

# Comprehensive Hub-Oriented Transportation Strategy for Urumqi Metro Area

## International Examples

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Autonomous Region

# Table of Contents

## I. International Examples

A. Chicago, Illinois, U.S.A.

B. Frankfurt, Germany

PRC Example: Chongqing

## II. Success Factors?

A. Multimodal/Intermodal Hubs

B. Operational Costs and Benefits

C. Governance

## III. Trends in Europe and United States

## IV. Conclusions and Discussions



Anchored by BNSF Logistics Park Chicago (LPC)  
& Union Pacific Joliet Intermodal Terminal (JIT)



## International Examples

### BNSF Logistics Park Chicago and Union Pacific Joliet Intermodal Terminal

- All modes (rail, road, air) in the Chicago metro area of 7 counties (Cook, DuPage, Kane, Kendall, Lake, McHenry and Will (Joliet and Elwood))
- Integrating with passenger traffic through continuous planning to reduce congestion and environmental issues and improve safety

*“Will County Community Friendly Freight Mobility Plan”*

# I. International Examples: Chicago

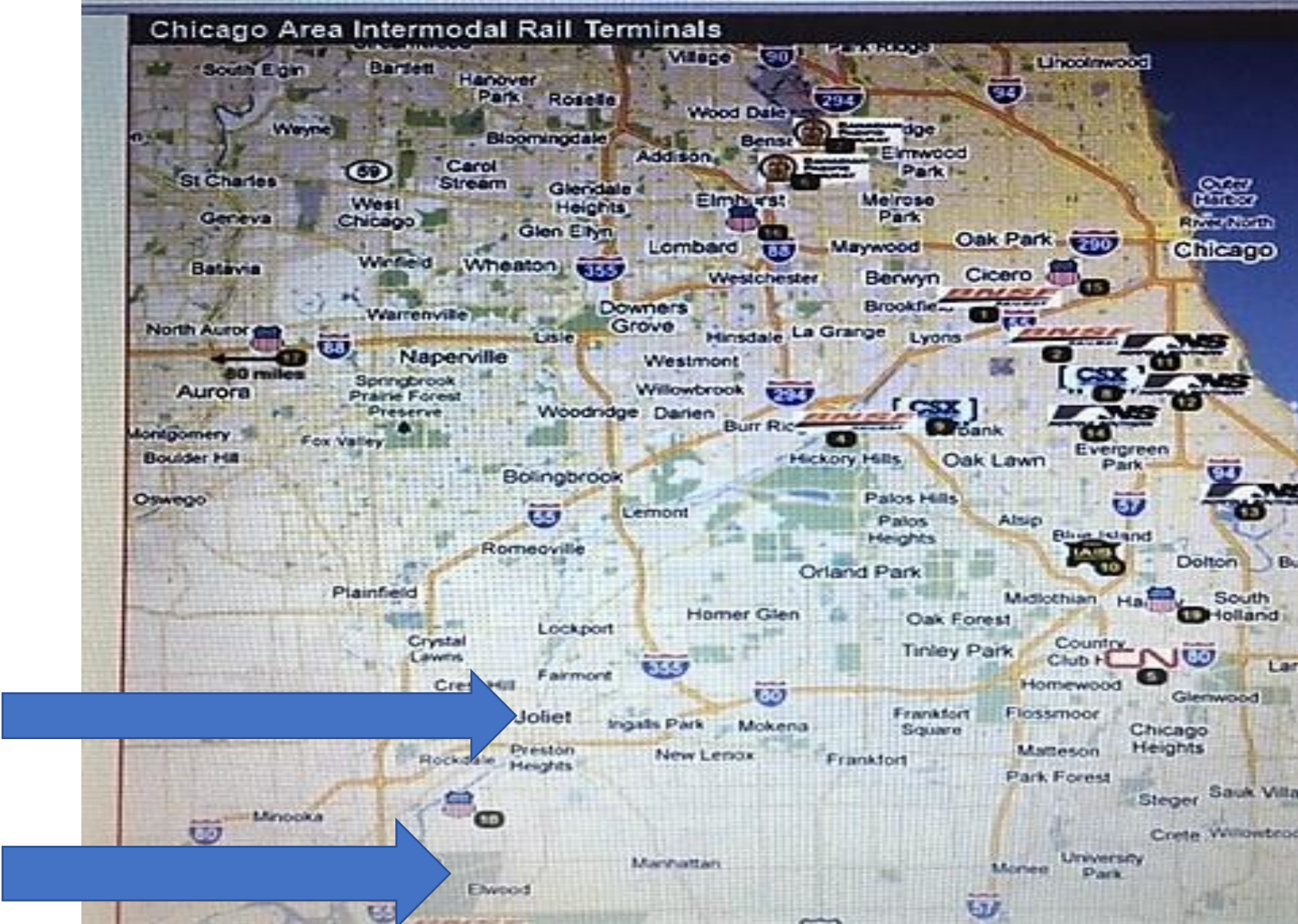
- 80 percent of goods from China/Asia via West Coast seaports for local, regional, national distribution for manufacturers and retailers
- Growing investments, jobs, income and economy in metro region:  
2017: 6,200 jobs, \$900 million investments, 21 m. square feet

Private Jobs 2001-2016: Will: 76,306- Dupage: 28,499- Lake: 12, 568

***Transport and Logistics Sector:*** “Metro Clusters” from Rail hubs: Distribution Centers/Light Manufacturing and Value Added Services and interurban passenger transportation for “Traded Clusters” of maintenance and repair, inspectors, load/unload services. “Local Clusters” of B2B/B2C and local retail

- Will County is largest inland port in N. America: 3 m. TEUS/\$65 billion/yr.

# International Examples: Chicago: 19 Yards



## International Examples: Frankfurt

### Frankfurt/Rhein-Main, Germany Metro Region Frankfurt-Oder intermodal terminal in a freight village: Poland border

- All modes (road, rail, air) in 200 cities, towns and rural municipalities of 4 major cities (Darmstadt (research center), Hanau (material science), Offenback (design), Wiesenbaden (agriculture))
- “Develop the region’s role as a center for trade and logistics and that a future-proof logistics location will be secure as a distribution center”
- The metro region is a growth area and node on Belt Road Initiative corridor at the intermodal terminal. Chongqing Hewlett Packard laptops to Port of Rotterdam and passenger regional traffic of 300,000 commuters per day

# International Examples: Frankfurt





## Regular intermodal connections via CT Terminal Frankfurt (Oder)



## International Examples: Frankfurt

- Frankfurt's main airport is the biggest employer in the region and as an international hub region needs to integrate into the European high-speed railway network
- Additions to road network only if bottlenecks cannot be solved by traffic management or road widening. Bypasses constructed, if improves quality of life—Frankfurt metro strategy report

# Chongqing

- Chongqing Railway Port
- Chongqing Finished Vehicle Import Port
- Bonded Logistics Center Railways  
(warehouses of frozen goods)
- Chongqing-Xinjiang-Europe Railway

## Block Trains

( to Duisburg, Germany): “Five Fixed Mode”  
time, route, country, station, price (Customs  
agreements)

- TNT, Kuehne & Nagle, DB Bahn offices
- Chongqing ASEAN International Logistics Co.



## II. Success Factors?

- Over the past 20 years Chicago and Frankfurt metro regions took bold steps for integrating multimodal transportation systems for people and freight within 7 counties of Chicago and 4 cities of Frankfurt
  - A. Hub oriented strategy anchored by **main rail intermodal facilities** with road access points and equipment to serve many supply chains
  - B. **Lower Costs** (\$58 million congestion delays/2017). Intermodal hubs lower logistics costs for drayage charges, fuel, carbon emissions
  - C. **Governance**-Public/Private Dialogue Organizations- Chicago Regional Growth Corporation (CRGC) for regional economic development by 7 counties led by the deputy mayor of Chicago to prioritize multijurisdictional projects. Chicago Metropolitan Agency for Planning (CMAP) for planning and finding project funding. Produced the “On To 2050” strategic report with the 7 counties’ Economic Development Organizations (EDO) to prevent overlapping plans and inclusive

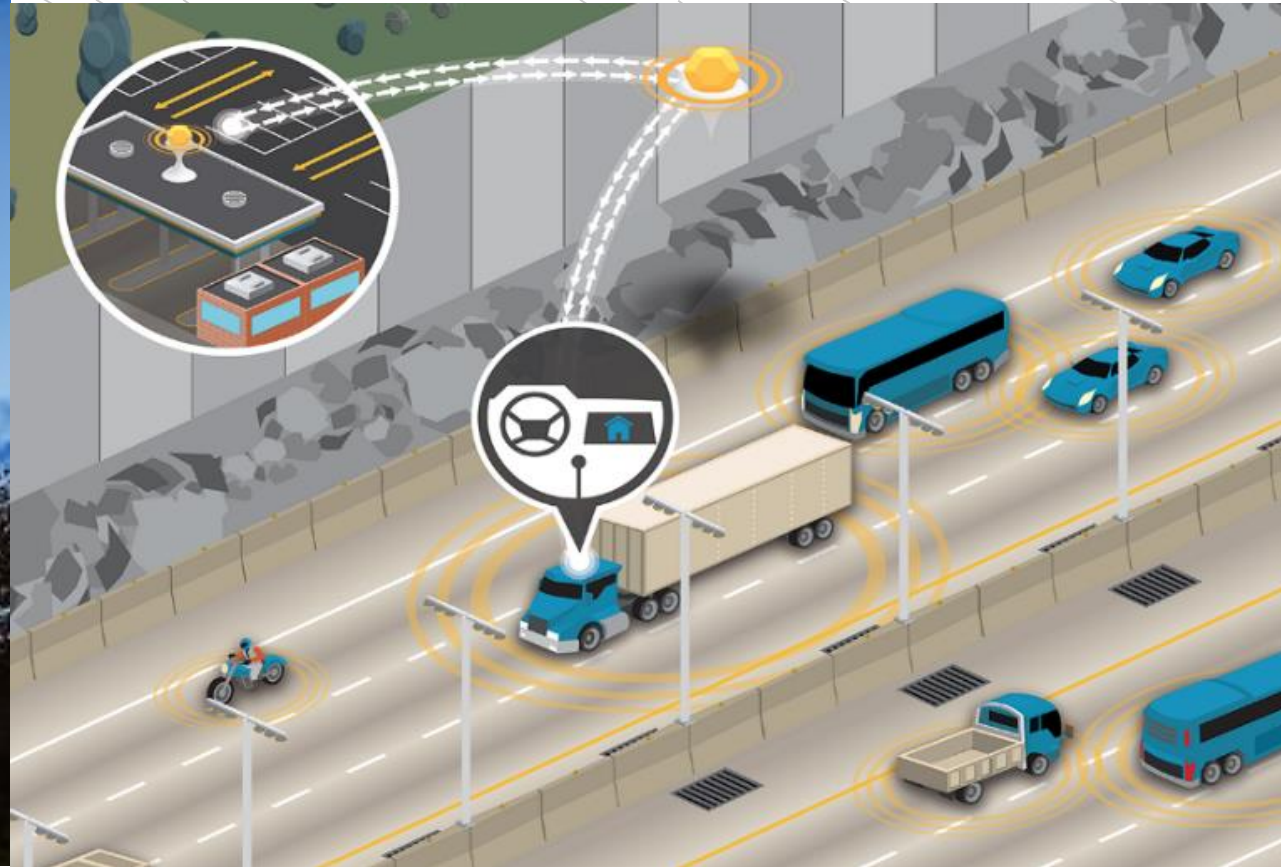
## II. Success Factors

Success Factors	Urumqi Situation	Action to Succeed
Develop recognizable economic profile of competitive advantages in specific sectors for inclusive growth	Urumqi-trade logistics Changji-business logistics Fukang-energy Turpan/Wujiaqu/Shawan-agriculture Shihezi-chemicals-textiles-food logistics	Functioning associations to upgrade logistics training with FIATA assistance to certify members and consolidate fragmented trucking industry
Governance with public-private organizations (mechanism) for better transport project planning across all metropolitan cities	Lack of one unifying public and private dialogue organization to solve problems	Develop a new organization chart in the cities that agrees to one office to work across cities in the region
One to two rail freight multimodal stations that are easily recognizable and functioning with value added services across all supply chains	North Railway Station (Bei Zhan) International Land Port is in pilot stage	Marketing and awareness of the services and cost benefits to the shippers in the shift from trailer to containerization
Air cargo to facilitate growing e-commerce business and largest employer in Frankfurt region	Growing volumes of cargo and mail with goal of 750,000 tons at airport by 2030	Partnership with SF Express and other private sector entities and CFLP to develop

### III. Trends: Europe

- Solutions to optimize use of postal/small parcel city hubs
- Design freight corridors in cities/regions to provide better management of long **first mile** freight transportation through urban transport networks—**last mile**
- Try publicly controlled consolidation centers operated by private companies.





## Trends: USA Dynamic Parking

Dynamic messaging signs prior to parking location provide truckers with information about current truck parking availability. Information is conveyed via websites, mobile apps, or connected vehicle technologies

# IV. Conclusions and Discussions

I. International Examples

II. Success Factors?-Infrastructure, Operations Cost/Benefits, Governance

III.Trends-KPIs-Load Factors: There needs to be a decrease in unwanted miles driven, unnecessary stops, and time wasted to improve the overall efficiency of the system and decrease its impact on congestion.

- Suggestions? Cargo Bikes, standardized modular logistics units, technologies to better transfer loads between large (first mile) and small (last mile) vehicles, lower the noise related to handling, loading and unloading goods to enable night deliveries; semi-automation of vehicles. Also, consider load factor solution of trucks and vans in the cities that double park and long parking by developing loading rate measurement systems (weight, volume) to be linked with overall city access control and network management.