

The Latest on Air Service Changes and Impacts

The Airport Planning Perspective

Contents

- Airport Planning – A Historical Perspective
- Catalysts to Change
- Industry Trends
- What Does the Future Hold?

Airport Planning – A Historical Perspective

- Ground Access and Parking

- Additional vehicular lanes
- More signage
- Expanded parking lots and decks

- Terminal Planning

- More counters, gate agents , baggage carousels
- Traditional “chain type” concessions
- High-profile Law Enforcement Officer presence
- Additional security checkpoints and TSA agents

- Airfield Planning

- Additional taxiways and runways
- Additional aircraft parking positions



Catalysts for Evolving Airport Planning Methodologies

AIRLINE

- Mergers / Alliances
- Yield Management
- Political push/pull
- Route Development
- Aircraft Modifications
- Labor Relations
- Slot Swaps

ALL

- Mergers / Alliances
- Aircraft Modifications
- Safety

AIRPORT

- Safety
- Security
- Environmental / Sustainability
- Non-Airline Revenue
- Asset Management
- Customer Service
- Financial Responsibility

Security

Efficiency

PASSENGER

Technology

Aging Population (mobility)

- Amenities
- Technology
- Feeling of Safety
- Ticket Costs

Ground Access and Parking Planning

- Parking amenities to compete with off-airport parking operators
 - Preferred parking programs (points, rewards, etc.)
 - Valet parking
 - Guaranteed spot
 - Minor maintenance (oil changes, car washes, etc.)
- Better roadways and decision point planning
- Travel Plaza's (fuel, food, retail)
- Dedicated alternative fuel vehicle (AFV) parking
- Environmental considerations (e.g. LED parking garage and lot lighting, rooftop water reclamation, etc.)
- Implementation of airport cell phone lots to reduce curb congestion
- Enhanced signage and roadway /parking communication

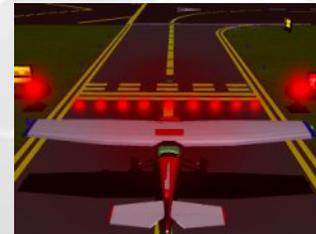
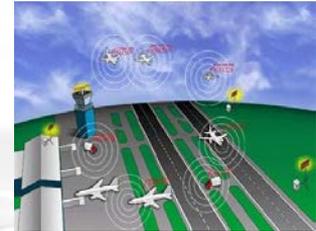
Terminal Planning

- De-chaining use of ticket counters
- Common-use terminal equipment (kiosks, counters, FIDS, BIDS)
- Sustainability and “green initiatives”
- Local food and beverage and retail (the mall concept)
- Non-traditional concessions (e.g. spa, manicure, wine)
- Natural light and opens spaces
- Redundant and out-of-sight security (TSA’s “multiple layers”)
- Intuitive wayfinding
- Asset management/life cycle cost



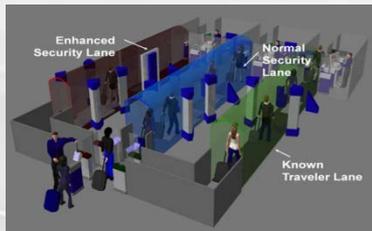
Airfield Planning

- End-around taxiways (ATL & DFW)
- Surface movement management systems (e.g. ASDE-X)
- Visual / Self docking
- Aircraft routing optimization through simulation analysis
- Safety Management Systems (SMS)
- Sustainability and "green initiatives"
- Change in procedures and NextGen capabilities



What Does the Future Hold?

- Continued environmental and sustainability initiatives
- Multi-modal and mass transit enhancements to/from airports
- Smartphone use for boarding and airport wayfinding
- Threat based screening & enhanced biometrics
- Aerotropolis concept (highest and best use of available land)
- Economic viability and sustainability through non-aeronautical revenue initiatives



Conclusions

- Although the major functions of airports remain the same over the past few years, the methodology and planning for those functions have changed dramatically.
- Continuous changes from every facet of the industry leads to new and creative ideas in airport planning
- Technological, environmental and economic sustainability measures will be some of the main drivers for airport planning and development into the future.