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June 23, 2017

**TO:** City of Austin City Councilmembers & General Public  
**FROM:** Fregonese Associates, Inc.  
**RE:** CodeNEXT Envision Tomorrow Modeling/Versioning Explanation

## INTRODUCTION

This memorandum explains differences between versions of Envision Tomorrow scenario spreadsheets used in initial housing capacity and redevelopment estimates conducted by Fregonese Associates as part of CodeNEXT. (see: [CodeNEXT Housing Capacity: Envision Tomorrow Analysis](#) for an explanation of the methodology used in this analysis)

This memo accompanies the release (and re-release) of four (4) Envision Tomorrow spreadsheets that have been referenced in public presentations and have been made available on the City of Austin website here (<http://austintexas.gov/department/about-codenext>):

1. May 8<sup>th</sup> Draft CodeNEXT Housing Capacity (previously released containing errors)
2. May 8<sup>th</sup> Draft CodeNEXT Housing Capacity update (previously released to correct field calculation errors found in #1)
3. May 8<sup>th</sup> Draft CodeNEXT Housing Capacity with “stable single-family housing” removed from analysis (new release)
4. Current Code Housing Capacity with “stable single-family housing” removed from analysis (new release)

The following explains the errors corrected between #1-2, as well as the difference in methodology used in #3-4. It should also be noted that the above spreadsheets (#1-4) have had all unused and uncalibrated indicators removed from the spreadsheet. Envision Tomorrow scenario spreadsheets have a wide-range of potential indicators to draw from, all of which hold a place in the spreadsheet. However, each one must be calibrated to draw an accurate result, though the columns and functions within the spreadsheet remain, regardless. Therefore, because these models were *only* calibrated to estimate housing and population, other indicators (i.e., sustainability, property tax revenue, GHG emissions, etc.) will now appear blank.

## PREVIOUSLY RELEASED SCENARIO SPREADSHEETS (#1-2 ABOVE)

Following the May 8<sup>th</sup> release of the CodeNEXT draft zoning map, Fregonese conducted an initial housing capacity estimate based on the proposed code and map. This analysis was intended, at a high level, to estimate housing growth over a 10-year time horizon to see if it was realistic for the City of Austin to reach its goal of 135,000 new housing units set in the Strategic Housing Blueprint. The results estimated 162,011 new housing units, with 22,394 existing housing units redeveloped, or **139,617 net new housing units**.

These numbers were presented in multiple public settings, and City staff were urged to release the data and assumptions that went into the estimates. Upon releasing the Envision Tomorrow spreadsheet behind the analysis, community members were justifiably alarmed that the data showed population loss of 141,319 people, or more than 140,000 people being displaced through redevelopment. Fregonese double checked the analysis, and realized there were calculation errors within the columns for Population Lost, as well as Employment Lost and Improvement Value Lost. These columns are meant to be calculated by applying a redevelopment rate (%) to the overall population (or jobs/value) in a parcel, whereas this spreadsheet was applying the redevelopment rate, as well as an inapplicable “abandonment rate”, resulting in a much higher percentage of population being counted than was actually estimated for redevelopment.

In response to this error, corrections were made to these columns – which are highlighted in yellow within the spreadsheets (#1-2) – and more descriptive field headers were also added upon request from City Council.

## **CODENEXT AND CURRENT CODE AFFORDABILITY RISK SPREADSHEETS (#3-4 ABOVE)**

Though the above errors were corrected, the estimate for redeveloped housing units, and their geographic distribution, remained (and still does remain) a major concern. Therefore, Council passed *Resolution 20170126-038* requesting an evaluation of “...potential net loss or gain of market affordable housing and income-restricted affordable housing...” under CodeNEXT, relative to current code.

Fregonese underwent the same methodology used in the initial CodeNEXT housing capacity analysis to estimate housing capacity and redevelopment under current code, and then utilized University of Texas professor Elizabeth Mueller’s Corridor Housing Preservation research to estimate redevelopment risk of affordable housing units. **The only methodological difference between this approach and the methodology used for #1-2 was the removal of existing stable, single-family zoned parcels from the analysis.** The threshold used to remove these parcels was any parcel less than double (2x) the minimum allowable lot-size by zone - or **parcels that had no potential for subdivision** and redevelopment of more than one new building.

This methodological change resulted in slightly lower capacity numbers for CodeNEXT (when compared to #1-2), as well as lower numbers under current code than if the original methodology had been replicated exactly.

## **WHAT’S NEXT? A REFINED APPROACH**

The Envision Tomorrow analyses referenced in this memo should not be considered final, as they will continue to be refined as the process moves forward. The assumptions used in these analyses were probability driven at a citywide scale, not parcel specific, and therefore were not well-suited to precisely estimate redevelopment. They were a good starting point to inform discussions and decision-making processes, but due to concern by the project team, and many in the community, surrounding issues of demolitions and displacement, Fregonese Associates, the rest of the consultant team, and City staff are in the process of conducting a more refined assessment related to these concerns.

A better way to estimate capacity for growth and redevelopment is to use a parcel specific map. We have a map already developed from 2015 that has not only vacant land, but parcels that are likely to redevelop based on their value. This map will be used as a starting point in this analysis.

We will then use submarket specific rents to more accurately estimate redevelopment risk than the city wide, general assumptions used in the initial assessment. We will also be looking at how economically feasible it is to redevelop existing housing in order to utilize entitlements under CodeNEXT draft code. By modeling the maximum value that can be paid to allow economically feasible redevelopment by submarket, we can then more accurately identify specific parcels at risk of redevelopment. This will allow a closer look at neighborhoods and districts with interested parties, and will better inform the next version and the CodeNEXT draft zoning map

We look forward to a continued, robust conversation about these data and methods of assessment, and welcome all feedback as we continue to analyze strategies and policy directives related to the future growth of the City of Austin.