,557	93	1,601	8,473	23,724	312,338	365,334	677,672	701,396
NCR						3,158	41	162	2,297	5,658	3,040	48,455	51,495	57,153
Baguio City						27	-	1	27	56	513	1,480	1,993	2,049
Angeles City						40	0	2	32	75	676	1,386	2,062	2,137
Olongapo City						19	1	2	27	48	476	976	1,452	1,500
Lucena City						49	0	4	26	79	739	990	1,729	1,808
Iloilo City						174	0	12	59	245	1,439	1,533	2,972	3,217
Bacolod City						217	2	9	74	303	1,862	1,983	3,845	4,148
Cebu City						290	4	14	137	445	2,702	3,388	6,089	6,534
Lapu-lapu City						75	0	3	18	96	1,189	1,490	2,679	2,775
Mandaue City						136	0	2	27	167	1,093	1,371	2,464	2,630
Tacloban City						86	0	12	15	113	1,017	779	1,796	1,908
Zamboanga City						166	0	16	98	280	4,149	3,152	7,301	7,581
Iligan City						41	0	6	16	63	1,347	1,269	2,616	2,679
CDO City						196	0	16	74	286	2,556	2,409	4,965	5,251
Davao City						370	2	29	143	545	7,483	6,014	13,497	14,041
Cotabato City						82	2	6	83	172	1,026	909	1,935	2,108
Gen.Santos City						187	0	13	30	229	2,514	2,229	4,743	4,973
Butuan City						57	0	9	24	90	1,742	1,197	2,939	3,029

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2013														
PHILIPPINES						13,815	95	1,631	8,634	24,175	318,273	372,275	690,548	714,723
NCR						3,218	42	165	2,341	5,765	3,098	49,376	52,474	58,239
Baguio City						28	-	1	27	57	523	1,508	2,031	2,088
Angeles City						41	0	2	33	76	689	1,413	2,102	2,178
Olongapo City						19	1	2	27	49	485	995	1,480	1,529
Lucena City						50	0	4	26	80	753	1,009	1,762	1,842
Iloilo City						177	0	12	60	250	1,466	1,562	3,028	3,278
Bacolod City						221	2	10	75	308	1,897	2,021	3,918	4,227
Cebu City						296	4	14	139	453	2,753	3,452	6,205	6,658
Lapu-lapu City						76	0	3	18	98	1,211	1,519	2,730	2,828
Mandaue City						139	0	3	28	170	1,114	1,397	2,510	2,680
Tacloban City						87	0	12	16	115	1,036	794	1,830	1,945
Zamboanga City						169	0	17	100	286	4,228	3,212	7,440	7,725
Iligan City						42	0	6	17	64	1,372	1,294	2,666	2,730
CDO City						199	0	16	76	291	2,605	2,455	5,060	5,351
Davao City						377	2	30	146	555	7,625	6,128	13,753	14,308
Cotabato City						83	2	6	84	176	1,045	927	1,972	2,148
Gen.Santos City						190	0	13	30	234	2,562	2,271	4,833	5,067
Butuan City						58	0	9	25	92	1,775	1,219	2,995	3,087

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2014														
PHILIPPINES						14,077	96	1,662	8,798	24,634	324,320	379,348	703,668	728,302
NCR						3,279	42	168	2,385	5,875	3,157	50,314	53,471	59,346
Baguio City						29	-	1	28	58	533	1,537	2,069	2,127
Angeles City						42	0	2	33	77	702	1,440	2,141	2,219
Olongapo City						20	1	2	28	50	494	1,014	1,508	1,558
Lucena City						51	0	4	27	82	768	1,028	1,795	1,877
Iloilo City						181	0	13	61	254	1,494	1,592	3,086	3,341
Bacolod City						226	2	10	77	314	1,933	2,059	3,993	4,307
Cebu City						302	4	15	142	462	2,805	3,518	6,323	6,785
Lapu-lapu City						78	0	3	19	100	1,234	1,548	2,782	2,882
Mandaue City						142	0	3	28	173	1,135	1,423	2,558	2,731
Tacloban City						89	0	12	16	117	1,056	809	1,865	1,982
Zamboanga City						172	0	17	102	291	4,308	3,273	7,581	7,872
Iligan City						43	0	6	17	66	1,398	1,318	2,716	2,782
CDO City						203	0	17	77	297	2,654	2,502	5,156	5,453
Davao City						385	2	30	148	565	7,770	6,244	14,015	14,580
Cotabato City						85	2	6	86	179	1,065	944	2,010	2,189
Gen.Santos City						194	0	13	31	238	2,611	2,314	4,925	5,163
Butuan City						59	0	9	25	94	1,809	1,243	3,052	3,145

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2015														
PHILIPPINES						14,345	98	1,694	8,965	25,102	330,482	386,556	717,038	742,140
NCR						3,341	43	172	2,431	5,987	3,216	51,270	54,486	60,473
Baguio City						29	-	1	28	59	543	1,566	2,109	2,168
Angeles City						42	0	2	34	79	715	1,467	2,182	2,261
Olongapo City						20	1	2	28	51	504	1,033	1,537	1,588
Lucena City						52	0	5	27	83	782	1,047	1,830	1,913
Iloilo City						184	0	13	62	259	1,523	1,622	3,145	3,404
Bacolod City						230	2	10	78	320	1,970	2,099	4,069	4,389
Cebu City						307	4	15	145	471	2,859	3,584	6,443	6,914
Lapu-lapu City						79	0	4	19	102	1,258	1,577	2,835	2,936
Mandaue City						144	0	3	29	176	1,157	1,450	2,607	2,783
Tacloban City						91	0	12	16	119	1,076	824	1,900	2,019
Zamboanga City						175	0	17	104	297	4,390	3,335	7,725	8,021
Iligan City						43	0	6	17	67	1,425	1,343	2,768	2,835
CDO City						207	0	17	79	303	2,704	2,549	5,254	5,556
Davao City						392	2	31	151	576	7,918	6,363	14,281	14,857
Cotabato City						87	2	6	88	182	1,086	962	2,048	2,230
Gen.Santos City						198	0	13	31	243	2,660	2,358	5,019	5,261
Butuan City						60	0	9	26	96	1,843	1,266	3,110	3,205

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/ Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/ Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inven-tory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2016														
PHILIPPINES						14,617	100	1,726	9,135	25,579	336,761	393,901	730,662	756,241
NCR						3,405	44	175	2,477	6,100	3,278	52,244	55,522	61,622
Baguio City						30	-	1	29	60	553	1,596	2,149	2,209
Angeles City						43	0	2	35	80	729	1,495	2,224	2,304
Olongapo City						20	1	2	29	52	513	1,053	1,566	1,618
Lucena City						53	0	5	28	85	797	1,067	1,864	1,949
Iloilo City						188	0	13	63	264	1,552	1,653	3,204	3,469
Bacolod City						234	2	10	80	326	2,007	2,138	4,146	4,472
Cebu City						313	4	15	148	480	2,913	3,652	6,565	7,045
Lapu-lapu City						81	0	4	19	104	1,282	1,607	2,888	2,992
Mandaue City						147	0	3	29	180	1,178	1,478	2,656	2,836
Tacloban City						92	0	13	16	122	1,096	840	1,936	2,058
Zamboanga City						179	0	18	106	302	4,473	3,399	7,872	8,174
Iligan City						44	0	6	18	68	1,452	1,369	2,821	2,889
CDO City						211	0	17	80	308	2,756	2,598	5,354	5,662
Davao City						399	2	31	154	587	8,068	6,484	14,552	15,139
Cotabato City						88	2	6	89	186	1,106	981	2,087	2,273
Gen.Santos City						201	0	14	32	247	2,711	2,403	5,114	5,361
Butuan City						62	0	10	26	97	1,878	1,290	3,169	3,266

Housing Needs Estimates, by Housing Indicator, by Highly Urbanized Cities: 2011-2017 (cont.)

(Unit in Household)

Year/Region	Accumulated Needs (as of January 1 of each year)					Incremental Accumulated Needs (January 2-December 31 of each year)					Future Needs			Total Incremental Needs
	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Accumulated Needs	Rent-free w/o Consent of owners +Marginal	Home-less	Dilapidated/Condemned	Doubled-Up Households in Acceptable Units	Total Incremental Accumulated Needs	Inventory Losses	Projected No. of New HHs that can afford to buy/rent	Total Future Needs	
2017														
PHILIPPINES						14,895	102	1,759	9,309	26,065	343,160	401,385	744,544	770,609
NCR						3,469	45	178	2,524	6,216	3,340	53,237	56,577	62,793
Baguio City						30	-	1	30	61	564	1,626	2,190	2,251
Angeles City						44	0	2	35	82	743	1,523	2,266	2,348
Olongapo City						21	1	2	29	53	523	1,073	1,596	1,648
Lucena City						54	0	5	28	86	812	1,087	1,900	1,986
Iloilo City						191	0	13	64	269	1,581	1,684	3,265	3,535
Bacolod City						239	2	10	81	333	2,046	2,179	4,225	4,557
Cebu City						319	4	16	150	489	2,968	3,722	6,690	7,179
Lapu-lapu City						82	0	4	20	106	1,306	1,637	2,943	3,049
Mandaue City						150	0	3	30	183	1,201	1,506	2,707	2,890
Tacloban City						94	0	13	17	124	1,117	856	1,973	2,097
Zamboanga City						182	0	18	108	308	4,558	3,463	8,021	8,329
Iligan City						45	0	7	18	69	1,480	1,395	2,874	2,944
CDO City						215	0	17	82	314	2,808	2,647	5,455	5,770
Davao City						407	2	32	157	598	8,222	6,607	14,829	15,427
Cotabato City						90	2	7	91	189	1,127	999	2,126	2,316
Gen.Santos City						205	0	14	33	252	2,762	2,449	5,211	5,463
Butuan City						63	0	10	27	99	1,914	1,315	3,229	3,328