

2013

City of North Platte Mobile Home Ordinance

Health Impact Assessment

A look at substandard housing's impact on health.

West Central District Health Department in conjunction with Advisory
Council members from the North Platte community, with technical
assistance from Human Impact Partners and funding assistance from the
Nebraska Department of Health and Human Services



History of the Health Impact Assessment

According to a March 2012 report by Martin H. Shukert of RDG Planning and Design, a major and very visible concentration of substandard housing appears in older mobile home parks in North Platte. The largest mobile home park in North Platte is on East Philip Avenue east of South Welch Avenue. Other smaller parks are scattered in various locations, often on the edge of town or within several blocks of the Union Pacific rail corridor. In some cases, these smaller mobile home parks, which lack the critical mass to develop site amenities, display the worst housing conditions (RDG Planning & Design, 2012).

Mobile homes that don't meet code in other communities are being moved into North Platte (Bottrell, 2012). These mobile homes are in poor condition and the current regulations -- based on State standards for mobile home parks dating back to 1976 -- require revisions to protect the citizens. Aged regulations make the City vulnerable to potential health issues related to substandard housing conditions and may affect the aesthetics of these communities.

Given the opportunity to improve health, an Advisory Council was formed to identify possible revisions to the City ordinances that could improve the housing conditions that shape health. The Advisory Council consisted of diverse representation from the business, medical, and public health fields, as well as various city agencies and a County Commissioner. The Advisory Council purposefully sought to include the West Central District Health Department (WCDHD) in reviewing the health risks associated with substandard housing.

Advisory Council members were:

- Nancy Striebel, Lincoln County Development Corporation
- Dan Mauk, North Platte Area Chamber
- Norm Franken, City of North Platte, Building Inspector
- Judy Clark, City of North Platte, Planning and Development Department
- Lori Hepperly, City of North Platte, Compliance Inspector
- Barb Long, City of North Platte, Compliance Inspector
- Michelle McNae, Great Plains Regional Medical Center
- DiAnn Kolkman, First National Bank
- Willis Roethemeyer, County Commissioner
- Shannon Vanderheiden, West Central District Health Department

A major and very visible concentration of substandard housing appears in older mobile home parks.

Report by Martin H. Shukert of RDG Planning and Design (March, 2012)

The Advisory Council developed a draft policy and accompanying inspection checklist (see Appendix A). Appendix B summarizes the current policy and changes suggested in the draft policy. Overarching changes in the draft policy include that it consolidates into a single ordinance language currently spread among different sections of city ordinance, and it applies existing requirements to homes brought into the city, which is not currently the case. Specific changes include that it reduces the time to obtain a permit from six months to 30 days. Also, it requires all mobile homes meet housing standards that ensure structural integrity and safety of the mobile home, bear a HUD label, and pass inspection by an

approved official/agency. The proposed changes described here will not impact mobile homes already in the City that are not moved; rather, any time a set down is required (unhook and move), the mobile home must obtain a permit within 30 days prior to being moved and comply with the mobile home ordinance within 30 days of placement on the lot.

West Central District Health Department, with the support of the Advisory Council, began a Health Impact Assessment, or HIA, in January 2013 and completed it in September 2013. The purpose of the HIA was to describe the affects the draft policy changes could have on the housing factors that shape the health of residents in North Platte to inform Planning Commission and City Council decisions on the policy. In addition, the HIA sought to identify relevant recommendations with the aim of improving health.^{*} The HIA process included developing a pathway diagram hypothesizing the ways the proposed policy changes could affect health (see Appendix C); gathering statistics on demographics, housing, and health; reviewing the literature on housing and health; and having conversations with mobile home park managers. As part of those conversations, City Inspector Norm Franken, reviewed draft of the proposed policy changes with eight mobile home park managers, and he found several would support the initiative.

Current Demographics, Housing , and Health Data in North Platte

The West Central District Health Department (WCDHD) service area covers almost 4,000 square miles and 37,000 residents in Lincoln, Logan, and McPherson counties in west central Nebraska. In the region, North Platte is the largest community, with a population near 25,000, of which children under the age of 18 comprise 25%, minorities 5%, and females 51% (U.S. Census Bureau, 2010).

The proportion of the city's housing supply that requires rehabilitation is within the expected range, given the nature of the supply; however, the aging nature of housing in North Platte suggests the issue requires attention. A five-year comprehensive housing study by Hanna:Keelan Associates published in August 2010 found 5% of North Platte's housing supply requires moderate or more extensive rehabilitation. However, three-year averages in the American Community Survey, including 2010 Census figures, show more than 41% of the City's housing units are 50 or more years old, one-third of which predate 1950, which is a time when deterioration can accelerate if reasonable repairs do not occur (RDG Planning & Design, 2012).

Mobile homes account for nearly one-tenth of the City of North Platte's 10,560 total households. Many residents are renters and median income in the City of North Platte is less than the state of Nebraska overall. Renters occupy 39% of all households, accounting for 34% of the total population (U.S. Census Bureau, 2010). According to city-data.com, the 2009 median household income was almost \$39,000. By comparison, the Census estimates the State's median income in 2009 was higher, at approximately \$48,000 (US Census Bureau, 2011). With the 2009 mean prices of detached houses over \$109,000,

^{*} More information and examples of health impact assessment in Nebraska are available through Douglas County Health Department: <http://www.douglascountyhealth.com/healthy-community/health-impact-assessments>. Information about the purpose and process of health impact assessment, and its use throughout the U.S., is available through the Centers for Disease Control and Prevention (<http://www.cdc.gov/healthypplaces/hia.htm>), and Human Impact Partners (www.humanimpact.org).

townhouses or other attached units over \$116,000, and mobile homes over \$32,000, mobile homes are the more affordable option.

Compared to the other health districts in Nebraska, WCDHD ranks first in the number of adults who reported being told they had asthma at 14.5%, potentially resulting in more days where residents experience poor health. WCDHD had the second highest proportion of adults that currently have asthma at 9.7%. Respondents reported a total of 6 days in the past 30 days where physical or mental health was not good, with 62% of those days a result of physical health. Poor physical and mental health resulted in 4.2 days in the past 30 days where their activities were limited. When applying 62% of people with physical health issues in the last 30 days, it equates to 2.6 days of limited activity as a result of poor physical health (Nebraska Department of Health and Human Services, 2007 - 2008).

Given the prominence of asthma among adults in WCDHD compared to other areas, and working within the available information, time and resources, the Advisory Council prioritized the HIA focus to asthma and the mobile home conditions hypothesized in the pathway diagram to contribute to it (see Appendix C).

Substandard Housing and Health

According to the American Journal of Public Health, May 2002, housing-related health concerns such as lead exposure and asthma are highly visible. Americans spend 90% of their time indoors, and an estimated two-thirds of that time is spent in the home (Pollack, Egerter, Sadegh-Nobari, Dekker, & Braveman, 2008). Very young children spend even more time at home and are especially vulnerable to household hazards. Indoor allergens and housing conditions play an important role in the development and exacerbation of respiratory conditions including asthma, which is the most common chronic disease among children. Residential exposures are believed to contribute to 40% of diagnosed asthma among children (Pollack, Egerter, Sadegh-Nobari, Dekker, & Braveman, 2008).

Manufactured structures have unique health and safety risks by virtue of their transportability, more confined spaces, use of different foundations and means of anchoring, and in some cases, different utility connections and services. Structural integrity also varies in manufactured homes due to their transportability. While statistics on the conditions of manufactured homes in North Platte was not readily available for this HIA, national statistics provide information about common issues. Of 6.9 million occupied manufactured homes in the U.S., 4.5% had sagging roofs, 3.0% had a visible hole in the roof, 2.5% had a visible hole in the floor, 2.6% had sloping outside walls, 6.7% had broken windows, and 1.4% had foundations with either visible crumbling, open cracks, or holes (Centers for Disease Control and Prevention and U.S. Department of Housing and Urban Development, 2011).

Moisture problems can be caused by structural issues in the roof, floor, walls, or foundations. Excessive moisture in buildings causes the growth of mold, and increases the possibility of dust mites and other pests. Exposure to house dust mite allergen is a risk factor for the development of asthma in susceptible children, and dust mites trigger asthma symptoms and respiratory irritation among some individuals. The National Academy of Sciences found sufficient evidence to establish a casual association between cockroaches and several respiratory conditions, including asthma exacerbation. There is also limited

evidence that links development of asthma in preschool-aged children to exposure to cockroach allergen. According to the 2005 American Housing Survey, more than 10% of mobile-home owners reported seeing rodents around their home within the last 3 months (Centers for Disease Control and Prevention and U.S. Department of Housing and Urban Development, 2011). Rodent urine and dander

contain allergens that can cause allergic reactions or trigger asthma symptoms in sensitive persons.

When comparing health districts in Nebraska, WCDHD:

- *Ranks first in the number of adults told they had asthma*
- *Ranks second in the number of adults that currently have asthma*

Nebraska DHHS Behavioral Risk Factor Surveillance System, (2007-2008)

Nationally, there has been a 15% growth in asthma in the last decade, costing US residents \$56 billion annually and resulting in 10.5 million missed school days and 14.2 million missed work days in 2008. About 9 people die daily from asthma. Statistics show adults with an annual income less than \$75,000 are more likely to have asthma (Center for Disease Control). Asthma is more prevalent in children (9.5% of children versus 8.2% of adults), women (9.7% female versus 7.2% male), and minorities (11.6% black, 7.3% Hispanic, 8.2% white) (Centers for Disease Control and Prevention, 2011).

Findings

Drawing on the literature reviewed, statistics gathered, and interviews conducted for the HIA, the Advisory Council found that overall, housing that satisfies the revised mobile home policy is likely more physically stable, has fewer pests, and less moisture and standing water. These housing conditions that shape health, particularly asthma, would improve. Improvements to these conditions could reduce the number of missed school and work days and medical costs associated with emergency room and doctor visits.

Additional predictions included:

- Changing the permit time for compliance with set-down from six months to 30 days will likely reduce the time tenants are exposed to poor housing conditions that contribute to conditions like asthma. Requirements for skirting will likely reduce moisture and standing water, which contribute to mold growth that the literature is strong in showing links to asthma, as well as presence of pests.
- Requiring that all mobile homes moving in North Platte comply with current mobile home standards will improve conditions for a moderate number of North Platte residents overall, but

will likely include many low-income residents, as well as youth, who are considered particularly sensitive to respiratory issues.

A Step Toward Better Housing and Health

In reviewing the proposed policy for its health implications, the HIA finds that reducing the time to obtain a permit, decreasing the age of the mobile home, and requiring compliance with current standards would improve the health of mobile home residents, especially children who are most vulnerable to substandard housing conditions. As a result, the Advisory Council recommends the City of North Platte update its standards to include these elements and improve its ability to enforce compliance with these standards. The Advisory Council also recommends the City of North Platte track and periodically report on mobile home inspection results. This information, in conjunction with future asthma and health information reported in Nebraska Department of Health and Human Services' Behavioral Risk Factor Surveillance System reports, can be used to monitor the impact of the revised policy.

Works Cited

- Bottrell, A. (2012, September 21). *City may appoint a health inspector*. Retrieved from nptelegraph.com: http://www.nptelegraph.com/news/city-may-appoint-a-health-inspector/article_8efc812f-d017-52b2-81fc-5dee61644450.html
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- U.S. Census Bureau. (2010). *Profile of General Population and Housing Characteristics: 2010*.
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Appendices

- A. Inspection Checklist Developed by Advisory Council
- B. Summary of Current Mobile Home Policy and Draft Revised Policy
- C. Pathway Diagram Illustrating How Changes in Mobile Home Park Policy Could Affect Health

Appendix A - Inspection Checklist Developed by Advisory Council

MOBILE HOME INSPECTION CHECKLIST

Date Requested: _____ Date Inspected: _____

Requested by : _____

Inspection Agency: _____ * PLEASE ATTACH BUSINESS CARD
(if not City of North Platte can be Architect, Engineer, Home Inspector or local Building Inspector)

Inspection Agency Phone Number: _____

Inspector Name: _____

HUD Data Plate Information

Manufacture Number: _____
Serial Number: _____

* PLEASE ATTACH PHOTO OF PLATE
AND PHOTOS OF ALL 4 SIDES
OF MOBILE HOME

EXTERIOR	YES	NO	COMMENTS
a. Is roof structure solid and capable of protecting interior from snow, rain and wind?			
b. Have any rooms, carports or storage areas been added to this mobile home?			
c. Are walls straight and in good condition?			
d. Is exterior trim and panels solid and attached?			
e. Is all flashing solidly attached around roof and openings?			
f. Is all metal frame work straight and rust free?			
g. Is the belly wrap in place and tear free?			
h. Is the siding free of any cracks, chips or holes?			
i. Are all vents protected with proper covers?			
j. Do the front and rear doors open, close and latch properly?			

INTERIOR	YES	NO	COMMENTS
k. Is the water heater and furnace in working order and properly supported?			
l. Is the floor solid and smooth?			
m. Do all interior doors open, close and latch properly?			
n. Are all outlets and switches in working order?			
o. Do all windows open and close smoothly?			
p. Is all glass unbroken?			

GAS AND PLUMBING	YES	NO	COMMENTS
q. Is the water heater and furnace labeled for mobile home installation?			
r. Are all gas, water and sewer lines properly supported?			
s. Was proper type of piping material used?			
t. Are working smoke alarms and CO detector in proper locations?			

CITY OF NORTH PLATTE - OFFICE USE ONLY	
Comment Notes: _____ _____ _____ _____	Inspection fee: \$ _____ Mileage fee: \$ _____ TOTAL FEE: \$ _____
APPROVED <input type="checkbox"/>	
DENIED <input type="checkbox"/>	

Appendix B - Summary of Current Mobile Home Policy and Draft Revised Policy

Proposed Changes to Mobile Home Policy

Current Policy	Possible Revisions to Policy
<ul style="list-style-type: none"> Policy written in different sections of city ordinance. 	<ul style="list-style-type: none"> Consolidates policy in single section of city ordinance.
<ul style="list-style-type: none"> Describes that existing mobile homes should have adequate support for placement and tie down. 	<ul style="list-style-type: none"> Applies same requirement for mobile homes brought into city limits.
<ul style="list-style-type: none"> Permits are 6 months to meet the requirements of the city ordinance in regards to mobile homes. 	<ul style="list-style-type: none"> Permits will be 30 days to meet the requirements of the city ordinance in regards to mobile homes.
<ul style="list-style-type: none"> Includes some architectural and aesthetic standards. 	<ul style="list-style-type: none"> Keeps those standards, and adds for any mobile home in city limits: <ul style="list-style-type: none"> mobile home must meet HUD standards must have a label saying it was built to meet HUD standards and built in Nebraska

Current Policy	Possible Revisions to Policy
<ul style="list-style-type: none"> No language on skirting. 	<ul style="list-style-type: none"> Adds that skirting will be of a durable building material.
<ul style="list-style-type: none"> No checklist for inspections. 	<ul style="list-style-type: none"> New checklist for inspections.
<ul style="list-style-type: none"> Anchors and tie-downs shall be placed at each corner of the mobile home stand, and four additional ties per side at intermediate points. 	<ul style="list-style-type: none"> This will now also apply to mobile homes that are moved into the city from outside of it.
<ul style="list-style-type: none"> Details types of anchors and tie-downs mobile home can have (e.g., cast-in-place concrete deadman, eyelets embedded in concrete foundations or runways, screw augers, arrowhead anchor) 	<ul style="list-style-type: none"> This will now also apply to mobile homes that are moved into the city from outside of it.

ORDINANCE NO. 3885

AN ORDINANCE OF THE CITY OF NORTH PLATTE, LINCOLN COUNTY, NEBRASKA, ADOPTING SECTION 150.008 TO REGULATE ALL NEW AND USED MOBILE HOMES BEING LOCATED, RELOCATED, MOVED, AND SET IN THE CITY OF NORTH PLATTE AND ITS EXTRATERRITORIAL JURISDICTION; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HERewith; PROVIDING FOR THE EFFECTIVE DATE AND PUBLICATION THEREOF.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF NORTH PLATTE, LINCOLN COUNTY, NEBRASKA:

Section 1. That § 150.008 be, and hereby is, added to the Municipal Code of the City of North Platte to read as follows:

Section 150.008 Mobile Homes

(A) "Mobile Home" shall be defined as set forth in Section 156.003 of the North Platte Code of Ordinances.

(B) No mobile home shall be permitted to be located and installed within the zoning jurisdiction of the City of North Platte unless and until inspected and approved by a City Building Inspector or his/her designee according to mobile home standards set forth in subsection (D) herein.

(C) A mobile home shall be installed according to the same standards regarding utility connections, setbacks and minimum square footage which apply to a site-built, single family dwelling on the same lot.

(D) Mobile homes shall also meet the following architectural and aesthetic standards?

1. The home shall have no less than 900 square feet of floor area.
2. The home shall have no less than 8-foot exterior width and 40-foot exterior length.
3. The roof shall be pitched with a minimum vertical rise of 2-1/2 inches for each 12 inches of horizontal run.
4. The exterior material shall be of a color, material and scale comparable with those existing in residential site-built, single-family constructions.
5. The home shall have wheels, transporting lights and towing apparatus removed.

6. All mobile homes, regardless of year, shall pass an inspection by a City Building Inspector or his/her designee and shall meet all of the following standards:
 - a. Roof structure solid and capable of protecting interior from snow, rain and wind.
 - b. Shall not have any rooms, garages, carports or storage areas attached to this mobile home.
 - c. Walls shall be straight and in good condition.
 - d. Exterior trim and panels shall be solid and attached.
 - e. All flashing shall be solidly attached around roof and openings.
 - f. All metal frame work shall be straight and rust free.
 - g. Belly wrap shall be in place and sealed.
 - h. Siding shall be free of any cracks or holes.
 - i. All vents shall be protected with proper covers.
 - j. Front and rear doors shall open, close and latch properly.
 - k. Floors shall be solid and smooth.
 - l. All interior doors shall open, close and latch properly.
 - m. All windows shall open and close smoothly.
 - n. All glass shall be unbroken.
 - o. Water heater and furnace shall be in working order and properly supported.
 - p. Water heater and furnace shall be labeled for mobile home installation.
 - q. All gas, water and sewer lines shall be properly supported.
 - r. Code approved type of piping material shall be used for gas, water and sewer.
 - s. Working smoke alarms and CO detector shall be in proper locations.
 - t. Outlets and switches shall be in working order.
7. The home must bear a label certifying it has been inspected in accordance with the requirements of the Department of Housing and Urban Development and is constructed in conformance with the Federal Manufactured Home Construction and Safety Standards in effect on the date of manufacture.

(E) Fees: Inspection for mobile homes completed by the City of North Platte Building Inspectors will be calculated at a cost of hourly rate, mileage and materials as per the fee schedule approved by resolution of the North Platte City Council.

(F) Mobile and Manufactured Homes must be blocked, anchored (tiedowns) and skirted according to manufacturer instructions or the City of North Platte Building Department Standard which is derived from Code of Standards, Subpart D-Foundations and Subpart E-Anchorage, within 30 days.

Section 2. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 3. This ordinance shall take effect and be in full force from and after its passage, approval, and publication or posting as required by law.

Section 4. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions thereof.

PASSED AND APPROVED THIS ____ DAY OF _____, 2014.

ATTEST:

City Clerk

Mayor

Appendix C - Pathway Diagram Illustrating How Changes in Mobile Home Park Policy Could Affect Health

