Natural Resources Snapshot – Project Scope

Background

GO TO 2040 included a variety of recommendations relating to the region's natural resources; these recommendations were broadly organized under the goals of managing and conserving water and energy resources, expanding and improving parks, and preserving open space. The ON TO 2050 development process is building on those recommendations through strategy development on topics such as green infrastructure, lands in transition, climate resilience, energy, water, and stormwater.¹ There are also several place-based layers under development that will build on environmental policy areas.

The purpose of the natural resources snapshot is to lend existing conditions and trends background to these topics, drawing upon already completed and ongoing work when possible. The report will also review and update pertinent GO TO 2040 indicators, such as public supply water demand, acres of impervious area, greenhouse gas emissions², acres of conservation open space, regional access to parks per person in acres, and trail greenway mileage.

Scope

The snapshot's development will include three phases; first, the team will assess the landscape of ON TO 2050 development activities that relate to the snapshot and compile any completed analyses. Then, new analytical exercises to build on those activities or explore other areas will be undertaken. Finally, the team will create the report's narrative and graphics.

The report will provide a baseline understanding of the primary areas identified below, though other topics may be added as work progresses. Relevant ON TO 2050 activities are listed in parenthesis:

Climate change

- Higher level trends and impacts, particularly on vulnerable populations (climate resilience strategy paper, climate vulnerability layer); each subsequent snapshot section will consider climate impacts specific to the topic at hand, as applicable
- Trends in factors that contribute to greenhouse gas emissions, including energy consumption and vehicle miles traveled (energy strategy paper, travel behavior trends snapshot, indicators development)
- Relationship between increased heat and air quality, air quality mapping, and public health impacts

¹ Note that local food is being addressed through the Local Food Snapshot and is therefore not included in this scope.

² A regional greenhouse gas emissions inventory will be undertaken in FY18, but the snapshot will take a first step in compiling data relating to some of the components of the inventory, such as energy consumption and vehicle miles traveled.

Water resources

- Water source, supply quantity/quality constraints, and demand forecasts (water strategy paper)
- Assessment of water quality trends via impervious cover, stream impairments, and CSOs (water strategy paper, indicators)
- Wastewater (water strategy paper)
- Trends and projections in major storm events/flooding (climate resilience strategy paper, stormwater strategy paper, flood risk areas layer)
- Identification of stormwater inundation areas; riverine flooding at a minimum, but potentially to also include urban flooding (stormwater strategy paper)
- Cost and damage from flooding events (stormwater strategy paper)

Natural areas

- Trends in consumption of agricultural and natural lands, including isolation and fragmentation (lands in transition strategy paper)
- Biodiversity indicators habitat types, threatened and endangered species, invasive species, etc.
- Trends in land protection and identification of priority areas for conservation (lands in transition strategy paper, conservation areas layer)
- Soil composition hydric soils, agricultural soils, erosion
- Climate impact to migration patterns, hardiness zones, and crop composition (climate resilience and lands in transition strategy papers)

Park access

• Trends in park access (access to parks and open space layer, indicators development)

Phase 1: Understand and compile related analyses, already in process (Nov. – Dec. 2016)

As noted above, many plan development activities that feed into the natural resources snapshot are already underway or complete. This phase will compile relevant analysis completed to date and establish an understanding of ongoing analyses that can eventually be incorporated into the report. It will also identify where new analysis needs to be undertaken (that is not already underway) to support the snapshot's development.

<u>Deliverables</u>: memo summary or PowerPoint of completed analyses and methodological approaches; high-level snapshot outline

Phase 2: Conduct new analyses for targeted topics, tbd (Jan. 2016 – Mar. 2017)

Based on phase 1 results, the project team will conduct any new analyses that are appropriate for the identified topic areas and update the relevant GO TO 2040 indicators. This step should also include working with the Research and Analysis team on any new approaches for environmental indicators -- both refinement of GO TO 2040 indicators and proposed new indicators (such as for climate resilience). In addition, by the end of this phase, the other ongoing analyses should be largely complete. The results of those efforts should be readied for incorporation into the snapshot. <u>Deliverables</u>: memo summary or PowerPoint of new analyses and methodological approaches; annotated snapshot outline

Phase 3: Draft the snapshot (Apr. – Jun. 2017)

This phase will consist of pulling all analyses together into one coherent narrative, and working with the communications team to create a graphical report.

Deliverable: draft snapshot narrative and graphics

Outreach

The Environment and Natural Resources Working Committee will be the primary external audience and sounding board for the snapshot development; the Land Use Committee will also be asked for feedback at key points. ENR will hear presentations near the conclusion of each phase and may also be asked for feedback on particular analyses as needed. Individual experts or stakeholders may also be contacted for information or assistance as needed throughout the process. For additional information on snapshot outreach, see the project's Engagement Strategy Checklist.

Timeline

October Develop and finalize scope	informa	e and Phase 1 tion esentation:	December Compile and analyze Phase 1 information Draft Phase 1 ppt or memo, outline	January Compile and analyze Phase 2 topics ENR presentation: Phase 1 findings	February Compile and analyze Phase 2 topics
March Compile and analyze Phase 2 topics Draft Phase 2 ppt/memo, annotated outline	April Draft re narrativ graphice ENR/LU presenta 2 findin	e and 5 J ations: Phase	May Complete draft report Submit draft to ES/BD for review	June Complete senior staff review Submit to comms for design	