

8. City Planning AI Case Studies

The following summaries and links are provided for more exploration and review

1. City of Mesa, Arizona – ArcGIS Urban [ESRI Link](#) ; [Mesa Active Development Sites](#)

- The planning division of Mesa used ArcGIS Urban, ArcGIS Experience Builder and CityEngine for three major initiatives: an interactive “Active Development Sites” map, the MesaCONNECTED Transit-Oriented Development (TOD) Plan, and the 2050 General Plan update.
- Highlights: The map allowed public to view status of projects (pending, approved, construction) and view them in 3D. The TOD plan along a 5-mile future streetcar route used the tool to explore various land-use scenarios.
- Why it’s relevant: Demonstrates how a mid-sized city (Mesa) used these tools for internal/externally facing communications, scenario testing and engagement.
- Lessons for you: If Orlando’s planning dept already uses GIS, adding scenario/3D visualisation modules could help with public engagement and transit/development corridor planning.
- Consideration: Need 3D building data, GIS staff comfortable with the tools, and an engagement strategy.

2. Brisbane City Council (Australia) – UrbanSim (BrisUrban) [Brisbane UrbanSim Modelling](#) ; [Virtual Twin Model](#)

- The council adopted UrbanSim to address multiple challenges: climate-induced flood risk, upcoming 2032 Olympics, housing affordability.
- The tool enabled modelling of housing supply/demand under multiple future scenarios, integrating land-use, transport, and climate risk.
- Why relevant: Shows a large city/regional scale using advanced tool for long horizon planning including major events.
- Lessons: If Orlando wanted to run long-range (20-30-year) scenarios (e.g., growth around airports, climate resilience, major new transit), UrbanSim is potent.
- Consideration: Probably over-sized for standard annual planning tasks; best used with academic/technical partner or as part of regional consortium.

3. CommunityViz – Various Smaller/Mid Projects <https://en.wikipedia.org/wiki/CommunityViz>

- CommunityViz provides dynamic modelling and scenario tools (build-out, suitability, 3D) built on ArcGIS.
- Case examples: Cedar Hill (TX) used it for ROI study; Northern New Jersey MPO used it via cloud-enabled version.
- Why relevant: Good fit for mid-sized city tasks (comprehensive plan update, land-use alternatives, public workshops) without the full complexity of large simulation tools.
- Lessons: A “taste” of scenario planning, good for departments that may not have heavy modelling staff but want to engage stakeholders and test “what-if” plans.
- Consideration: Still needs GIS foundation; not as full-scale as UrbanSim for transport integration.