

**Energy and Climate Change Action Plan
Community Engagement Workshop
3/1/2022**

Question:

If we want to reduce flooding, we need to rethink density and limit heavy density to within 1/2 mile of metro stations. More open space and tree canopy should be required for all new commercial development. The Green Building Policy needs to be updated to reflect that things are worse than in 2019 so that all new commercial development is net zero. (Sasha Impastato)

Can we please get a response from staff on the idea that we need to “limit heavy density to within 1/2 mile of metro stations” ??? (Praveen Kathpal)

Response:

High capacity transit includes Metro stations, of course, but also stations along the three high capacity transit lines (Route 1, West End, and Duke Street). In addition to the existing high capacity BRT line on Route 1, the City is spending \$150 million to get started on two more high-capacity transit corridors (Duke St and West End). Also very important: DASH (now fare free) and MetroBus move considerably more people in the City on a daily basis than Metrorail does – both pre-pandemic and especially during the pandemic. The bus will be Alexandria’s transit focus for the next 10 years at least.

Alexandria has a long history of integrating land use and transportation policies, and, specifically, locating density near high capacity transit has been a core principle for land use and transportation planning. These statistics bear this out:

- 90% of the planned development within the city is located within a ½ a mile of a Metrorail station and/or a transitway alignment.
- 75% of the development in the past ten years has occurred within ½ mile of a Metrorail station or near a transitway.

Perhaps implied by the question is a suggestion that new development in other locations is problematic from an environmental perspective. In fact, new development in Alexandria regardless of location will almost always be an improvement – often a great improvement – over current conditions. That’s because it is almost always replacing development approved under far more lax environmental regulations. In no circumstance can new development make an environmental condition worse.

In addition, new development generally improves stormwater management because most of the development in the last five years has occurred on surface parking lots that do not have stormwater detention or treatment (removing pollutants) that is required for new development. In addition, because most of the large redevelopment site are impervious with limited tree canopy

(Landmark, Power Plant, Potomac Yard, Oakville etc.), new development in these cases increases tree canopy.

Overall, urban core densities are considered more sustainable compared to the suburbs. For example, per capita green house gas emissions are lower in more urban areas.

Density by itself is not a good indicator of potential stormwater impacts. Tall multistory buildings with the same footprint as a one story building has the same appreciable effect on stormwater runoff. Any development or redevelopment must meet stormwater requirements to not increase the rate of stormwater runoff from a property. Water quality requirements mean they have to put in green infrastructure as well.

In addition to the lower per-capita carbon footprint from high density development, density can provide these benefits:

1. Lower square footage dedicated to each housing unit as some amenities are shared (like gym space, garages for shared car spaces)
2. Reduced ownership of cars and single use vehicles by the close proximity of community amenities (food, recreation, school and work) that allow walking and biking.
3. Many City amenities not limited to just the first ½ mile radius of a metro station.
4. Open space is planned into development.
5. Allows for a population that can support transit use by bus.