

Date: April 17, 2020

To: Ed Drain, Chief of Police

From: Danny Alexander, Planning and Research Division Manager

Subject: Plano Crime Rates vs. United States Crime Rates

On February 20, 2020, at the requests of City Planning Director, Christina Day, DCM Greg Rushin did a short presentation to the Comprehensive Plan Review Committee about crime and Crime Prevention Through Environmental Design (CPTED). During the presentation, two concerns arose that required additional information for the Committee.

First, a committee member questioned whether Plano is truly a safer city as is purported or has crime in Plano simply paralleled the national major crime trend for the past 20 years. The reduction of crime in Plano over the past 20 years has not just merely followed a national trend. The analysis of crime trends in the United States and Plano is discussed below.

Second, Committee Member Mike Bronsky asked for a longitudinal statistical comparison of safety in multi-family v. single family housing. The Plano Police Department is unable to accurately provide comparative crime data for multi-family v. single family housing. We are unable to separate out crimes that occurred at public and common areas in and around an apartment complex, which makes it incomparable to single family residences by themselves. Below is information and analysis on the two issues.

Major crime rates in the United States peaked in approximately 1991 for violent crimes and 1990 for property crimes. Since then, violent and property crime rates in the United States have fallen by 51.3 percent and 57.2 percent, respectively. In contrast, Plano's violent crime rate peaked in 1995 and its property crime rate peaked in 1991. Since these peaks, violent and property crime rates in Plano have decreased by 65.6 percent and 68.6 percent, respectively.

If just the decline of major crime rates over the past 20 years are examined Plano continued to outperform the national average. During this period, the United States experienced a 29.5 percent and 41.2 percent decrease in violent and property crime rates, respectively. For the same period, Plano's violent and property crime rates decreased by 61.1 percent and 46.4 percent, respectively. A simple way to illustrate this is visible in the Figures 1 and 2 below. The Figure 1 normalizes 1999 violent crime rates in both Plano and the United States to 100, while the Figure 2 uses the same methodology for property crime rates. The Figures below show the 1999 crime rates normalize to 100, with the crime rates in every year after represented as a percentage of the 1999 number. This allows for an easy visualization of change in crime rates over time. As shown in the Figures 1, 2, and 3 major crime rates in Plano declined more precipitously than the national major crime rates.

Figure 1, Changes in Violent Crime Rates Since 1999, Plano and United States (1999 set to 100)

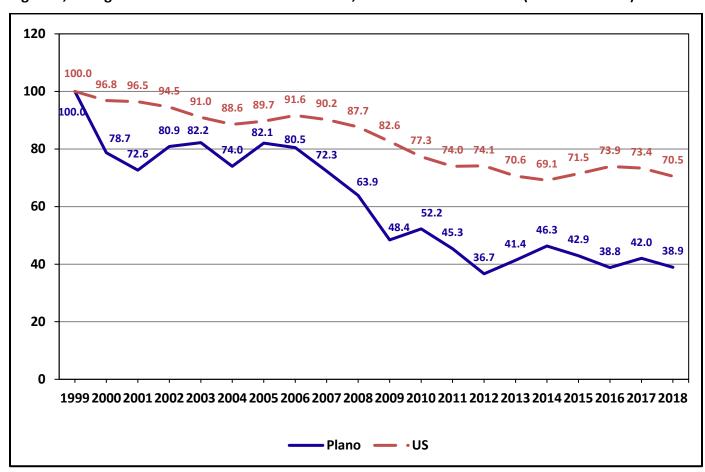
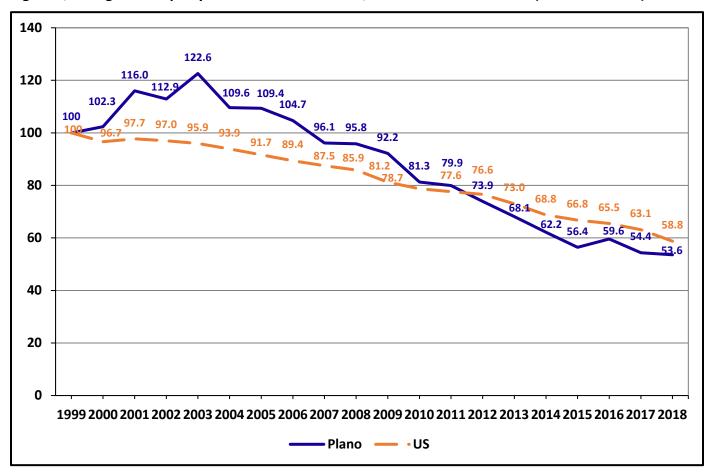


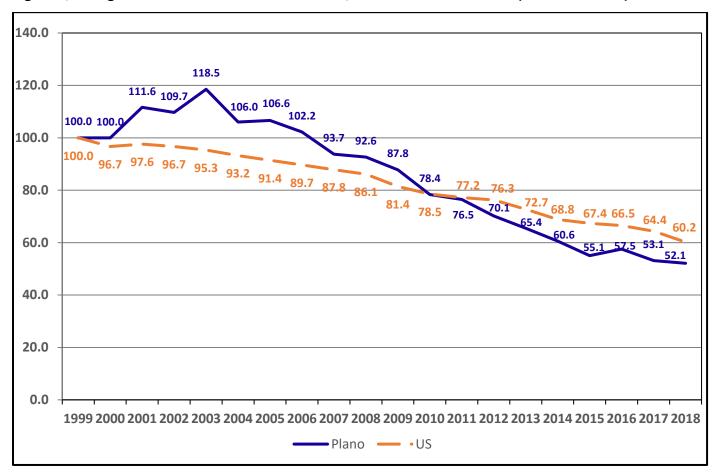
Figure 2, Changes in Property Crime Rates Since 1999, Plano and United States (1999 set to 100)



Examining the major crime rates for 2001 through 2018, Plano again outperformed the national crime reduction. Nationally, the violent crime rate declined 26.9 percent while Plano's violent crime rate fell by 46.5 percent. Similarly, national property crimes declined by 39.9 percent and Plano's decline by 53.8 percent. See Figure 3.



Figure 3, Changes in Part 1 Crime Rates Since 1999, Plano and United States (1999 set to 100)



Plano has posted the lowest major crime rates for at least the past 13 years for Texas cities with populations 200,000 and over. Figure 4 shows the 2018 major crime rates for Texas cities with populations 200,000 and over.



2018 Major Crime Rate Texas Cities over 200,000 55.59 50.36 50.00 46.21 44.01 40.14 38.40 33.47 33.83 29.69 27.47 25.70 18.77 18.48 Major Crime Rate Fort Worth Plano FI Paso Garland Arlington ■ Irving Laredo Austin ■ Dallas ■ Corpus Christi ■ San Antonio ■ Amarillo ■ Houston Lubbock

Figure 4, 2018 Major Crime Rates for Texas Cities with Populations 200,000 and Over.

In conclusion, both property and violent crime rates in Plano have fallen more than the national average, both over the last twenty years and since the early 90's when crime rates peaked. Thus, even as the United States has experienced an unprecedented crime decline over roughly the last two decades, Plano has generally outperformed the national crime trend.

Longitudinal Study and Comparative Crime Data for Multi-Family Housing vs. Single Family Housing.

The Plano Police Department is unable to accurately provide comparative crime data for multi-family apartment complexes and single-family residences. We are unable to separate out crimes that occurred at public and common areas in and around an apartment complex, which makes it incomparable to single-family residences by themselves. However, the Department's Planning and Research Division reviewed academic and independent research articles on the effects of land use on crime. The findings were mixed on whether multi-family housing has an impact on crime rate. Brief summations of the reviewed research findings are below:



The University of California Irvine and Florida State University findings showed that "older aged housing tend[ed] to have higher levels of crime when controlling for the sociodemographic characteristics of the area. [Also] crime is far less likely to occur [in areas] with detached single-family units compared with other types of housing."

The Joint Center for Housing Studies, Harvard University prepared a report that addressed the following claims:

- "Apartments overburden schools, produce less revenue for local governments, and require more infrastructure support
- Higher-density housing creates traffic congestion and parking problems
- Multifamily apartments lower the value of single-family homes in the neighborhood
- People who live in apartments are less desirable neighbors and more likely to engage in crime or other anti-social behavior."

However, this report found no evidence to support those claims, in fact their research seemed to contradict the above claims. Specifically, based on available research, they found that multifamily rental housing is not more likely to attract individuals who engage in criminal activity, does not increase traffic, does not harm property values, and impose no greater costs to local governments than single family residences. "This evidence may be sufficient for planners and many public officials — particularly those who have already come to understand the benefits of greater housing choice, mixed-use and mixed-income residences, transit-oriented development, and pedestrian-friendly communities. Two obstacles remain: codified restrictions on multifamily developments and individual opposition to specific multifamily projects. Experience suggests that opponents who live near apartment developments are often hard to convince. For some, opposition to apartments may be more emotional than analytical." (Obrinksy and Stein 2006)

School of Urban and Public Affairs at The University of Texas at Arlington and the Department of

Community Development at the City of Irving Texas research found that "high density and multifamily development are not necessarily associated with high crime rate, but socioeconomic status is. In



addition, crimes could happen in any geographic locations, and different types of crime are apt to occur in different types of neighborhoods... The results of this study also imply that housing and landuse policies stressing low density should be reconsidered, and crime prevention should not neglect the importance of social policies aimed at improving education attainment and social and economic equity." (Li and Rainwater 2000)

The School of Public and Environmental Affairs Indiana University Public Policy Institute Indiana University—Purdue University Indianapolis found "that the effects of busy roads, high density residential units, commerce and industrial land uses on violent crime counts all depended on the disadvantage index... Thus, both residential and nonresidential land uses can increase or decrease crime but their effects depend on the socioeconomic context surrounding them." (Stucky and Ottensmann 2009)

University of Maryland found that "the available evidence increasingly tends to suggest that most types of crime tend to increase in levels of occurrence with increasing population density. This relationship, however, is moderated by SES [socioeconomic status]. A cluster of affluent high-rise apartments in Mumbai or New York may have high density, but will also have a high level of guardianship, thus inhibiting crime. On the other hand, a high density poverty area will incorporate in its lifestyle incentives for predatory behaviors and disincentives for guardianship, given the hazards associated with confronting criminals (on their turf) or witnessing criminal acts." (Harries 2006)

Elliott D. Pollack and Company conducted a study the Arizona Multi-housing Association which concluded that "the perception of higher crime associated with multifamily housing results from counting police calls by address. Hence an apartment property with 100 or more units at the same address may be wrongly compared to one single-family residence. In actuality, when police data is analyzed on a per unit basis, the rate of police activity in apartment communities is no worse than in single family subdivisions, and in many cases, is lower than in single family areas." (Pollack 1996)



The Joint Center for Housing Studies, Harvard University stated that "apartments, when well designed and monitored, can also provide important security benefits and protection from crime." (Colton and Collignon 2001)

The University of Texas at San Antonio and the University of Washington research findings suggest that "assisted housing programs should invest in security and design features, encourage management practices that reduce opportunities for criminal behavior, and locate developments in economically diverse communities." (Tillyer and Walter 2019)

The University of Washington Bothell found that "dense, mixed-use areas actually exhibit lower crime rates than typical residential areas. Furthermore, crime rates are broadly declining with [increased] residential density." (Twinam 2017)



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