

# Transport Orientated Development (TOD)



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## Transport Oriented Development

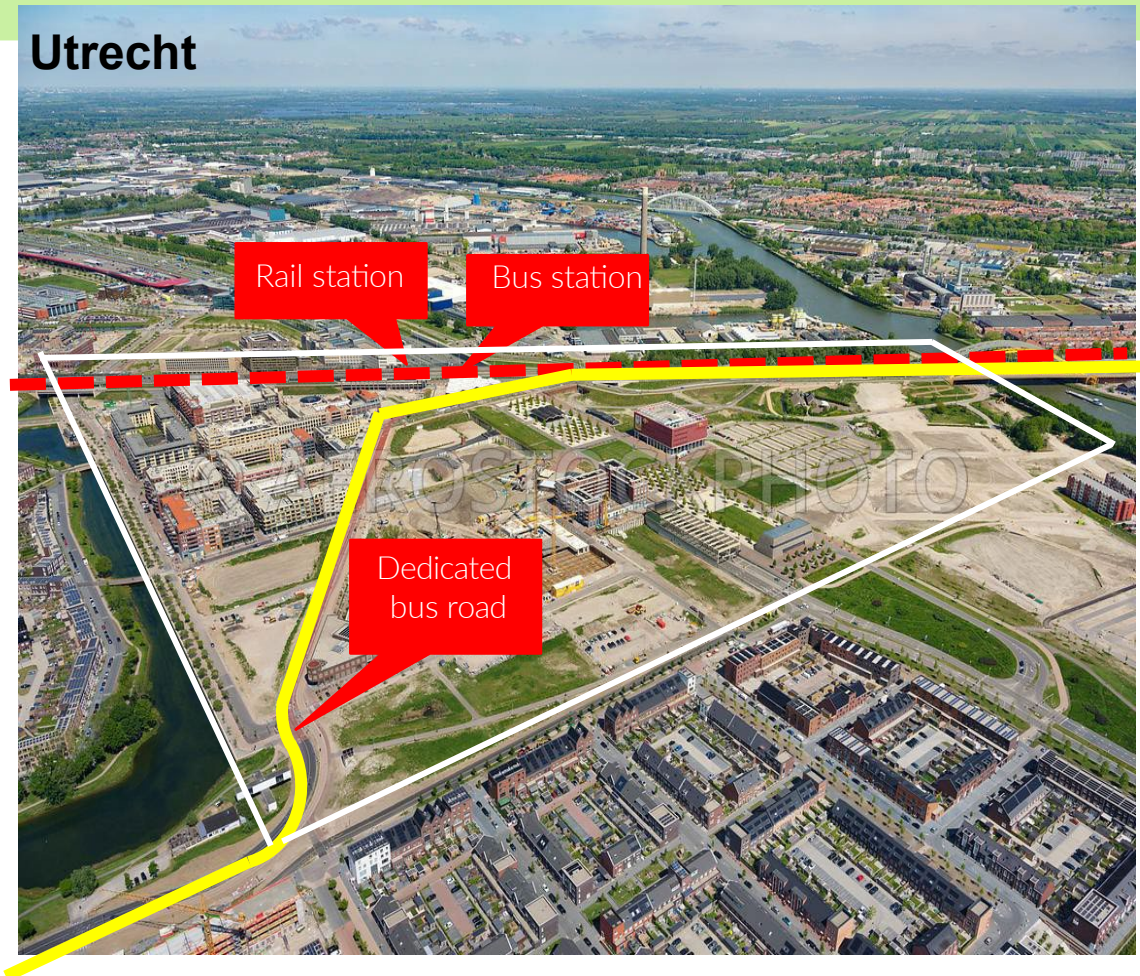
- Clusters jobs, housing, and services around transit hubs
- Promotes walking, cycling, and accessibility
- Reduces car dependency and supports sustainable growth
- Encourages high-density development and vibrant communities



# Benefits of TOD

## Benefits

- Improved public transport ridership and access
- Lower environmental and financial cost
- Enhanced social value and economic productivity
- Supports inclusive, resilient, and healthy cities



# 8 TOD Principles

Walk: 

Cycle: 

Connect: 

Transit: 

Mix: 

Densify: 

Compact: 

Shift:   

# TOD checklist (1/2)

Walk: 

- Continuous, wide footpaths
- Safe crossings every 80–100m
- Shade, lighting, weather protection
- Step-free, accessible routes
- Active frontages and safe streets

Cycle: 

- Protected cycle lanes
- Secure cycle parking
- Micromobility hubs
- Safe junction design
- Continuous cycle routes


Connect: 

- Short block sizes
- High intersection density
- Direct routes to key destinations
- No dead ends or barriers
- Clear wayfinding

Transport: 

- High-frequency services
- Seamless interchanges
- Real-time information
- Accessible ticketing
- Clean, safe stations

# TOD Checklist (2/2)

Mix: 

- Homes, jobs, retail nearby
- Active ground floors
- Community facilities
- Balanced day/night uses
- Reduced car dependency

Densify: 

- Higher density near transit
- Smooth transitions to surroundings
- Affordable housing included
- Land-value capture
- Supports footfall and viability

Compact: 

- Short, walkable blocks
- Reduced surface parking
- Buildings facing streets
- Placemaking improvements
- Stations as civic anchors

Shift:   

- Lower parking requirements
- Shared parking strategies
- Parking pricing tools
- EV and e-bike infrastructure
- Mobility management programmes

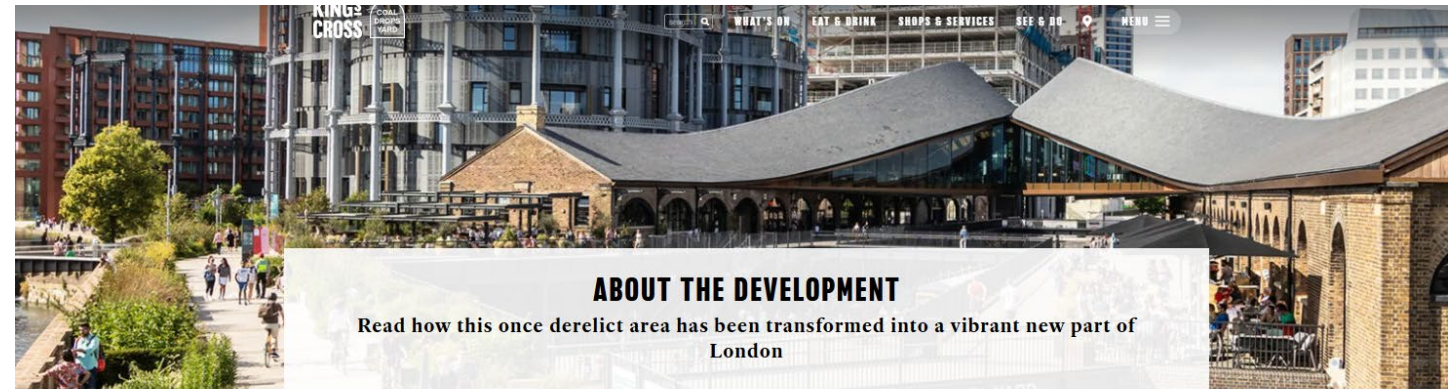
# TOD Aspern

- Vienna urban lakeside Aspern : Suburban development
- 240 hectares will accommodate more than 20,000 people and 20,000 workplaces
- **Target:** 40% PT, 40% walking & cycling, 20% car



# Success Factors of TOD

- Affordable & Inclusive Housing
- Public Realm & Urban Design Quality
- Parking & Traffic Management
- Strong Governance & Stakeholder Collaboration
- Policy Support and Funding



## Welcome to King's Cross

King's Cross is one of the largest and most successful redevelopments in London. Over the past 20 years, what was an underused industrial site has been transformed and rejuvenated with new streets, squares and parks, homes, shops, offices, galleries, bars, restaurants, schools, and even a university.

The location, the connections, the canal-side setting, the heritage, an exciting cultural scene, a thriving business community, and a strong sense of local community. All these things come together at King's Cross to make it unique and really quite special. But this wasn't always the case.



(especially in hot climates)

- Traffic calming, low-speed edges, pedestrian priority
- Limited surface parking; structured parking located away from the station
- Clear signage and wayfinding






## **5. Transport Operations**

- Bus/rail schedules coordinated for seamless interchange
- Reliable and frequent services (10–15 min headways or better)
- Demand-responsive or feeder services for areas beyond the catchment
- Integrated ticketing and payment systems
- Mobility-as-a-Service (MaaS) or multimodal journey tools available
- Loading, drop-off and taxi ranks planned without obstructing pedestrian flow

## **6. Sustainability & Environment**

- Mode shift targets defined (walking, cycling, public transport)
- Infrastructure supports zero- or low-emission

# Future change & opportunities for TOD

	 Deglobalisation	 Decarbonisation	 Demographics	 Debt & Volatility	 Digitalisation
Public Transport Sector Impact	Retreat from global trade & supply chains	Pivot to green technologies & low-carbon ops	Ageing and population shifts	High debt, inflation, economic uncertainty	AI, automation, digital platforms
Impact	Shift to regional logistics, local sourcing	Electrification, sustainable fuels, asset renewal	Workforce automation, accessible mobility design	Asset life extension, cost-driven innovation	Predictive analytics, MaaS, smart infrastructure

# 15 minutes cities



Transport-oriented development becoming standard practice in major cities e.g. Paris, London, Toronto e.g. 15 min neighbourhood



Integrated interchange hubs replacing single-mode terminals e.g. stations



Active transport infrastructure (cycling, walking) being included in all new projects





# Governance & Policy Frameworks

Europe including UK, North America show a clear trend towards more devolution—especially in transport—via new or expanded regional/metropolitan authorities and directly elected leaders, driven by the need for integrated, locally responsive mobility and investment.



Performance-based contracting under concession rather than revenue risk models the preferred choice making it easier (in theory) to work with operators on TOD.



Decarbonisation

# Sustainability to the fore

Mandatory Carbon targets driving activity e.g. Fleet electrification.

TOD can reduce transport carbon emissions by 16-20% through mode shift (C40)

Climate adaptation measures becoming mandatory for all new transport infrastructure



Manchester City Centre TOD Development

# Equity & Accessibility Integration

Demographics



Universal design principles to be considered in all transport infrastructure



Housing & fare affordability programmes integrated into social services



Community engagement requirements embedded in planning processes



Inclusive (Gender-sensitive) design becoming standard practice globally and focus on ensuring needs of ageing demographics



Dementia-friendly neighbourhood infrastructure includes floor wayfinding markers that guide those living with dementia along key routes

# Flexibility & Land Value Generation



## Debt & Volatility

### Flexible & Adaptive TOD Models

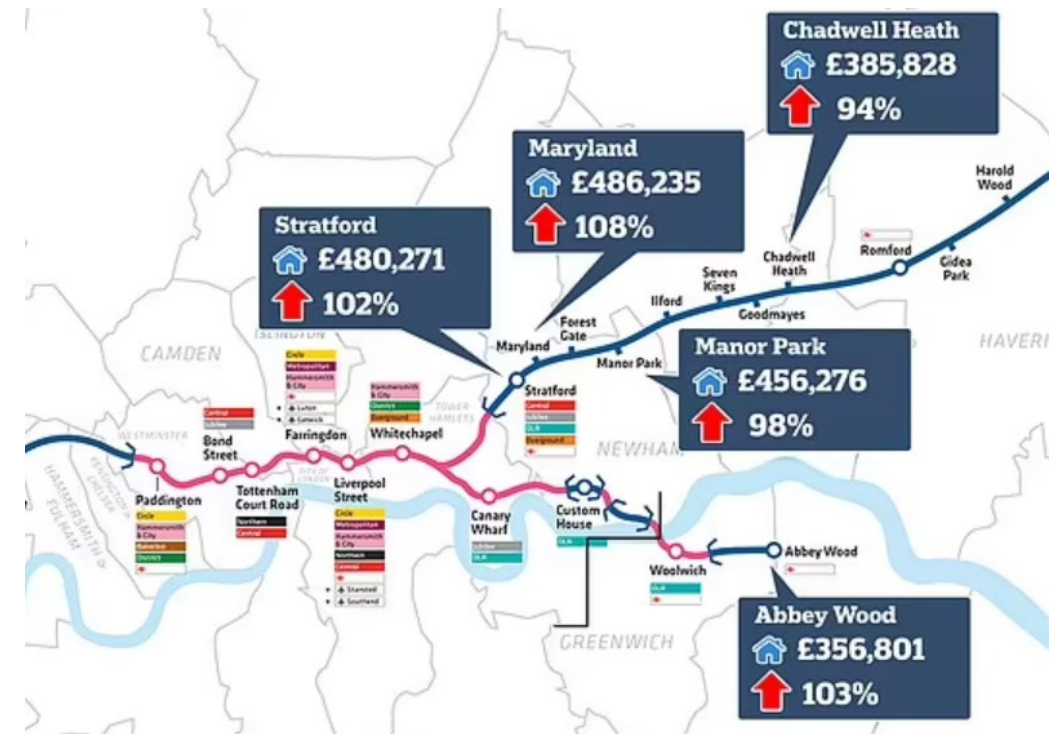
**Trend:** Moving away from "one-size-fits-all" to context-sensitive TOD

### Land Value Generation

**Trend:** Sophisticated land value capture mechanisms and public-private partnerships

**Tools:** Tax increment financing, development contributions, betterment levies

**Focus:** Preventing gentrification while funding infrastructure



Elizabeth Line, London

2012 – 2022 change in house prices for new stations



Digitalisation

# Digital integration & 'smart city' tech



Integration of IoT, AI, and real-time data analytics into TOD planning



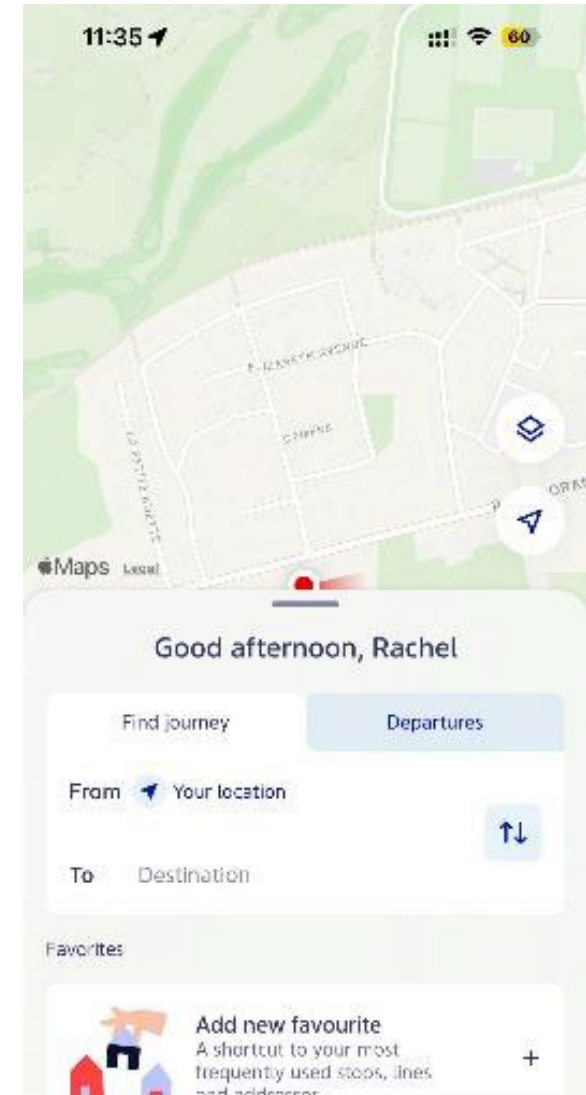
Dynamic routing, predictive maintenance, mobility-as-a-service (MaaS), and integrated payment systems.



Smart TOD market valued at \$4.52 billion in 2025, projected 7.9% CAGR to reach \$8+ billion by 2033



Private mobility services (bike-share, e-scooters) are being integrated into public transport networks



# Next steps

Want to discuss further, feel free to book a call at

[www.calendly.com/surbonconsulting](http://www.calendly.com/surbonconsulting)

