AI Reading Exercise: Class 5

From Digital to Physical Infrastructure
PLAN A6613: AI and the Future of Cities

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Tool & Process

I used **Claude Opus 4.6** with extended thinking via the Antigravity IDE.[1] The AI produced initial findings on *AI managing physical infrastructure*. I then directed over **140 iterative corrections**, each timestamped: downloading vendor, government, and independent sources; cross-checking statistics across stakeholders; and rewriting every unsupported claim. The most productive step was comparing **vendor-reported outcomes** against **city government data**, which revealed discrepancies the AI had not flagged.

Key Findings

1. Curb Space: Automotus in Pittsburgh. Pittsburgh's Smart Loading Zone program is the closest I found to AI that *actively manages* a city asset. The city deployed **Automotus** computer vision cameras across **75 commercial loading zones**, reading license plates, enforcing tiered time limits, and automating payment without meters. Funded by a **$3.8 million DOE grant** (Lazo, 2021) and SaaS revenue, what makes this case distinct is the *closed operational loop*: the AI observes, decides, and acts without a human in between. Yet the numbers do not agree. Automotus claims **40% higher turnover** and **95% less double-parking**; the city reports **70% turnover** and only **40% less** double-parking (Automotus, 2023; City of Pittsburgh DOMI, 2024). Both parties have reason to frame results favorably, making independent verification essential.

2. Traffic Signals: Flow Labs in North Carolina. North Carolina's statewide traffic signal program shows what happens when AI *monitors* but does not *control*. NCDOT deployed **Flow Labs** AI across **2,500 intersections** in July 2025, the largest such deployment in the U.S. (Nyczepir, 2024). The system uses connected vehicle GPS data to flag signal timing problems without field studies. Procured as a **SaaS contract** in existing operations budgets (Nyczepir, 2024; Flow Labs, 2025), it required no capital appropriation. Yet Flow Labs' own documentation clarifies that the system only *recommends* changes; a human engineer makes the final call (Flow Labs, 2025). Aaron Moody, NCDOT's assistant director of communications, confirmed that the platform "supports data-informed decisions while *maintaining oversight by engineering staff*" (Raths, 2025).

3. Power Grid: Google Tapestry & PJM. Google X's Tapestry partnership with PJM Interconnection is the most ambitious of the three, but also *the least real*. **Tapestry** uses DeepMind AI to model grid topology across PJM's **67-million-person**, 13-state network (PJM, 2025), aiming to accelerate the years-long interconnection queue for renewables. Tapestry *has not yet been deployed*: it is a **multi-year development partnership** where Google funds AI and PJM provides grid data (X, 2025). Faster interconnection directly serves Google's own data centers, and as Berreby (2024) documents in *Yale Environment 360*, AI data centers are themselves a **major driver of the demand** straining the grid; Google is partly solving a problem its own infrastructure creates.

Verification and Reflection

In all three cases the AI made the same error: it took each system at face value without interrogating stakeholder interests, autonomy, or deployment status. For Automotus, it missed the vendor-versus-city statistical discrepancy and conflated **parking** with **commercial loading** management. For Flow Labs, it described the system as *controlling* signals when three sources confirm it only *recommends* changes. For Tapestry, it equated a pre-deployment partnership with operational systems and noted Google's energy needs only in passing, without framing the conflict of interest or citing independent reporting.

The AI was a useful starting point for assembling an inventory of *who is doing what*, but it required extensive correction to reach a product a planner could trust. Left unchecked, a reader would have concluded that all three systems *actively control* city assets, when in fact only one does, one merely advises, and one does not yet exist. The harder questions, *how real is this*, *whose numbers are these*, and *who benefits*, were invisible to the AI and required cross-checking every statistic against multiple stakeholders' accounts.

[1] Verbatim prompt log, downloaded sources, annotations, and a claim-by-claim verification audit are archived at https://github.com/dhardestylewis/plan-a6613-ai-reading-class-3/tree/main/week5.

References

[1] Automotus. (2023). *Smart loading zones: Pittsburgh*. Retrieved February 17, 2026, from https://automotus.co/pittsburgh

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[3] City of Pittsburgh, Department of Mobility and Infrastructure. (2024). *Smart loading zones*. City of Pittsburgh. https://pittsburghpa.gov/domi/smart-loading-zones

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[5] Lazo, A. (2021, August 12). Pittsburgh gets $3.8 million from feds for smart loading zones. *Pittsburgh Post-Gazette*. https://www.post-gazette.com/business/development/2021/08/12/

[6] Nyczepir, D. (2024, July 16). NC deploys AI traffic signal software statewide. *StateScoop*. https://statescoop.com/north-carolina-ai-traffic-signals-flow-labs/

[7] PJM Interconnection. (2025). *PJM, Google announce multi-year AI collaboration* [Press release]. https://www.pjm.com/about-pjm/newsroom

[8] Raths, D. (2025, January 14). North Carolina taps AI to help manage traffic signals statewide. *Government Technology*. https://www.govtech.com/transportation/north-carolina-taps-ai-to-help-manage-traffic-signals-statewide

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