

OPC Sponsor Proposals

The following was drafted by the OPC Sponsors to support deliberations in early 2013.

Item A3, High Density Corridor/ Neighborhoods

OPC Sponsors: HDC Subcommittee (Paul Ingman, Judy Bardin, Rob Richards, Larry Leveen)

HIGH DENSITY NEIGHBORHOODS

GOAL: High-density Neighborhoods (HDN) are located at a number of designated sites: Downtown; Pacific/Martin Triangle; Capital Mall, and the City of Tumwater's Brewery District, which are primarily walk-dependent with alternatives of bikes and electrically-powered vehicles.

POLICIES:

P1 - Replace the "Urban Corridor" concept with High-density Neighborhoods (HDN: >25 Du/Ac), which concentrates affordable housing that represents locally diverse economic incomes; urban green spaces; vibrant commercial uses that serve neighborhoods directly; and allow people to meet their daily needs without traveling outside their neighborhood. One-third of the forecasted growth is downtown.

P2 - Protect and preserve Low-density Neighborhoods (LDN: 4-7Du/Ac). Disallow higher density development in existing low-density neighborhoods, except for ADU.

P3 – Medium-density Neighborhood Centers (MDNC: 8-24 Du/Ac) involve civic and commercial centers that serve LDN. [P3 is complemented with the inclusion of existing goals and policies of Comprehensive Plan 1994, Goal LU9, p.28.] MDNC emerge from neighborhood public processes.

P4 – Replace intense commercial land-use at city entrances and along major arterials through the capital city with large-scale landscapes and tree-lined civic boulevards. [P4 is complemented by the inclusion of the existing policy: Comprehensive Plan 1994, LU 2.7, p.7. "Establish gateways to Olympia with significant, special landscaping. Establish design standards for the landscaping and buildings along Olympia entrance and exit corridors that reinforce the streets' role as the gateways to the Capital."]

P5 – Streets will have fewer lanes dedicated for motorized vehicles and increase human powered mobility. Typically, a major arterial is comprised of four lanes: one lane designated for buses, trolleys, and car pools; one

lane designated for bike or cycle track; and two lanes designated for motorized vehicles.

P6 – Replace traditional piece-meal development with the comprehensive and longer range approach where High-density Neighborhoods emerge from public processes that continuously involve citizens, neighborhoods, and city officials.

INTRODUCTION

Today, in a decade of global uncertainty, social inequity, and environmental degradation, we have brought into question the conventional wisdom, calling for reassessment of traditional notions of urbanity.¹¹ The concept of High Density Corridors is one of those notions that compounds issues of urban inequity, internal city sprawl, and other multifaceted problems that threaten Olympia from climate change, growth, and earthquakes. As an alternative, *Green City* models compact and concentrate life's needs into High Density Neighborhoods (HDN) and replaces traditional frame and antiquated 'business as usual' paradigms formed from *fossil-based urban modes* that represent: linear spatial configuration of the High Density Corridor (HDC); "...strip commercial ..." development; dependency on motorized vehicles; and the dislocation and decentralization of neighborhoods with single family housing.

This proposal summarizes a few of the negative impacts that are associated with urban issues and linked to the obsolescence' of the fossil-based High Density Corridors. This proposal provides an alternatives towards the 21st century renaissance of a Green City. Although the proposal briefly outlines a few negative impacts of HDC on Health and Neighborhoods, it does not address the many important issues affected: greenhouse gases; energy; mobility; convenience; density; outdoor spaces; images of our state capitol city; social support systems; economic revitalization of downtown; treatment of HD arterials; and affordable housing.

Formal public hearings involving the Comprehensive Plan for HDC identified the public's lack of support for them and numerous "...contradictions ..."and "...conflicts..." associated with HDC. The purpose of this proposal is to identify a few problems associated with the HDC. The weakness of this proposal is that it does not represent all the HDC problems, and does not represent HDC's problems in an exhaustive or in depth analysis.

Although Olympia has the spatial capacity to accommodate a number of large-scale High Density Neighborhoods, the City of Olympia does not have a single High Density Neighborhood (HDN). To understand the concept and

benefits of HDN, the city's work plan requires time to reveal the countless internal inconsistencies and contradictions of antiquated fossil-based urban model of a HDC.

Urban achievements, similar to Howard's Garden City, recognized the importance of relatively circular city plans. It established structural, social, and economic parameters of the city. Although urban reform requires physical arrangement, urban life is enhanced when the physical environment works in harmony with human needs rather than against them.²⁵

PROBLEM STATEMENT

On January 12, 2013, the City Council developed work plans for 2013, which revealed that the "Olympia council wants people downtown...".² The City Council wants to find "...ways to promote Olympia and its downtown core to attract visitors, but to make it more inviting to residents again."² At the same time, the Comprehensive Plan demonstrated that the total planned growth over the next 25 years in the downtown is dramatically inadequate to achieve the City Council's objectives.

First, the total planned growth for the City of Olympia in 2035 is 26,087 people. However, Olympia's downtown's total planned growth is less than 4% for the next 25 years. In other words, 24 out of every 25 new residents to Olympia will live anyway but downtown. Further, more than 2 out of every 3 new residents to Olympia within the planned growth are to live near the edges of the city limits, which exasperated urban sprawl, rather than encouraging more centralized growth in the City of Olympia's downtown urban core.

Second, testimony from formal public hearings verified that neighborhoods oppose the HDC concept.

Third, the total planned growth of the HDC, excluding the HDN, is 251 people or less than one percent of the growth for the next 25 years, while HDC land uses consume almost 1,000 acres. In other words, the HDC for the next 25 years adds 1 new resident for every 4 acres. The HDC appears no more than a Low Density Neighborhood (LDN) that is slated for "... redevelopment..."⁵ and commercialization of local neighborhoods,⁶ and the displacement and relocation of single family residential neighborhoods.

IMPACTS OF HIGH DENSITY CORRIDORS ON HEALTH

Traffic-related air pollution (TRAP) has been linked to a number of adverse health outcomes or risk factors that are associated with chronic disease development. Traffic related air pollution has been linked to cardiovascular (heart disease and stroke) mortality and overall mortality (death). Nitrogen dioxide is a TRAP gas. People with higher exposure to nitrogen dioxide from traffic have been found to have a 26% increase risk of cardiovascular death and 13% increase risk of death overall¹³. When people exposed to more TRAP were compared to those with less TRAP exposure, those with higher exposure showed markers for atherosclerosis (increased carotid artery intima media thickness (CIMT))¹⁴. Another study in California supported this finding. The study showed that those living within 300 feet of a highway had much more rapid increases in their CIMT¹⁵. Other research found, that people living within 200 meters (tenth of a mile) or less of roadway with volumes as low as 20,000-40,000 cars a day had increased C-reactive protein levels and increased pulse-pressure. Both are markers for cardiovascular disease development¹⁶. A study of over 13,000 middle aged men and women found that those that lived within 300 meters (1/5 mile) of a major road for an extended period of time had an increased risk of coronary heart disease¹⁷.

The strongest most consistent TRAP health risk has been the exacerbation or development of asthma and respiratory symptoms in children. Multiple studies in different countries have shown this risk. Children that breathe more roadway air pollution at home and at schools are at higher risk of developing asthma¹⁸. Kids that live at a distance of a tenth of a mile or less of a road having relatively low levels of vehicle traffic have been shown to have a 70% increased risk of experiencing wheezing¹⁹. A study was done in British Columbia of 38,000 children with varying exposure to air pollution in utero and during their first year of life. The study found that children were at increased odds of developing asthma if they were exposed to air pollution and that children exposed to TRAP had the highest risk of asthma²⁰.

Traffic-related air pollution has also been found to increase the odds of pre term (early) births and preeclampsia (a pregnancy complication)^{21,22}. A survey study in Sweden found that people who lived near road traffic noise at 64 decibels and above were more likely to report they had high blood pressure²³.

A British Canadian study looked at neighborhood design and found that urban areas that are designed-for walking may inadvertently expose their residents to higher levels of TRAP. Additionally, people of lower socio-economic status often have the highest levels of exposure. The authors highlight that their research supports policies for siting residential buildings (especially schools, daycare centers, and assisted living facilities) back from major transportation corridors²⁴.

IMPACTS OF HIGH DENSITY CORRIDORS ON NEIGHBORHOODS

Landmark studies have revealed the impact of HDC physical environments on human behavior. These studies have shown that High Density Corridors cause environmental stress in humans and as well as other outcomes. HDC were associated with less social interaction, street activity, and withdrawal from the physical environment as a result of HDC erosion of environmental quality. Further, research by J.M. Thompson calculated that living within 600 feet of a HDC had implications on people who suffered from a deteriorated environment.⁹ Contrasts between HDC and Low Density Neighborhoods (LDN) occurred in age, family composition, and the length of residence. Criteria categories for environmental quality: safety at intersections; traffic hazards; dissatisfaction with noise; vibrations, fumes and soot; dust; stress; noise; pollution; feeling of anxiety; social interaction; privacy; home territory; and environmental awareness of the physical surroundings.⁷

Most importantly, the research showed that those people in HDC with children would move elsewhere for less stressful environmental neighborhoods if they have the financial ability to do so.⁷ In contrast, residents in the HDC had a shorter length of residence than a low density street, which were predominately family streets with many children and longer length of residence which spanned decades. Danger and safety issues associated with HDC were an important consideration for residents. Findings revealed that almost no children lived near the HDC and the housing was generally inhabited by single individuals. Traffic volumes produced different human stresses, need for withdrawal, and undermined the human coping mechanism.

Elder's perceptions of the HDC stressors were revealed by descriptive words, "...unbearable..."; It's "...too much..."; "People have moved because of the noise."; and the "Disgusting amount of litter"⁷ HDC noise levels were above 65 decibels for 45 percent of the time. "Noise from the street intrudes into my home."⁷ Car noises were relatively constant and produced a steady drone of traffic but the random city buses, and the screeching of brakes at the intersections added unnecessary disruptions. High Density Corridor's traffic volumes were destructive factors in urban life.⁸

Relocation of frail resident's and knowing functional level and wellness profiles for the baseline assessment helps determine an effective process to assure due process and protection of a resident's rights. Transfers are traumatic experiences which are often referred to in the literature base as "transfer trauma". Involuntary removing seniors can lead to increased liability.¹

Social interaction in LDN showed that children played on the sidewalk and in the streets, while HDC residents kept very much to themselves and held no feelings of community. "It's not a friendly street." and "People are afraid to go into the street ..."⁷ The concept of neighborhood as social support systems for families and individuals is loss or at least compromised in the HDC. HDC residents had little or no sidewalk activities while LDN were a lively close-knit community whose residents made full use of their streets. HDC residents sense of personal home territory did not extend into the streets, while LDN resident's showed "territorial expansiveness"⁷ into the street which was one of the salient findings of the study. HDC residents experienced withdrawal from the street and lived in the back of their home. In contrast, inhabitants on Low Density Neighborhoods streets had more acquaintances. People (LDN) said, " I feel it's home. ... I don't feel alone." ⁷ People living in LDN had three times as many friends than those along the HDC who had little social interaction and the contacts across the street were much less frequent.

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“A society grows great when ...(elders) plant trees, whose shade they know they shall never sit in.” Greek Proverb ¹⁰