

REFUGEES, INCREMENTAL HOUSING, AND SHELTER IN THE 21ST CENTURY

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Sub-Topic theme: Arrival Cities: Responding to Migrants and Refugees

ABSTRACT

The lack of adequate and affordable rental housing stock to accommodate an increasing number of Syrian refugees has put a strain on the capacity of cities in Northern Jordan such as Jerash, Ajloun, and Irbid. This paper examines the post-implementation impact of the incremental housing model of the Norwegian Refugee Council (NRC)'s Urban Shelter Program for assisting refugees in urban settings.

NRC's program provides financial assistance for house expansions and finishing to homeowners in exchange for rent-free accommodation to Syrian refugee families. Through surveys with participant homeowners, semi-structured interviews with NRC and UNHCR officers, and mapping of social and public infrastructure, we have found that NRC's Urban Shelter Program increases the total housing stock available in Northern Jordan cities, improves building standards and material quality, and supports the local economy. As opposed to cash-for-rent programs that can add pressure to constricted housing markets, NRC's approach provides adequate shelter for refugees without disrupting existing urban systems

I BACKGROUND

In a five-year period, the Syrian war has created an unprecedented refugee crisis, with more than 13 million Syrians internally displaced and an additional 4.5 million fleeing to neighboring countries. In Jordan, 85% of the more than 650,000 registered Syrian refugees live outside of refugee camps in urban areas, often in substandard and overcrowded shelters without tenure security (UNHCR, 2016). Given that urban governance and infrastructure need to be able to absorb rapid population influxes and outflows, it is important to create flexible tools that not only make new housing stock available promptly but also allow this new housing stock to be put to other use if the displaced population leaves.

A rental support grant is one such tool to assist refugees by addressing immediate housing needs. In Jordan, UNHCR is coordinating Cash-for-Rent programs to vulnerable refugee households in urban areas, however, a more structural problem is the shortage of affordable housing stock for rent (3RP 2016). Urban densification is an alternative that makes more accommodation available, and stimulates the housing construction market. Densification may be in the form of vertical expansion of existing housing units or in terms of urban in-fill—building on vacant plots in the city.

The principle aim of this paper is to identify best practices from the Norwegian Refugee Council (NRC)'s Urban Shelter Program, which provides financial assistance for house expansions and finishing to homeowners in exchange for rent-free accommodation to Syrian refugee families up to 24 months (NRC, 2015). Building on NRC's shelter programs for Syrian refugees in Lebanon, this first-of-a-kind program provides an opportunity to discuss and analyze incremental construction and standardization that benefit both homeowners and refugees through the implementation of SPHERE standards in an urban setting. Our proposed research is part of a greater study that addresses incremental housing in urban areas as a strategy for 21st century urban growth. As conflicts prevail in most areas of the world, a greater number of families are forced to flee their homes. It is imperative to think of how cities will accommodate this population.

The Affordability Challenge

As refugees in the region have limited opportunities for legal employment, they often have to face difficult economic choices between paying for essential goods and services (food, health, education, etc.) and paying rent. In Jordan, rent is one of the largest household expenditures for Syrian refugees. A December 2014 UNHCR survey on the livelihoods of 1,634 Syrian refugee households in Jordan found that on average monthly rent represented 30.9% of a Syrian refugee household's monthly expenditure (UNCHR 2014). Given that Syrian refugees in Jordan earn an average monthly income of JOD 100 (USD 140) yet pay over JOD 150 (USD 211) in rent, most rely on paying rent through diminishing savings, borrowed money and cash assistance (UNHCR, 2014). With increased numbers falling into debt, Syrian refugee families are exposed to the risk of eviction.

Rising rents have exacerbated housing affordability for Syrian refugees in Jordan, who have reported an overall increase of 14% in rental prices across the country between 2013 and 2015, with the majority of refugees paying around JOD 150(USD 211) per month on rent (NRC, 2015). The Government of Jordan has noted similar trends for Jordanian tenants in some parts of the country (GoJ 2014). In a 2013 assessment, 89% of surveyed Syrian refugee households were recorded to be in debt, with an increase both in the number of indebted households and amount of debt compared to baseline surveys in 2012, where Syrian families reported an average debt of JOD 573 (USD 843) (UNHCR/IRD 2013).

The Tenure Security Challenge

In Jordan, a recent NRC study revealed that 70% of Syrian refugees do not have secure tenure, with many households renting without basic rental agreements (NRC 2014). The lack of agreements leaves them vulnerable to forced eviction and further displacement. Syrian refugee families assessed by NRC reported moving frequently in an attempt to secure affordable accommodation crucially impacting their ability to maintain their legal status as they are required to update their place of residence on government-issued service cards in order to access local services (NRC 2015).

Objectives of Research

The primary aim of this research is to understand how incremental housing can be used as a strategy for supplying adequate shelter for refugees in urban areas. For more than five decades, incremental building has been used as a sanctioned method for increasing housing stock in cities. Official incremental methods are primarily used by governments and NGO's in social housing programs, commonly referred to as 'site and service' projects. However, incremental building is also an organic method of construction in most of the developing world, families slowly add an additional room or floor to their houses in a span of years as they have the means. While this phenomenon has been well-documented for decades, utilizing incremental housing as a strategy for refugee shelter provision is an innovative experience.

Through a mixed-methods approach for capturing essential data on NRC's Urban Shelter Program, this research intends to shed light on the following aspects of incremental housing for refugees and its impacts on urban areas:

- *Incremental housing process* - Understand if incremental housing is already a natural phenomenon in Jordanian cities, and if it is, how NRC's program harnesses this process for the purposes of refugee shelter.
- *Financial assistance for building* - Analyze how homeowners that have participated in NRC's program benefitted from the financial assistance offered for finalizing their house additions.
- *Technical assistance for building* - Learn about the standards and practices used by Jordanian homeowners and the contribution of NRC's technical assistance
- *Housing typologies* - Observe the spatial configuration patterns in Jordanian houses that are part of NRC's program.
- *Access to public and social infrastructure* - Investigate if houses participating in the Urban Shelter Program have access to essential public and social infrastructure.
- *Recommendations for future assistance* - Envision how NRC's program can be improved to successfully scale-up to assist a greater portion of the refugee population in Jordan.

II. METHODOLOGY

The methodology is derived from the research of Graham Tipple and MIT's Special Interest Group in Urban Settlement's (SIGUS) framework, which combines quantitative and qualitative research for the purpose of finding patterns on incremental housing building and financing, as well as the socio-economic impact this may have on urban areas (Tipple, 2000; Gattoni et.al., 2011). For the purpose of this paper, field research was focused in three Jordanian cities where the NRC Urban Housing Program has been implemented: Irbid, Jerash, and Ajloun, all of which are in the Jordan Northern border (Figure 1).

Figure 1. Location of Case Study Cities



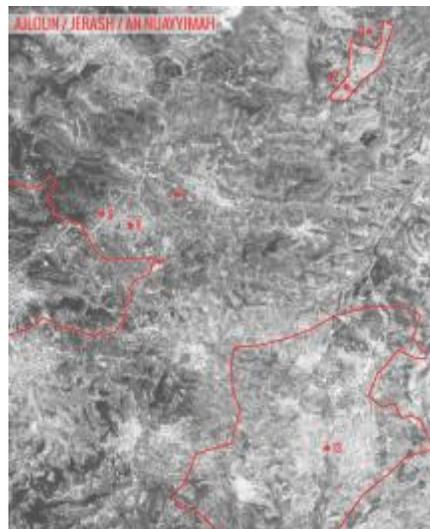
The field data gathered includes surveys with homeowners that have taken part in the NRC program, interviews with shelter officials from NRC and UNHCR Jordan offices, photographs of program's housing expansions, and mapping of public services and infrastructure accessibility. Semi-structured interviews with NRC officials as well as UNHCR's Shelter Program were carried out to understand the collaborative relationship between the humanitarian organization and government. Additional data was gathered through an extensive literature review on the greater Syrian refugee crisis, as well as NRC's Urban Shelter Program in

Jordan and Lebanon. Finally, geospatial analysis was used to understand the progressive impact of this project on urban centers in Jordan.

Survey of Users and Incremental Expansions

The survey method developed by SIGUS to specifically to analyze incremental growth of houses was used for homeowners that participated in the NRC program. These surveys are supplemented by photographs and floorplans of the seventeen different case studies we analyzed. We applied a total of seventeen semi-structured questionnaires to homeowners that had taken part in NRC's Urban Shelter Program. The survey sample group was chosen by NRC officers, with the purpose of being representative of the greater population of homeowners that had participated in the program (Figures 2 and 3).

Figures 2 + 3: Location of Case Studies



III. SURVEY RESULTS

NRC provides financial support to Jordanian homeowners who have already built the basic infrastructure and core of the expansion of houses in order for them to finish the remaining work in a period of two months. This support is contingent on the homeowners providing the spaces built for refugees at no cost for up to two years. Almost 70% percent of respondents indicated they could have financed the expansion without NRC's program, however, the

remaining 30% of our sample demonstrates that this program is able to reach less economically advantaged households.

NRC’s financial assistance to Jordanian homeowners for house expansions and finishing has evolved since the inception of the program. In 2013 when the urban shelter program began, NRC’s assistance ranged from JOD 1,000 (USD 1,409) per bedroom a year to JOD 1,400 (USD 1,973) per bedroom for a year and half. However, there was low interest from Jordanian residents in building small units as they did not accommodate the needs of a traditional Arab family. Given this cultural factors, 10 months ago NRC changed their financial incentives for a 18 month rent-free requirement through the following tiers (Jouri 2016):

- JOD 2,000 (USD 2,818) for one bedroom
- JOD 3,000 (USD 4,228) for two bedrooms
- JOD 3,800 (USD 5355) three bedrooms
- JOD 4,200 (USD 5,919) for four bedrooms

Since 2013, when the program began, until mid 2015 the following financial incentives were provided to Jordanian families interested in participating in NRC’s Urban Shelter Program (Table 1).

Table 1. Financial Incentives for Jordanian Families

Number of bedrooms	12 month (in JOD)	18 month (in JOD)	24 month (special cases) (in JOD)
1	1000	1400	2000
2	2000	2800	3000
3	3000	4200	
4	4000	5600	

Taking the aforementioned into account, we analyze how the houses are being valued on a monthly basis in order to compare the perception of the value that homeowners assign to

expanded units once the contract with NRC expires. In the following table we show the percentage of difference between NRC's monthly value and the one of the homeowner (Table 2).

Table 2. Perception of monthly Value of Expansion

Number of bedrooms	NRC's monthly value (before 2015 on a 12 month contract)	NRC's monthly value (before 2015 on a 18 month contract)	NRC's monthly value (before 2015 on a 24 month contract)	NRC's monthly value (since mid-2015 on 18 month contract)	Homeowner's monthly value*
1	\$JD 83.3	\$JD 77.77	\$JD 83.3	\$JD 111.11	JOD 170
2	\$JD 166.66	\$JD 155.55	\$JD 125	\$JD 166.66	JOD 150-160
3	\$JD 250	\$JD 233.33		\$JD 211.11	JOD 120-250
4	\$JD 333.33	\$311.11		\$JD 233.33	JOD 150-250

* Values are only representative of answers from 12 surveyed homeowners that have units varying in size and quality

Table 1 represents both the changes of financial assistance from NRC depending on the length of the contract and the homeowner's own perception of value on their expansion. As seen in the table above, NRC's and the homeowner's value on the expansion varies by 1 to 2%. Additionally, 70% of homeowners we interviewed would continue to rent the NRC expansions to refugees, the other 30% would use it for personal means. While it's important to note that the disposition of continuing to rent is positive for the larger part of the respondents of our surveys, it is as vital to understand that the average rental costs is higher than what is feasible for refugees to pay.

According to a case study from the World Bank Group, the average salary of a Jordanian worker is JOD 257 (USD 362) (World Bank Group 2016). The continuity of the rent contract not only depends on the willingness of the Jordanian homeowners but the affordability for the Syrian refugees. A recent study showed nine out of ten Syrians outside camps live below the Jordanian poverty line of JOD 68 (USD 87) per capita per month (Rummery 2016). This can be attributed

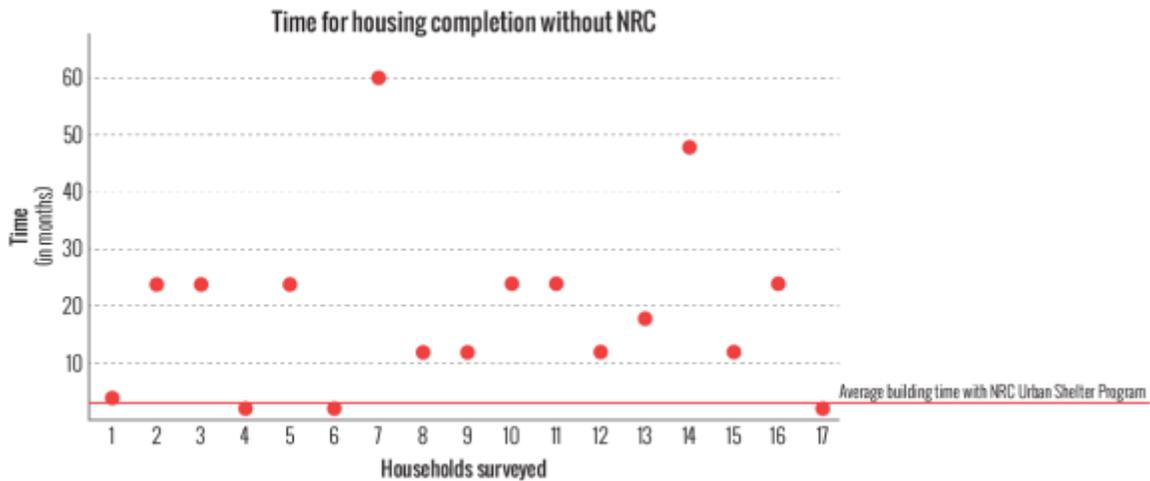
to the fact that refugees are not allowed to work in Jordan. Nonetheless, many of them find employment in the informal sector of industries like construction and agriculture. There are also remittances from family members living in Europe that could potentially help them afford rent after NRC's program. As of April of this year, the Government of Jordan has put forward the following measures that will help Syrian refugees find legal employment :

- a 90-day grace-period that allows employers in the informal sector to freely obtain work permits for Syrian refugees which will regularize their employment and allow them to work like other migrant workers in the country.
- The temporary waiver of fees (which range between USD 170 to USD 1,270 depending on the sector) is an important reprieve: Many Syrian refugees have been sinking into poverty as the war at home drags on, increasing the risk that they will work illegally in host countries. For employers of Syrians, the new grace period also allows them to legalize workers and avoid steep fines of between USD 280 and USD 2,100 which were imposed previously and led to the closure of many businesses.
- Authorities will allow Syrian refugees to use UNHCR-issued asylum-seeker cards and Jordanian Ministry of Interior identity cards to obtain work permits. Previously, the only way to do so was using a passport and proof of legal entry into the country. As most Syrian refugees lack passports and proof of legal entry status, many were precluded from having jobs. Authorities have now removed that requirement, paving the way for thousands more Syrians to be legally employed.

(Rummery 2016)

NRC's Urban Shelter Program also provides important support to homeowners to lower the construction time of housing expansions (Figure 4).

Figure 4. Time for Housing Completion without NRC

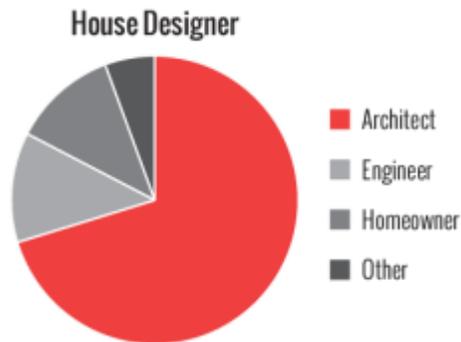


From the survey results, 88.21% of respondents answered that it would have taken them from 1-5 years of construction time without NRC’s intervention. With the continuous and rapid influx of refugees into Jordan, it is imperative to have programs that can create new housing stock at a continuous fast-pace. To this end, NRC’s maximum length of construction time is two months. During this time, homeowners are supported with NRC engineering and architectural staff.

The impact of NRC’s financial support on the building quality of house expansions is another noteworthy finding from our survey results. In terms of the quality of the house, 50% of the respondents believe that NRC’s financial assistance helped the quality of the expansion. Furthermore, 82% of the respondents believed that the quality of the expansions built was of high or very quality. This is important to note because it speaks to how the program is able to improve the building material quality which in the long term improves the long-term sustainability of the built expansion leading to fewer investments for home improvements.

The following data in our survey highlighted the different ways that the NRC Urban Shelter Program supports the local economy during the construction process. While three people responded that they designed the expansion of the house, the remaining homeowners hired architects or engineers (Figure 5). Additionally, out of the all the respondents, only one indicated that he built the expansion, the rest employing small to medium-size contractors.

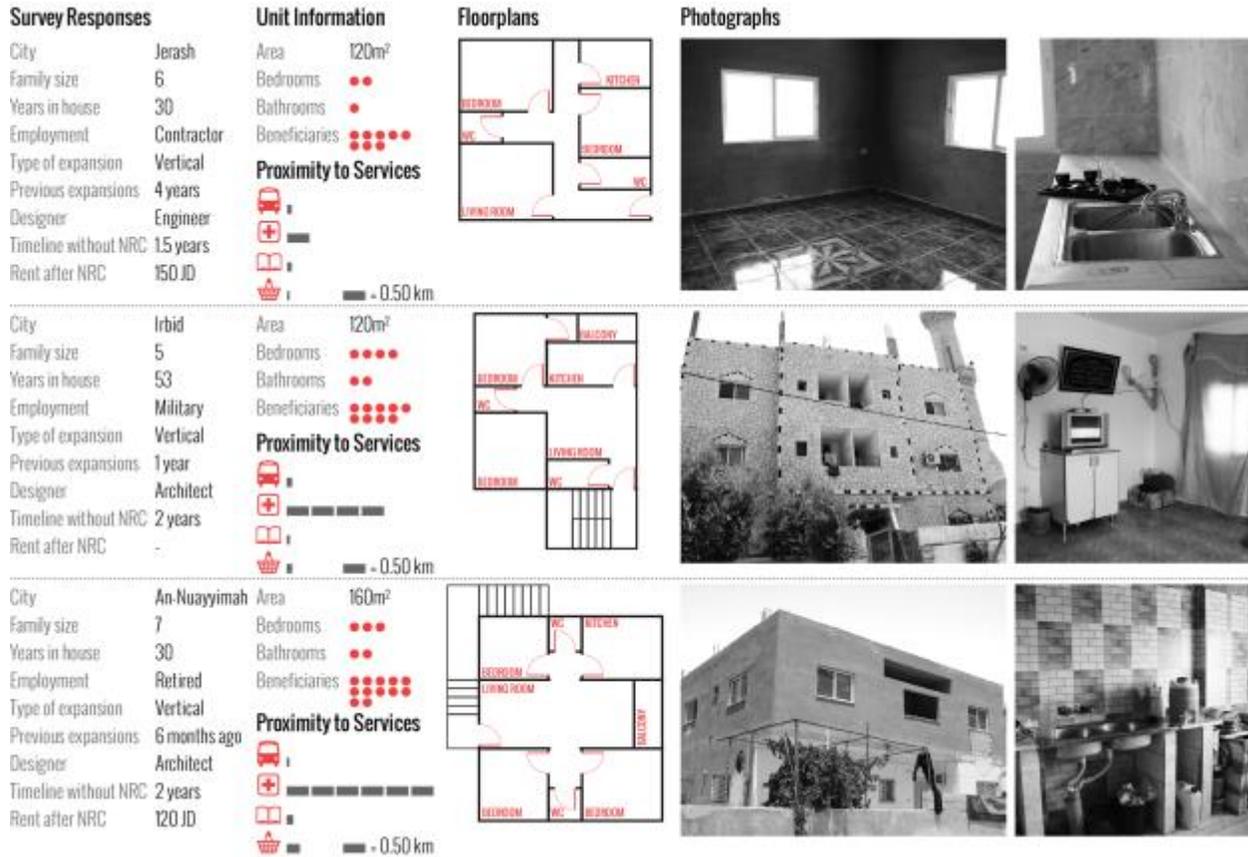
Figure 5. House Designer of Households Interviewed



Homeowner and house profiles

The following pages demonstrate a sample of our survey results. Included is the basic information of respondents, proximity to basic and social services (transportation, health centers, schools, and markets), the floorplan of the NRC-sponsored additions, as well as interior and exterior photographs of each house. Some noteworthy findings include the varying size of sample units, that range from 80m² to 250m². Likewise, all the houses were in close proximity to most basic and social services, the only exception being access to health centers, which in many cases was the furthest service (Figure 6).

Figure 6. Survey Response Sample



Post-Urban Shelter Program

In addition to the previously discussed benefits of the program, the survey we administered includes questions about expansion usage post-program completion and amount of rent willing to change in order to comprehend the impact of NRC'S Urban Shelter Program once leases are terminated

The post-use of the expansion space by homeowners were divided into two categories: rent and personal use. 70% of the homeowners reported that they intend to continue renting the space to receive an additional source of income. Homeowners that plan to use expanded units for personal use mentioned that they intend the units to serve as homes for their sons.

More than half of the homeowners expressed that the main reason for expanding their house was due to personal reasons as aforementioned. The other two categories, rent or investment, made up the other 47% of answers. Survey results indicate that the cultural tradition

of building an extension for a son and his future family is an incentive for Jordanian families to participate in the Urban Shelter Program. It is in the interest of a family to support male offsprings achieve homeownership as this becomes an advantage once they decide to get married.

For the majority of the respondents, the price they would charge for their property expansion would not change if it were rented by the current Syrian beneficiaries. A couple of homeowners answered rental costs charged would be less if the refugees are favorable tenants . One could argue that the exposure to a program like NRC's Urban Shelter Program that integrates Syrian refugees in Jordanian homes is able to create a more sympathetic environment and emphatic attitude from citizens of the host country.

Finally, 70% of the respondents expressed a commitment to add further expansions in the future. This elevated number shows that there is a natural disposition towards incremental housing that NRC's program is able to harness for the purposes of refugee shelter and that is likely to be continued after the program.

IV. DISCUSSION & POLICY IMPLICATIONS

Our investigation has shown that NRC's role as an intermediary between Syrian refugee families, Jordanian homeowners, local governments, local builders, and contractors has established a model for the incremental expansion of existing housing stock to accommodate influx of the refugee population in Northern Jordan. Through qualitative surveys with homeowners we have identified the following benefits of NRC's Urban Shelter Program for refugees:

- **Quality of housing:** NRC's role as an intermediary ensures that the housing expansions carried out by homeowners are built according to SPHERE habitability guidelines, including at least 3.5m² per person, access to water, electricity, and structural safety of the building.
- **Tenure Security and Affordability:** refugee households can enter into rental agreements and receive rent-free housing for up to 24 months. NRC's legal counseling program facilitates access to remedies in case of the possibility of eviction and helps establish positive relationships and understanding between host families and refugee families.
- **Access to services:** NRC's standards demand houses hosting refugees to be at a maximum distance of 2 km to basic services. With this standard, refugees have better access to local markets, education, healthcare, public transportation, and other goods and services. All surveyed households were less than 2 km away from markets, schools, health care facilities and public transportation.
- **Increased demand for local materials, labor, and contractors:** Incremental construction increases the much needed housing stock in overcrowded cities and contributes to the economy of urban areas by involving local builders, contractors and architects. All surveyed households worked with local contractors to build the expansions and 14 out of 17 households said they worked with architects to design the expansions. In 2014, 20% of the new private housing units constructed in Irbid Governorate were facilitated by the NRC Urban Shelter Program (NRC 2015).
- **Urban Densification:** By assisting the construction of multi-story building, NRC's Urban Shelter Program is a driver of urban densification in cities receiving refugee families. When mapped within the Governorate of Irbid, we found that all surveyed units

were built in designated urban areas and more than 80% constituted vertical expansion (See Map “Land Use and Densification in the Governorate of Irbid” in Appendix V). As the households of homeowners interviewed in this qualitative survey constitute a very small portion of total homeowners, a more detailed mapping with all households participating in NRC’s USP would indicate whether or not the program is contributing to urban densification or sprawl at scale.

NRC’s Urban Shelter Program’s success is based not only on mediation between homeowners and refugee tenants but also continuous oversight throughout the process. While our surveys have revealed NRC’s role has established and promoted standards for quality shelters, the program can be further streamlined to accommodate the needs of more beneficiaries.

Shelter officials from NRC and UNHCR interviewed for this research cited humanitarian standards in urban settings as an urgent need to resolve. A recent innovation in this area has been the SPHERE Project’s initiative, Sphere for Urban Response. Since 2016, the SPHERE Project has begun to create a handbook for humanitarian standards in urban settings, that takes into account the complex web of systems found in urban environments. When completed, the Sphere for Urban Response handbook will provide practitioners with a methodology to address the multiple challenges of humanitarian work in urban settlements. This includes identifying urban risks and vulnerability including access to services, building standards, and urban planning, as well as risks of economic shocks from varying food and rental prices (The Sphere Project, 2016).

Another current limitation is the need for more diverse typologies, such as smaller 1-bedroom units for nuclear families. Our survey found that 14 out of 17 units had more than 3 bedrooms. While homeowners have full control over the expansion process, with NRC’s oversight, there can be more consultation with refugee families to accommodate a wider range of families, such as female-headed households that make up 24% of refugee families in Jerash and Ajloun (NRC 2014). Design interventions for subdivisions, for example, can accommodate smaller families and help reduce the cost of the program.

At scale, the NRC program would not only increase the stock of housing for rent but also stimulate housing markets through cash-based assistance that has an economic multiplier effect through required construction and building systems services. NRC estimates that across Irbid, Jerash, and Ajloun Governorates the Urban Shelter Program meets the shelter needs of 8% of the registered Syrian refugee population (NRC 2015). Though innovative and successful at its

current scale, the deficit of affordable housing in Jordan remains. Nonetheless, the presence of a functioning construction industry, and the existence of partially finished buildings that could be upgraded to create additional housing units, as well as possibilities to explore temporary subdivisions, the program has the potential to be scaled up.

Another enabling factor for the NRC Urban Shelter Program is Jordan's 1994 Landlords and Tenants Law, where any person, including a refugee, can legally enter into a contract and is protected by its stipulations. Accordingly, NRC's Information, Counselling, and Legal assistance (ICLA) team ensures that a transparent rental document is accepted by both parties and is recognized in a Jordanian court of law, which protects families from arbitrary eviction. This is stark contrast with the fact that about 10% of Syrian refugees assessed by NRC's shelter programs were under immediate threat of eviction, and 40% of Syrian refugees applying to NRC for shelter support report that they have had to move at least three times in the last year (NRC 2015).

A motivating factor for Jordanian homeowners to expand their houses is to accommodate their growing families. More than half of respondents for said that they wanted to use expanded for their extended families, while others cited investment and future rent as a motivation. While these motivations are specific to the cultural context of Jordan, where families prefer to live together in close proximity, transferability to other contexts is still possible given that incremental building is also seen as a sound investment.

As the scale of shelter needs has become a key source of tension within host communities, incremental building schemes like NRC's Urban Shelter Program takes the market effects of interventions into account, provides proximity to essential services and works with local communities to ensure programming and oversight for facilitating social cohesion. Given these benefits of shelter provision in urban settings, humanitarian and development actors should prioritize shelter responses in collaboration with host communities.

CONCLUSIONS

NRC's Urban Shelter Program provides a legal platform through which homeowners can expand their dwellings. By supplying a grant for families to finish their houses, NRC provides a financing mechanism that would have otherwise been inaccessible to low and middle-income households. Through NRC's financing, families are able to build their expansions in a period of two months, instead of an otherwise prolonged period of one to five years. Likewise, engineer and architecture teams from NRC lend technical assistance to families so that housing expansions are designed and built according to Jordanian construction standards as well as SPHERE humanitarian standards.

Architectural and engineering expansion plans are submitted to the proper municipal authorities and are formally approved by the regulating governmental bodies. This formalization process implies that households can secure legalized documents and the municipal authorities have an updated cadastre for taxing and planning purposes. Finally, the NRC Urban Shelter Program increases the affordable housing stock in cities using existing building structures, thus counteracting sprawling cities.

Unlike other self-built housing monetary assistance programs, NRC's Urban Shelter Program takes a comprehensive approach by closely supervising the construction of the expansion, including legal assistance between the homeowner and beneficiary rental contract and regular monitoring of the living experience from both parties involved.

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APPENDIX

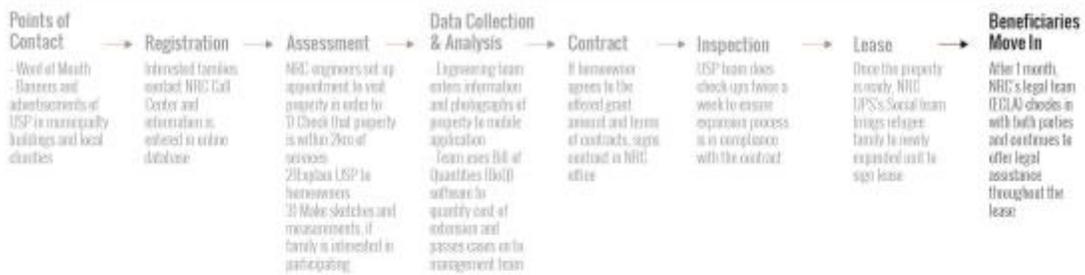
I. Map of NRC Urban Shelter Program

URBAN SHELTER PROGRAM ROADMAP

Refugee Families



Homeowners



II. Profiles with Photos

Survey Responses

City Irbid	City Irbid	City Irbid	City Irbid
Family size 10	Family size 5	Family size 3	Family size 10
Years in house 18	Years in house 53	Years in house 25	Years in house 45
Employment Teacher	Employment Military	Employment Engineer	Employment Military
Type of expansion Vertical			
Previous expansions 2 years	Previous expansions 1 year	Previous expansions 1.5 years	Previous expansions 2 years
Designer Architect	Designer Architect	Designer Homeowner	Designer Architect
Timeline without NRC 4 months	Timeline without NRC 2 years	Timeline without NRC 2-4 months	Timeline without NRC 2 months
Rent after NRC 150 JD	Rent after NRC -	Rent after NRC 150 JD	Rent after NRC 250 JD

Basic Unit Information

• - one unit

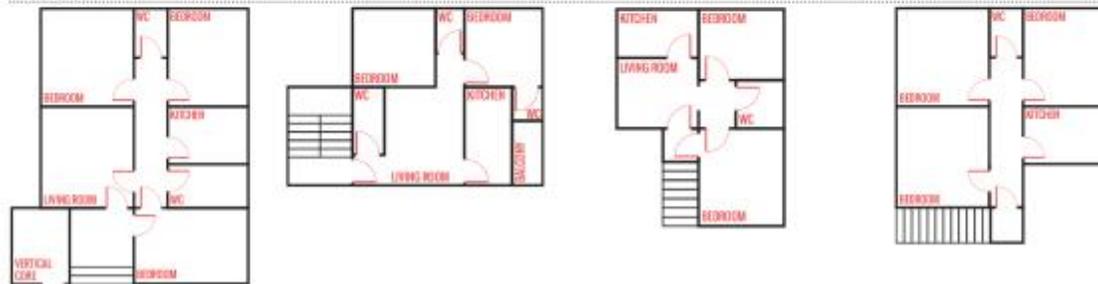
Area 90m ²	Area 120m ²	Area 90m ²	Area 80m ²
Bedrooms ●●●	Bedrooms ●●●●	Bedrooms ●●	Bedrooms ●●●
Bathrooms ●●	Bathrooms ●●	Bathrooms ●	Bathrooms ●
Beneficiaries ●●●●	Beneficiaries ●●●●	Beneficiaries ●●●●	Beneficiaries ●●●●

Proximity to Services

■ - 0.50 km

 ■■■■	 ■■■■	 ■■■■	 ■■■■
 ■■■■	 ■■■■	 ■■■■	 ■■■■
 ■■■■	 ■■■■	 ■■■■	 ■■■■
 ■■■■	 ■■■■	 ■■■■	 ■■■■

Floorplans



Photos



Survey Responses

City Irbid	City Irbid	City An-Nuayyimah	City An-Nuayyimah
Family size 8	Family size 6	Family size 7	Family size 3
Years in house 12	Years in house 8	Years in house 30	Years in house 30
Employment Military	Employment Retired	Employment Retired	Employment Retired
Type of expansion Infill	Type of expansion Infill	Type of expansion Vertical	Type of expansion Vertical
Previous expansions 2 years	Previous expansions 1 year	Previous expansions 6 months ago	Previous expansions 1 year
Designer Architect	Designer Homeowner	Designer Architect	Designer Architect
Timeline without NRC 2 years	Timeline without NRC 2 months	Timeline without NRC 2 years	Timeline without NRC 1 year
Rent after NRC -	Rent after NRC 150 JD	Rent after NRC 120 JD	Rent after NRC 150 JD

Basic Unit Information

• - one unit

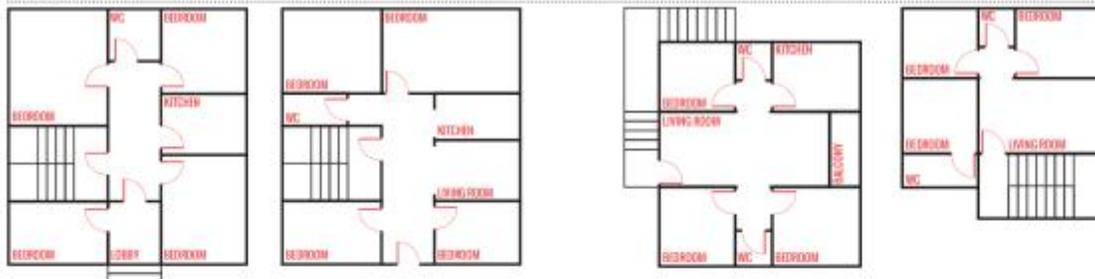
Area 200m ²	Area 250m ²	Area 160m ²	Area 90m ²
Bedrooms ●●●●	Bedrooms ●●●●	Bedrooms ●●●	Bedrooms ●●●
Bathrooms ●	Bathrooms ●	Bathrooms ●●	Bathrooms ●
Beneficiaries -	Beneficiaries ●●●●	Beneficiaries ●●●●	Beneficiaries ●●●●

Proximity to Services

■ - 0.50 km



Floorplans



Photos



Survey Responses

City Jerash	City Irbid	City Irbid	City Irbid
Family size 6	Family size 2	Family size 4	Family size 9
Years in house 30	Years in house 5	Years in house 10	Years in house 8
Employment Contractor	Employment Retired	Employment Air force	Employment Blacksmith
Type of expansion Vertical	Type of expansion Vertical	Type of expansion Vertical	Type of expansion Vertical
Previous expansions 4 years	Previous expansions 1 year	Previous expansions 2 years	Previous expansions 1 year
Designer Engineer	Designer Architect	Designer Bought built	Designer Engineer
Timeline without NRC 1.5 years	Timeline without NRC 4 years	Timeline without NRC 1 year	Timeline without NRC 2 years
Rent after NRC 150 JD	Rent after NRC 160 JD	Rent after NRC 250 JD	Rent after NRC 150 JD

Basic Unit Information

• - one unit

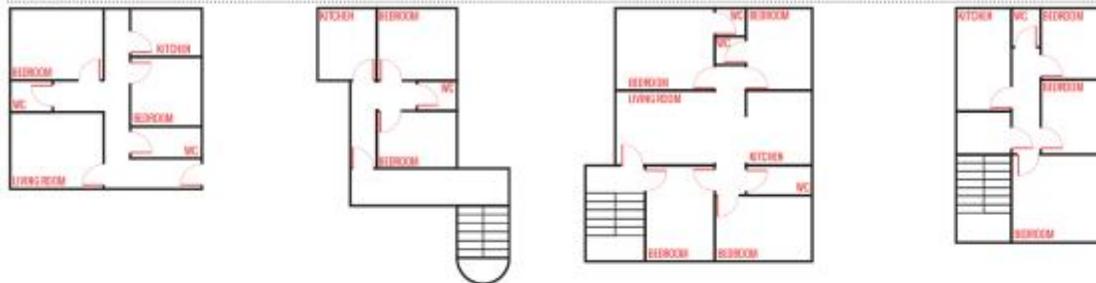
Area 120m ²	Area 90m ²	Area 100m ²	Area 90m ²
Bedrooms ●●	Bedrooms ●●	Bedrooms ●●●●	Bedrooms ●●●●
Bathrooms ●	Bathrooms ●	Bathrooms ●●●	Bathrooms ●
Beneficiaries ●●●●●	Beneficiaries -	Beneficiaries -	Beneficiaries ●●●●●

Proximity to Services

■ - 0.50 km



Floorplans



Photos



III. Land Use and Densification Plan

