PARKING CODE AMENDMENT

FREQUENTLY ASKED QUESTIONS

FAQ'S
10/20/2020

1. How accurate is the comment, "Ex. North Park Shopping Center has been in decline for a number of years…" from page 7 Trends/Car Ownership of Parking, Public & Interdepartmental Outreach – Input staff report on October 15, 2020? Do you know how the consultants reached that decision - e.g. based on number of vacant stores, declining retail sales (pre-COVID), declining visitation numbers, etc.?

   This comment by DeShazo, Tang & Associates is in reference to the declining demand for parking spaces only, as shown in parking studies performed and submitted to the City in 2008, 2010 and 2013. Please reference excerpts from these parking studies on page 66, Parking – Local and National Parking Studies, Part 2 staff report on September 3, 2020.

   They determined that a decrease in demand for parking spaces over the years is due to increased ridership from the Park Lane light rail station, bus service, as well as the increase in on-line store shopping with customers picking up the orders at the shopping center versus in-person shopping for long durations. Other factors for the change in demand for parking spaces at the shopping center includes ride-share services, such as Uber and Lyft. Also, while much of the parking demand is near the south end of the shopping center, there appears to be a surplus of parking spaces at the north end of the shopping center.

2. How many years is the prevalence of AVs being predicted in the following reference, "The future of cars will be automated tech to self-park the cars and based on smart city and equipment….." "Automated vehicles (AVs) will also be prevalent" on page 7 Trends/Technology of Parking, Public & Interdepartmental Outreach – Input staff report on October 15, 2020? We read articles about AVs and smart cars, but still seem to be some way from realizing the benefits of this technology. Is the NCTCOG predicting these will have any meaningful impact in 5, 10, or 20 years?

   <u>(Per the feedback from NCTCOG)</u>

   The technology for Robo Remote Valet is in the process of being rolled out. Self-parking capabilities are being built into many vehicles today. High-end vehicles are now being equipped with technology that allows the vehicle to travel some distance from the driver, find a parking space, and park itself. This technology will be built into more models over the next few years. The range of self-parking vehicles will gradually increase as more vehicles get more automated vehicle capabilities. Major parking destinations—especially airports--are testing a variety of technologies that either pair with in-vehicle self-parking technology or use self-contained robots to park vehicles.

   Locally, DFW International Airport is closely monitoring the technology, looking for a solution that can accommodate a wide variety of vehicles. Like other major parking operators, DFWIA

sees the potential of the technology to more efficiently utilize parking facility space, and to give patrons a better customer experience by eliminating the long march from parking facility to terminal. Remote robot valet parking is the closest thing there is to a sure bet in the AV space.

The picture is less clear with respect to AV deployments on the open roads. This past week has seen significant announcements from Waymo and Cruise (GM) that they are going to begin deploying automated vehicles without a safety driver on board. Waymo is currently providing robotaxi service in Arizona. Ford will be rolling out robotaxi service in Austin in 2021/22.

There is some interest from another major AV company in a significant DFW robotaxi deployment in 2023. DFW already is a hub for AV long-distance trucking.

Arlington is beginning AV service connecting UTA with its downtown in March 2021. TxDOT and Cintra are studying how to make their roads AV ready and TxDOT is installing connected vehicle technology on I-30 and other expressways. Michigan is building an AV corridor between Detroit and Ann Arbor. Internationally, there are major robotaxi deployments ongoing in China and coming soon in other regions. It thus seems likely that by 2020 Dallas will see a substantial robotaxi deployment and by the end of the decade there will probably be several substantial robotaxi deployments in DFW. The major urban downtowns and the airports are likely early service zone areas.

Bottom line estimates:

- **Remote self-parking: 2020s**
- **Robotaxi: 2025-2035**
- **Personally, owned AVs: 2025-2045**
- **AV long-distance trucking: 2020-2035**
- **Automation of vehicles in freight yards, warehouses, agriculture: 2020-2040**