

# CITY OF SEATAC

## Transportation Element Update & Transportation Master Plan

Presented by

transpogroup 

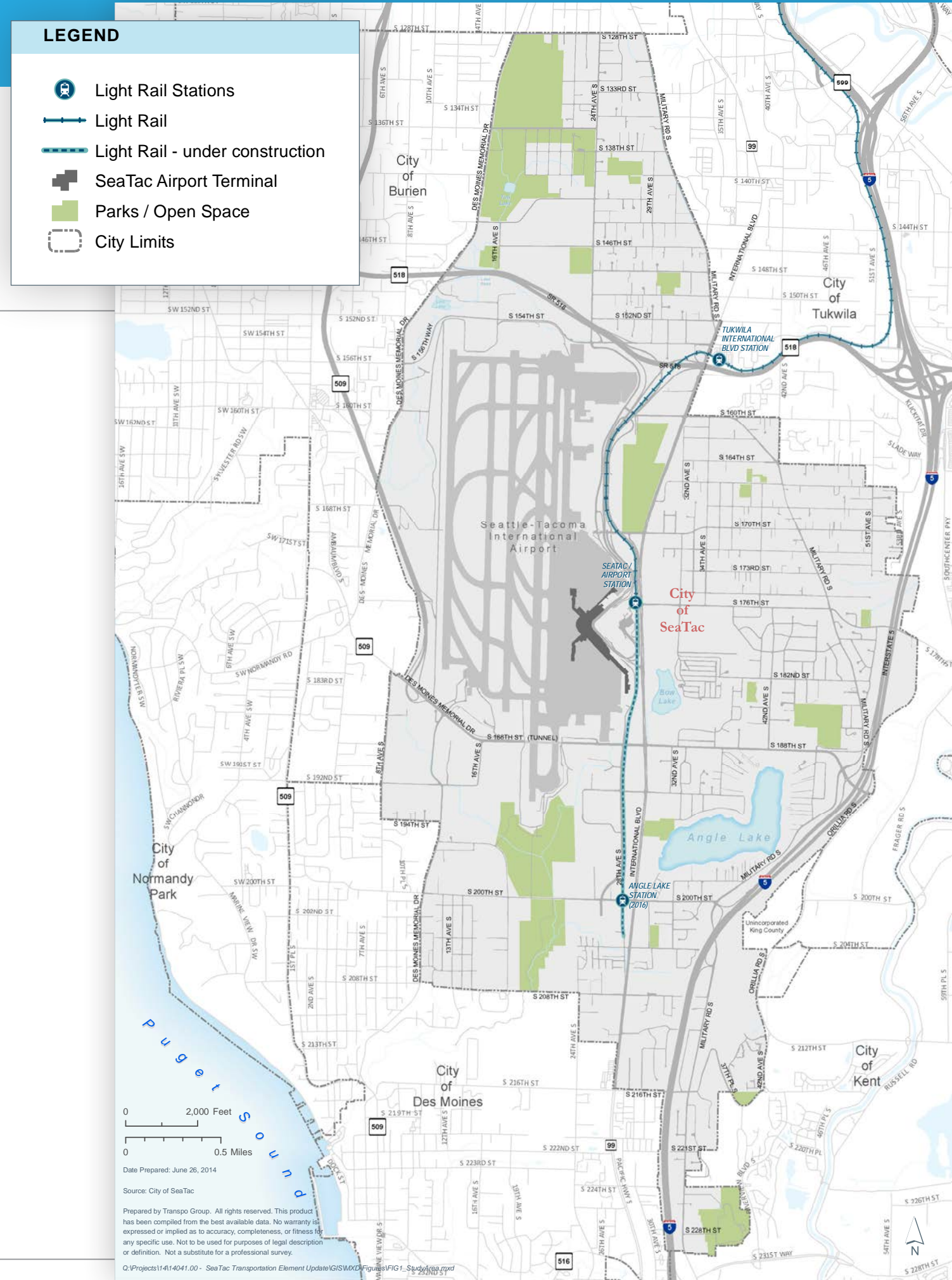
Planning Commission  
August 5, 2014





# Agenda

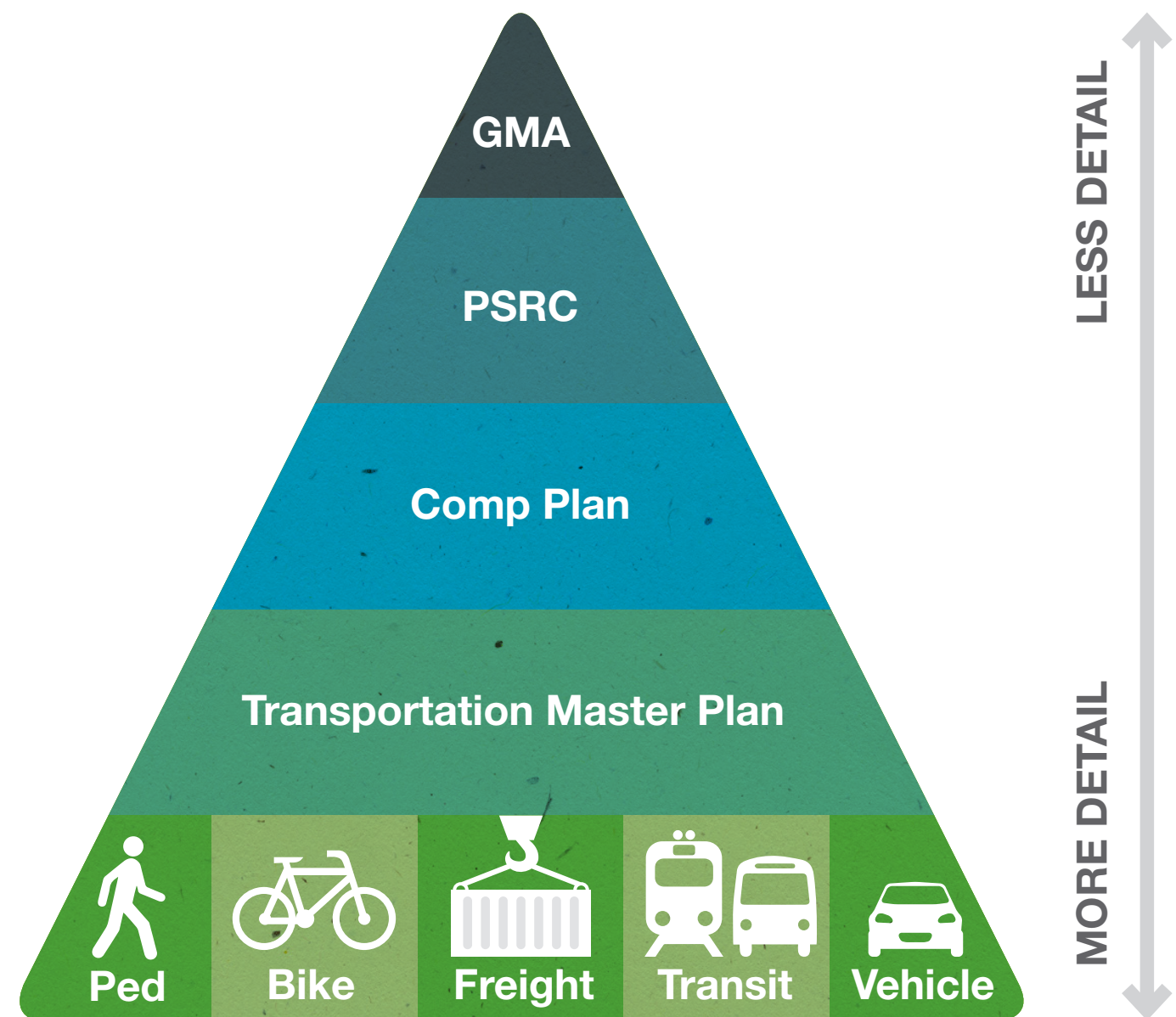
- > Initiate Discussion on Update of Transportation Element (TE) and preparation of Transportation Master Plan (TMP)
- > Review Existing Transportation Conditions
  - Transportation system
  - Traffic volumes and operations issues
  - Transportation safety concerns
  - Integration with Draft Safe and Complete Streets Plan
- > Introduce conversation on transportation policies





# Transportation Element and Transportation Master Plan Objectives

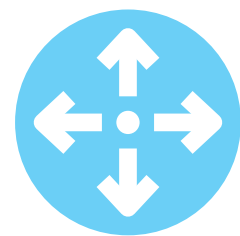
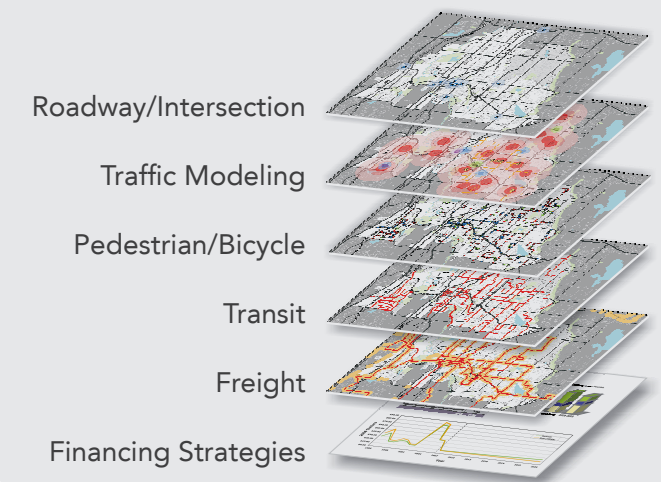
- > Support overall Comprehensive Plan and City vision
- > Meet requirements of the Growth Management Act (GMA) and Vision 2040
- > Reflect Neighbors' planning
- > Integrate and prioritize transportation improvements serving all modes
- > Review and update transportation policies
- > Revisit level of service standards/concurrency program – what is acceptable for transportation?
- > Update transportation funding analyses and strategies



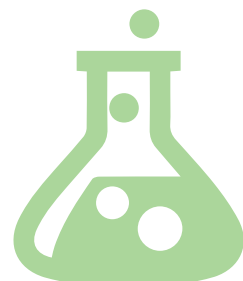




# Primary Work Program Tasks



Agency coordination and public outreach



Evaluate existing transportation systems conditions and issues

- > Traffic operations
- > Safety
- > All travel modes
- > Economic development



Prepare travel forecasts and evaluate options

- > Integration of transportation and land use planning
- > Coordinated travel demand model with Port of Seattle
- > Evaluate alternatives for SR 509 phasing



Define multimodal improvement projects

- > Complete Streets framework
- > Potential trade-offs
- > Costs
- > Project priorities



Transportation policies

- > Consistency with Vision 2040 / GMA requirements
- > Transportation funding and impact fees
- > Level of service standards and concurrency



Documentation and Environmental Review



**PUBLIC OUTREACH**



# Existing Transportation System

- > Well connected to regional freeway system
- > Primary north-south travel on three arterials
- > East-west travel corridors restricted by Airport and topography
- > Freight routes

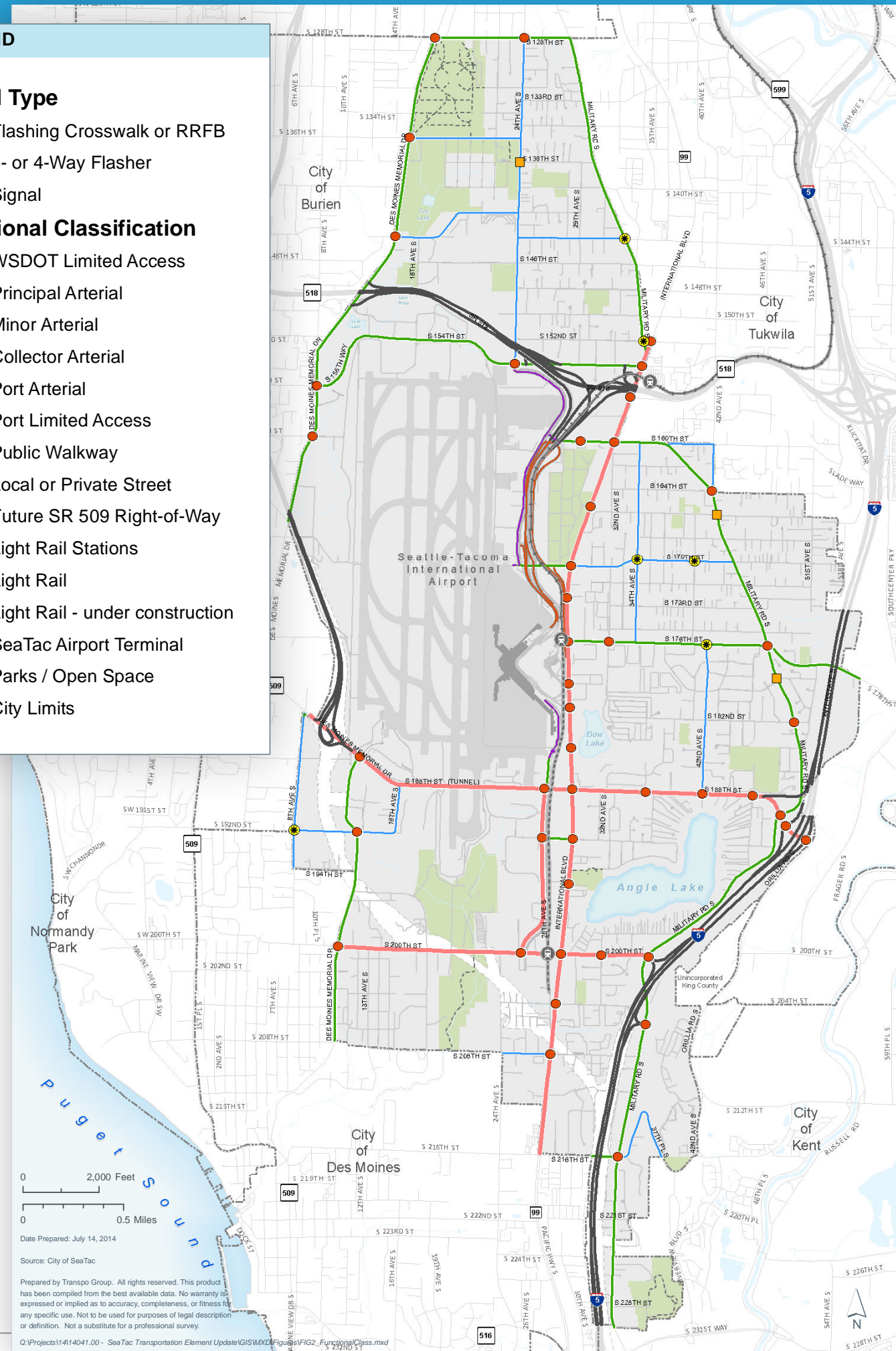
**LEGEND**

**Signal Type**

- Flashing Crosswalk or RRFB
- ⊛ 3- or 4-Way Flasher
- Signal

**Functional Classification**

- WSDOT Limited Access
- Principal Arterial
- Minor Arterial
- Collector Arterial
- Port Arterial
- Port Limited Access
- - - Public Walkway
- Local or Private Street
- Future SR 509 Right-of-Way
- ⊙ Light Rail Stations
- Light Rail
- Light Rail - under construction
- SeaTac Airport Terminal
- Parks / Open Space
- City Limits







# Existing Transportation System Conditions – Initial Findings

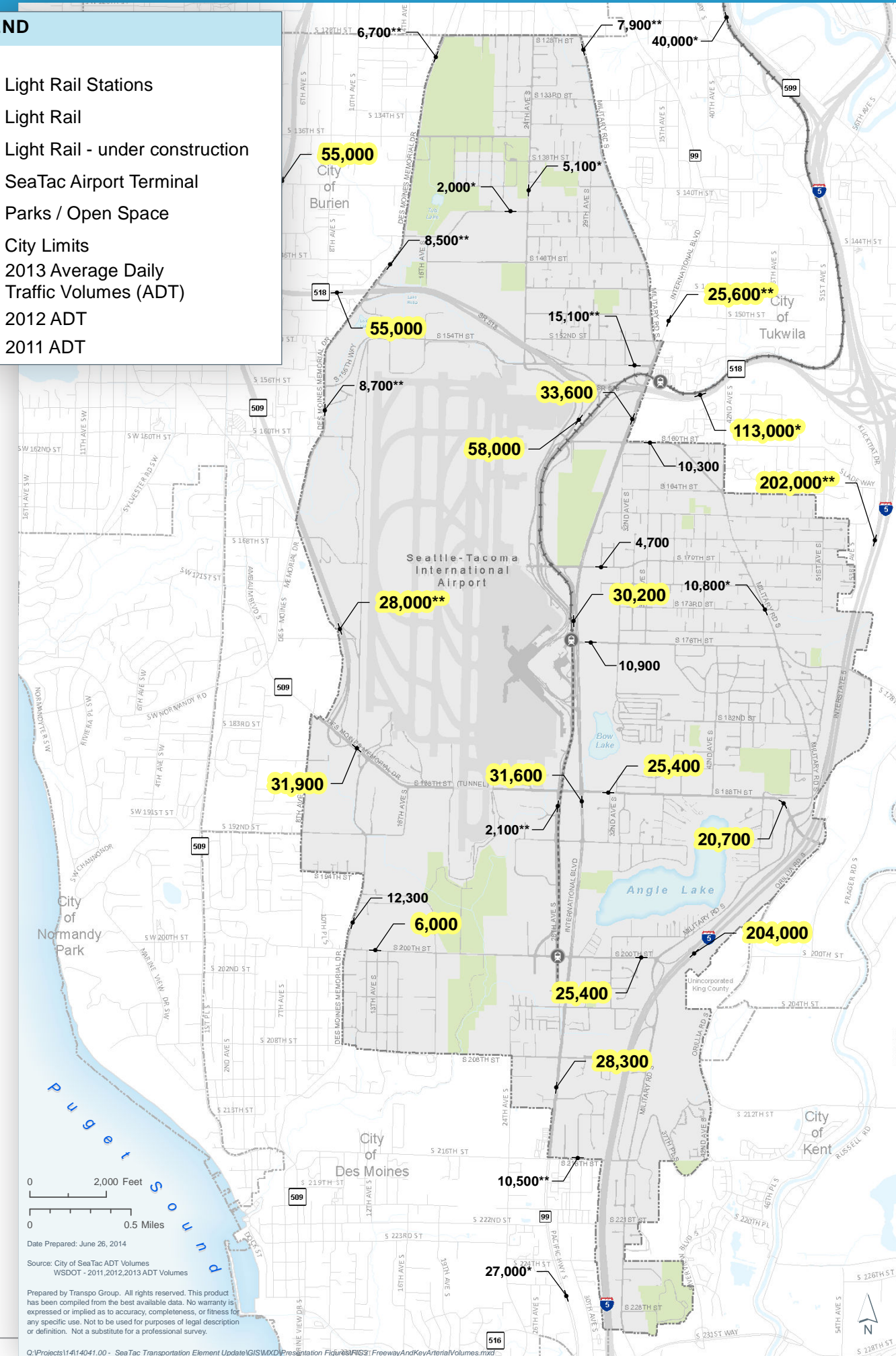
## Traffic Volumes

- > Freeways carry most of traffic, but much of it is through travel
  - I-5 carries over 200,000 vehicles per day
  - SR 518: 110,000 vehicles east of Airport and 55,000 to the west
  - North Airport Expressway: 58,000 vehicles on a weekday
  - SR 509: about 30,000 vehicles per day at south end of freeway segment
- > International Blvd carries 25,000 to 35,000 vehicles per day in SeaTac
- > S 188th Street: 20,000 to over 30,000 vehicles a day
- > S 200th Street: 25,000 vehicle a day near I-5

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**LEGEND**

- Light Rail Stations
- Light Rail
- Light Rail - under construction
- SeaTac Airport Terminal
- Parks / Open Space
- City Limits
- ###** 2013 Average Daily Traffic Volumes (ADT)
- ####** 2012 ADT
- #####** 2011 ADT





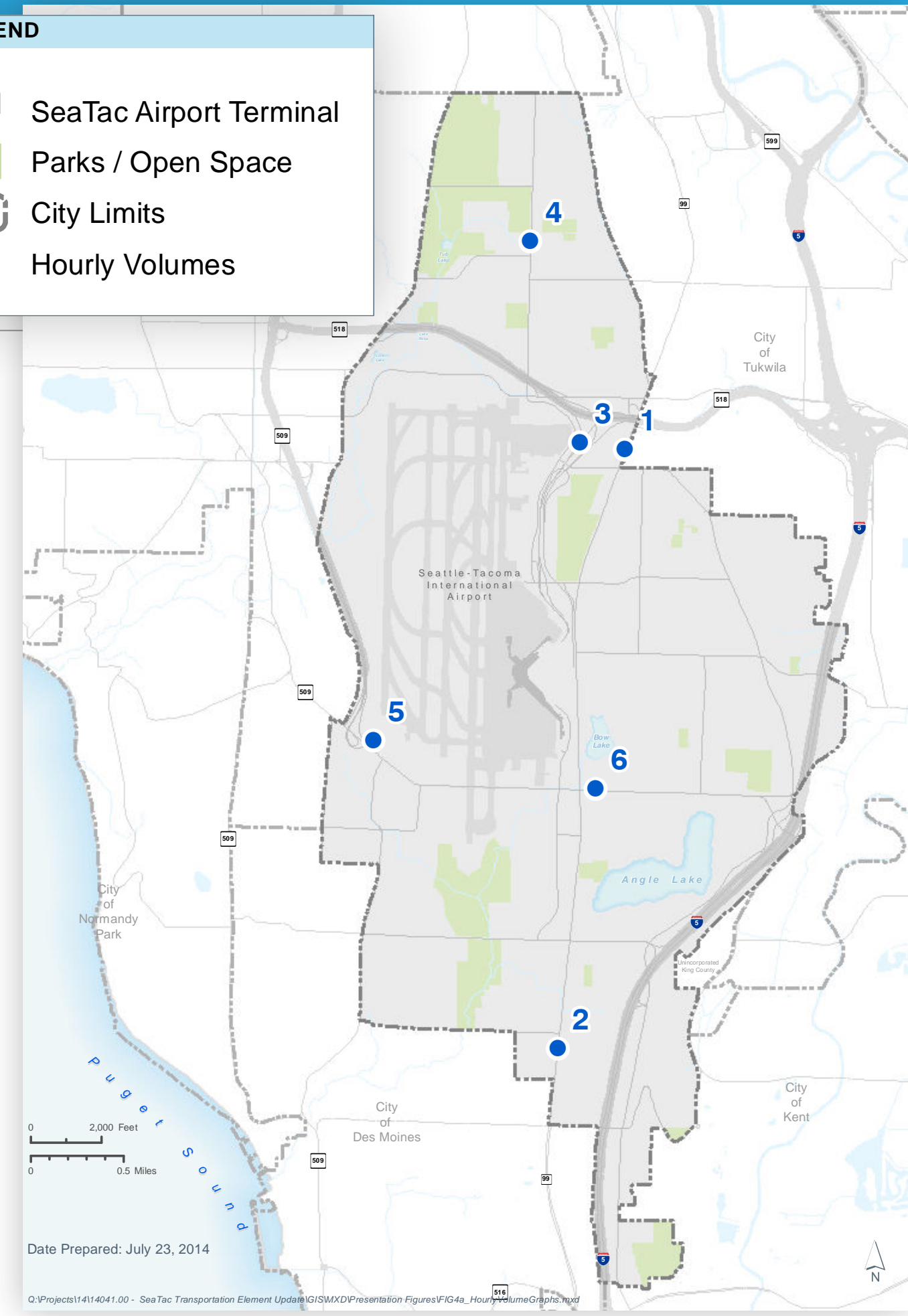
# Existing Transportation System Conditions – Initial Findings

## Traffic Volumes

- > Traffic volumes have not changed much over past 4 to 6 years; some locations have decreased
- > Traffic patterns peak differently than typical suburban areas
  - Airport has high volume in middle of day and at night
  - International Blvd has smaller commute peaks due to mid-day Airport and business traffic
  - Other arterials such as 24th Avenue S and S 160th Street have lower volumes; consistent volumes during the day – no strong commute peaks

**LEGEND**

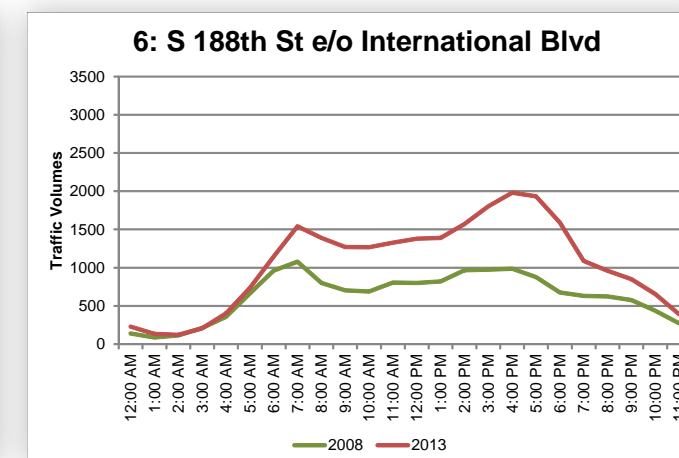
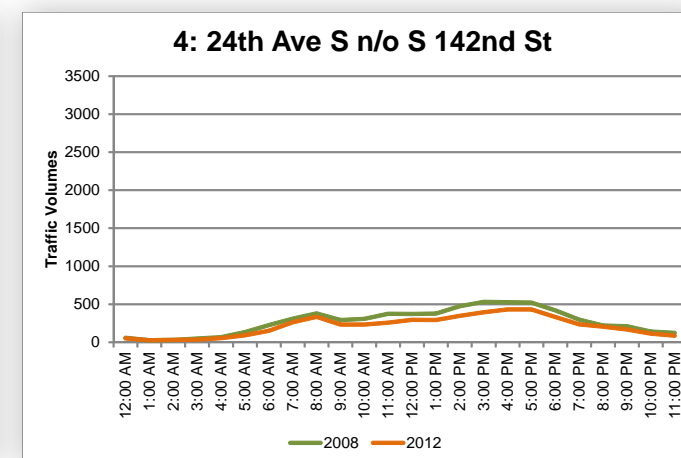
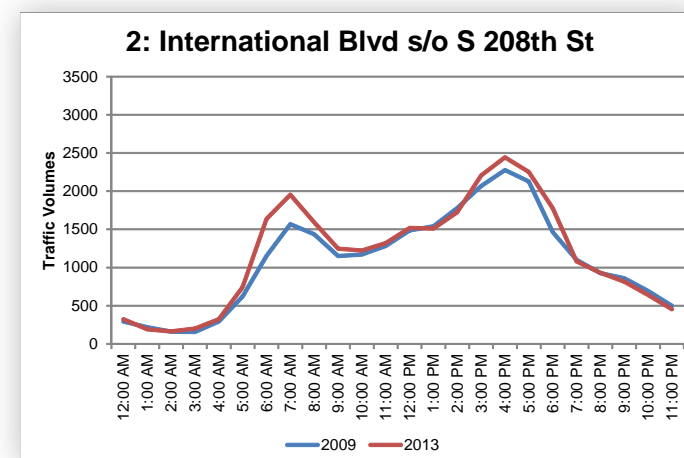
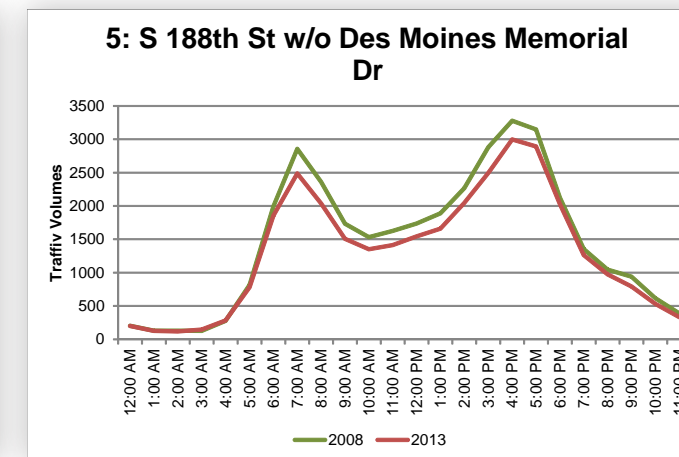
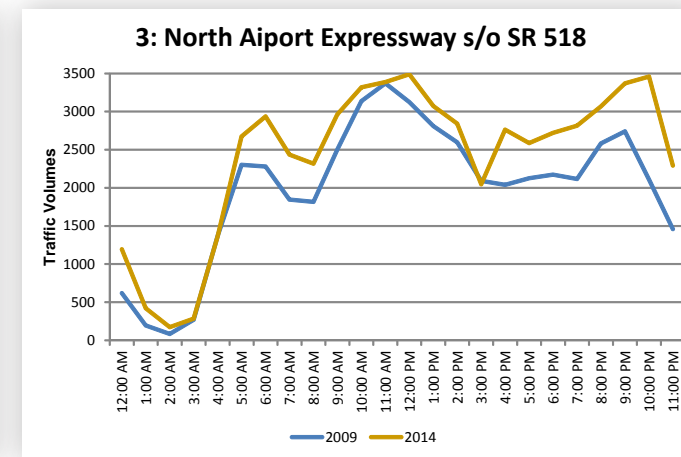
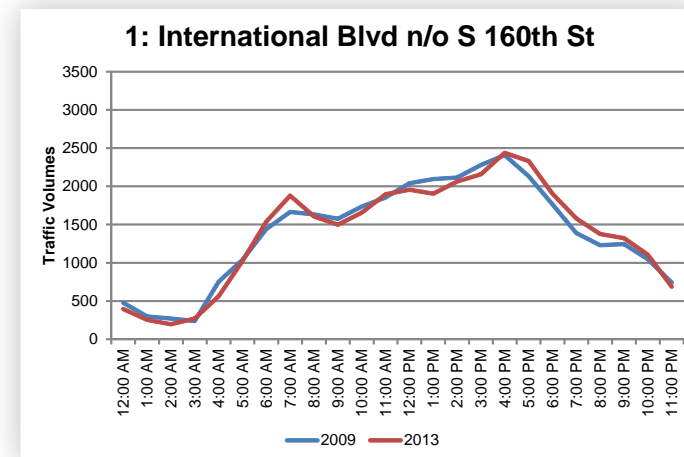
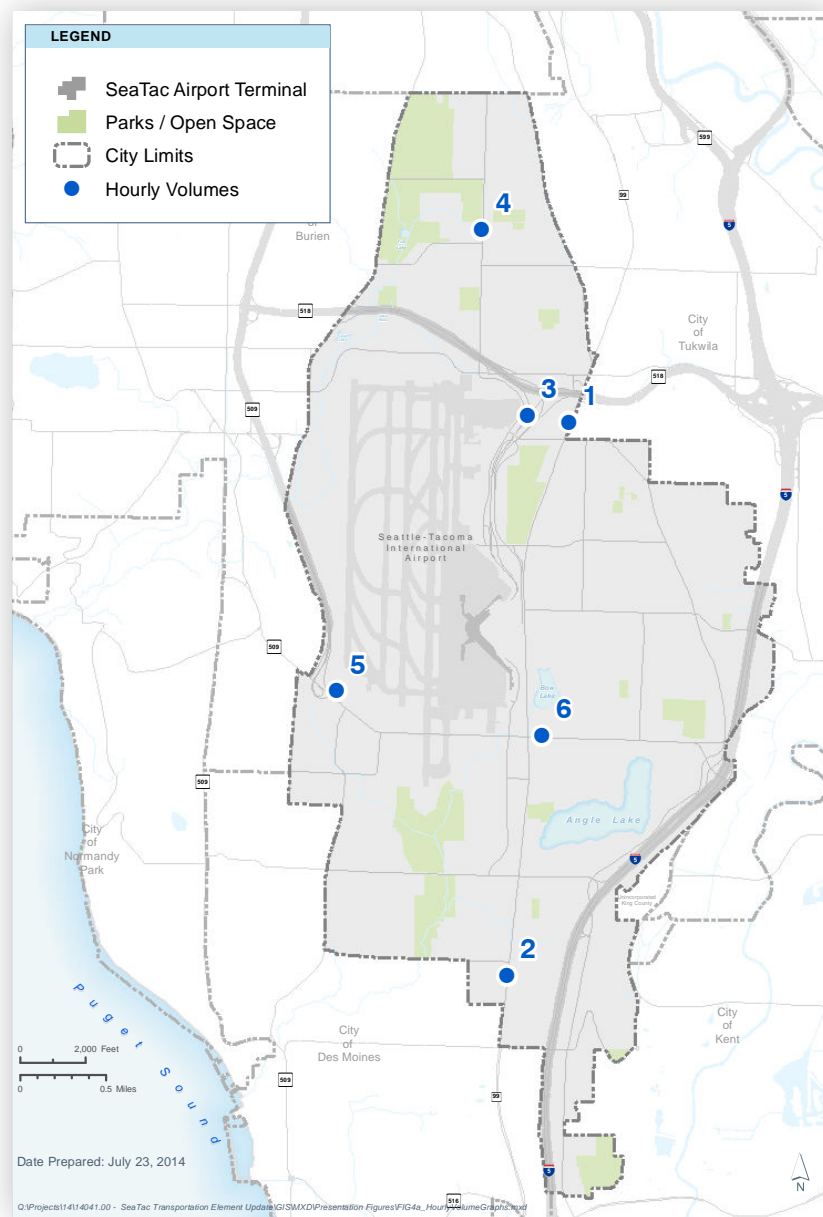
- SeaTac Airport Terminal
- Parks / Open Space
- City Limits
- Hourly Volumes







# Hourly Volume Graphs



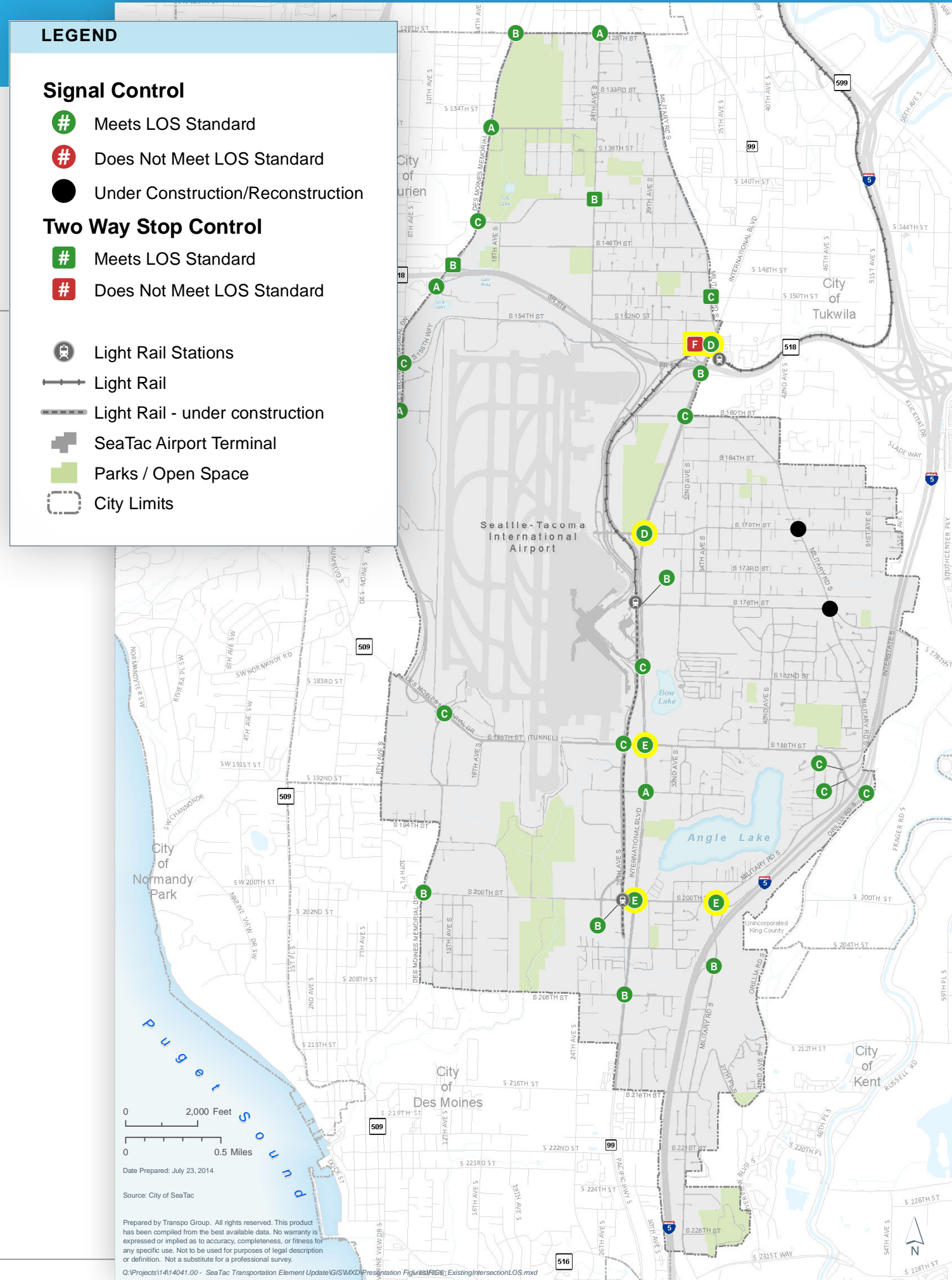




# Existing Transportation System Conditions – Initial Findings

## Traffic Operations

- > Traffic at most major intersections is controlled by traffic signals
- > Most intersections in City operate with moderate delays during PM peak commute period
- > **Highest levels of congestion are:**
  - Along International Blvd
  - At freeway interchanges
  - Only SR 518 Westbound off-ramp (left-turns) to S 154th Street operates below adopted level of service standards
- > Traffic queues affect the calculated delays, such as 28th Avenue S/S 188th Street





# Existing Transportation System Conditions – Initial Findings

## Transportation Safety

- > Over 1,960 recorded collisions over three year period (2011-2013)
- > Two-thirds of collisions are at or are related to intersections
- > Five fatality collisions
  - One on I-5 (pedestrian involved)
  - Three driving under the influence (D.U.I.)
    - > 34th Avenue S/S 176th Street
    - > Military Road south of S 135th Street
    - > Temporary SR 509 Construction Ramp
  - S 160th Street west of International Blvd
- > 196 collisions with injuries; 424 additional recorded with possible injuries
- > 68 collisions involved pedestrians or bicyclists – 26 of these along International Blvd
- > Most common types of collisions:
  - Rear end (31 percent)
  - Angle collisions (20 percent)
  - Turn collisions (12 percent)
  - Sideswipes (12 percent)
- > These types of collisions are typical in suburban/urban areas due to congestion, lane changes, property access

### LEGEND

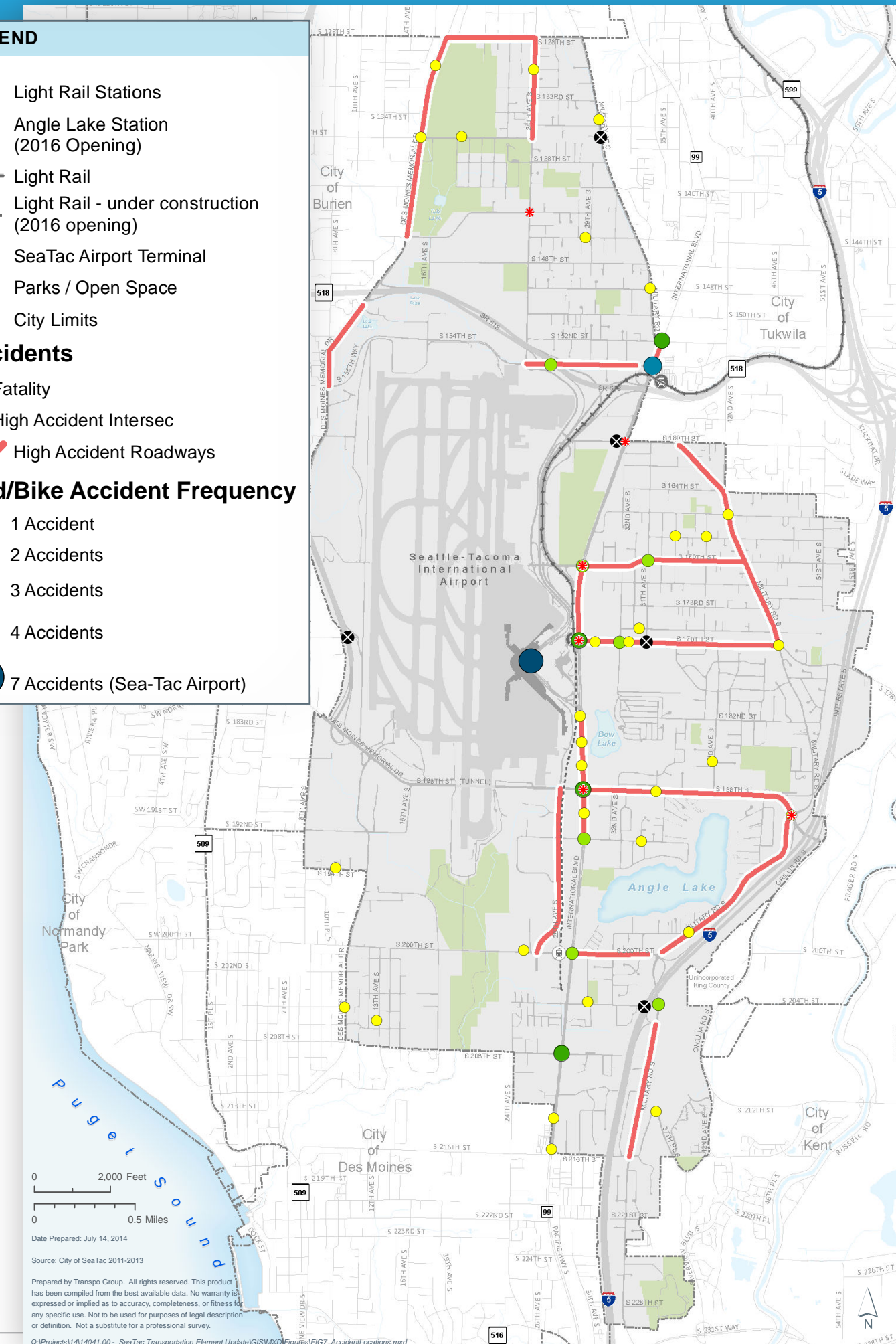
- Light Rail Stations
- Angle Lake Station (2016 Opening)
- Light Rail
- Light Rail - under construction (2016 opening)
- SeaTac Airport Terminal
- Parks / Open Space
- City Limits

### Accidents

- Fatality
- High Accident Intersec
- High Accident Roadways

### Ped/Bike Accident Frequency

- 1 Accident
- 2 Accidents
- 3 Accidents
- 4 Accidents
- 7 Accidents (Sea-Tac Airport)

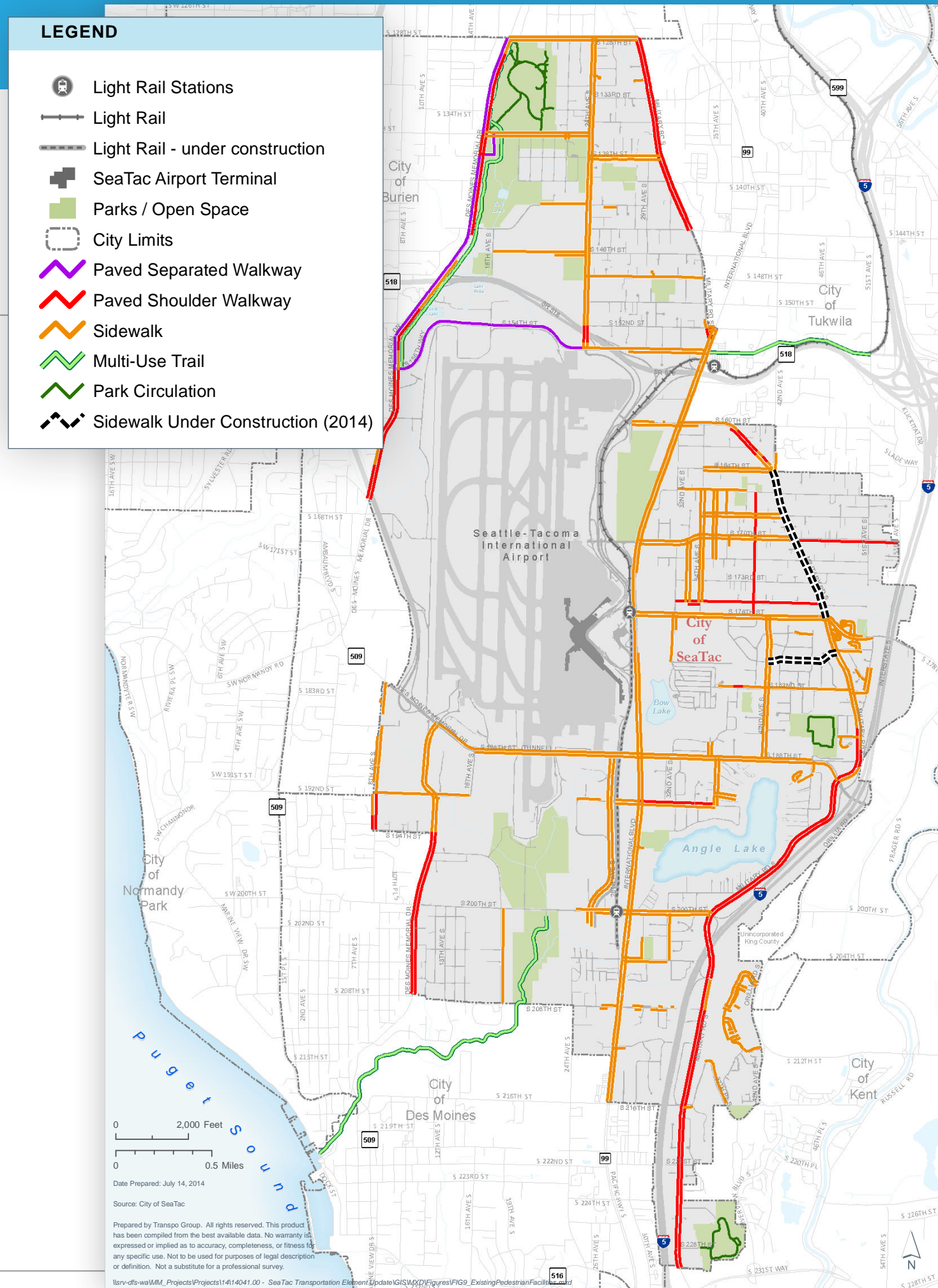






# Existing Transportation System Conditions – Pedestrian Facilities

- > Build from Draft Safe and Complete Streets Plan (2012)
- > Sidewalks are present along most major roadway corridors
- > Paved shoulders exist along north-south arterials – such as Des Moines Memorial Drive, Military Road – which can reduce use or increase safety issues
- > Multi-use trails and park paths also provide pedestrian connectivity
- > Missing or deficient pedestrian connections:
  - Lack of sidewalks along higher volume/higher speed corridors
  - Connections for pedestrians to schools
  - Within neighborhoods and along non-arterials







# Existing Transportation System Conditions – Bicycle Facilities

- > Build from Draft Safe and Complete Streets Plan (2012)
- > Limited bicycle lanes
- > Bicycle routes using shared lanes with traffic, examples:
  - International Blvd
  - S 188th Street
  - Military Road
  - S 176th Street
- > Shared bicycle facilities on higher volume/higher speed arterials
- > Limited connections to regional facilities
- > Conflicts with pedestrian use along shoulders and on-street parking
- > Missing segments

## Gap Analysis

- Facility Quality Gap
- Spot Gap
- ↔ Connection Gap (≤1/4 mile)
- Lineal/Corridor Gap
- System Gap

## SeaTac Existing Bicycle Facilities

- Bicycle Route/Shared Roadway
- Bicycle Lanes
- Bicycle Lanes One Side Only

## Trails Maintained by SeaTac

- Multi-Use Trail
- Park Circulation Trail
- ★ Primary Public Building
- ★ Schools
- ★ Light Rail Station
- Open Space
- City Boundary
- Airport
- Waterbody
- SR-509 Future ROW

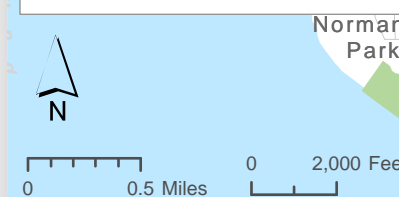
This map shows existing bicycle facilities as defined by the City of SeaTac. The shared roadways and bicycle route categories have been merged. Facilities displayed on this map include:

**Bicycle Lanes:** Bicycle lanes are delineated by painted lane markings within the pavement width of urban arterials or collector streets.

**Bicycle Route/Shared Lane:** These facilities accommodate cyclists and motorists in the same travel lane. In some cases an extra three feet of width is provided. Facilities in this category may also accommodate cyclists riding on the roadway shoulder.

**Multi-Use Trail:** These trails are built for transportation and recreation purposes and accommodate a variety of nonmotorized uses, including pedestrians and bicycles. These trails typically connect several destinations. SeaTac only maintains trails that fall within the city limits.

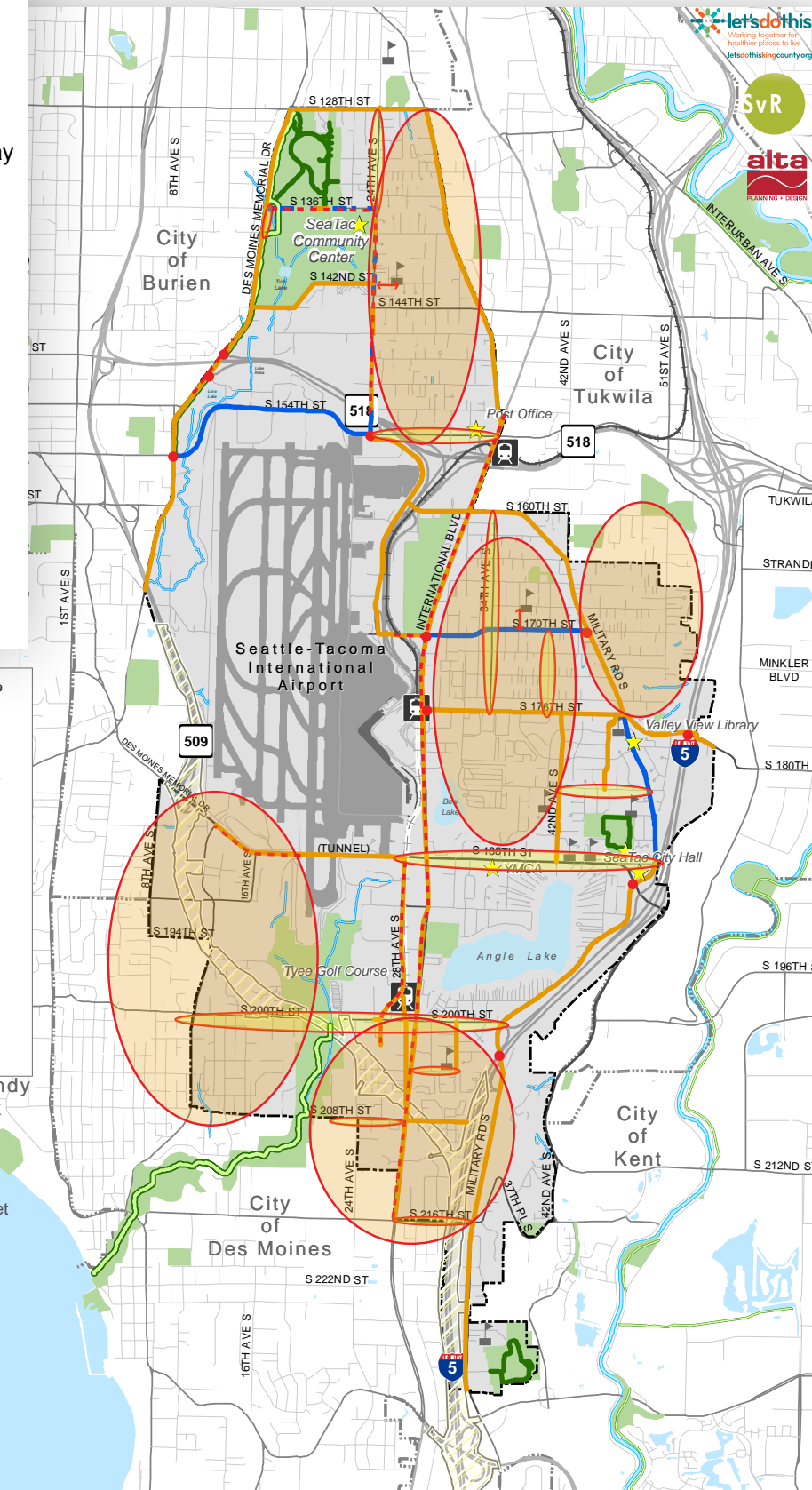
**Park Circulation Trails:** These multi-use trails provide internal circulation within SeaTac's parks. They serve a variety of nonmotorized uses, including pedestrians and bicycles.



Date Prepared: November 2011  
Source: City of SeaTac, King County GIS, NAVTEQ

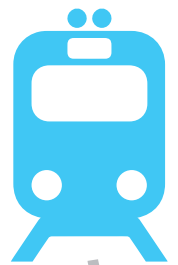
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Made possible by funding from the Department of Health and Human Services and Public Health - Seattle & King County.





# Existing Transportation System Conditions – Transit



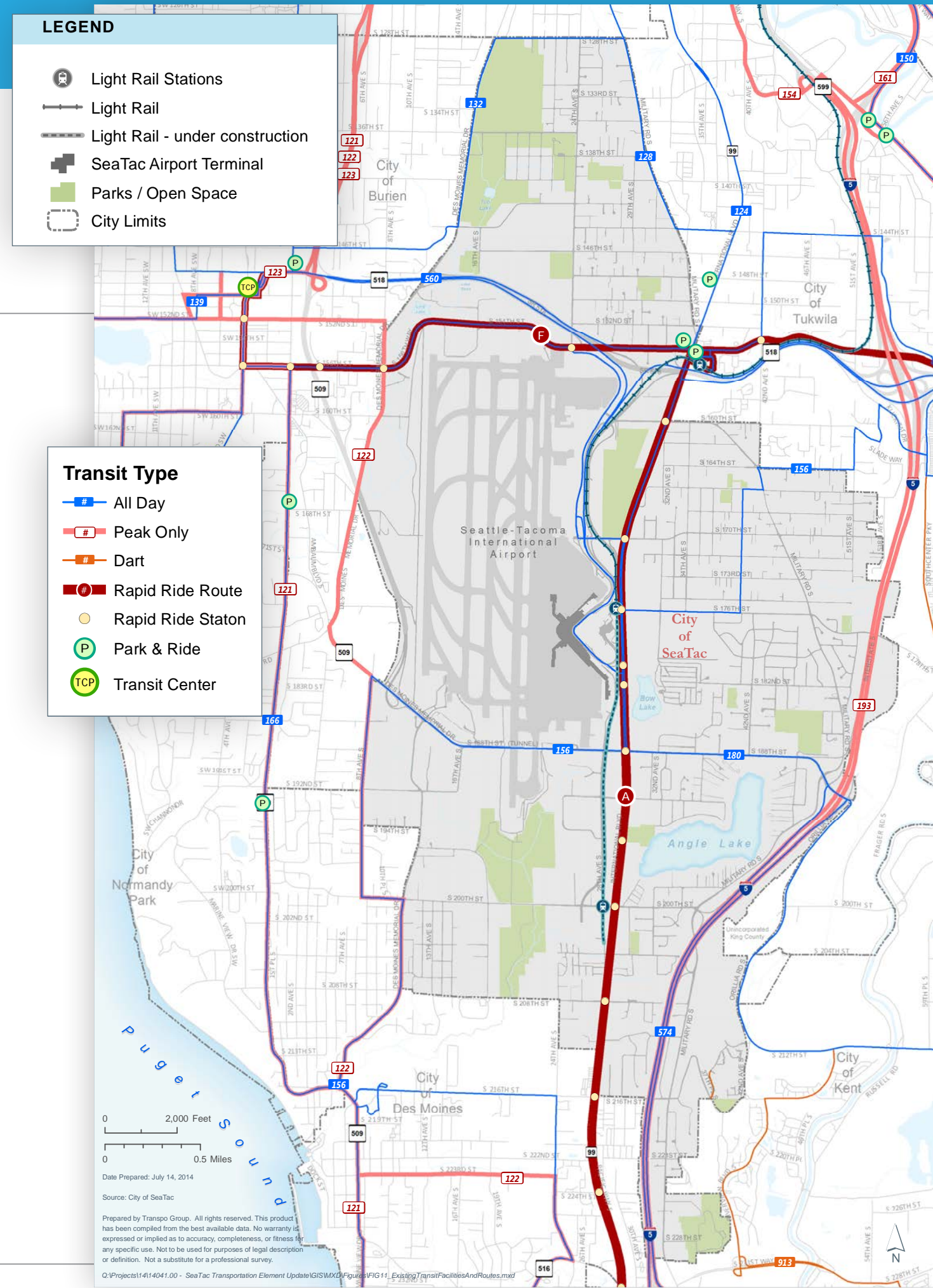
Link Light Rail and RapidRide provide solid framework for transit service in SeaTac

## EXPRESS BUS

Supported with other peak period express bus service



Three Park-and-Ride lots serving greater SeaTac area







# Transportation Policy Introduction

VISION 2040 & GMA

INTEGRATION OF  
PEDESTRIAN AND  
BICYCLE FACILITY  
IMPROVEMENTS  
WITH TRAFFIC  
NEEDS

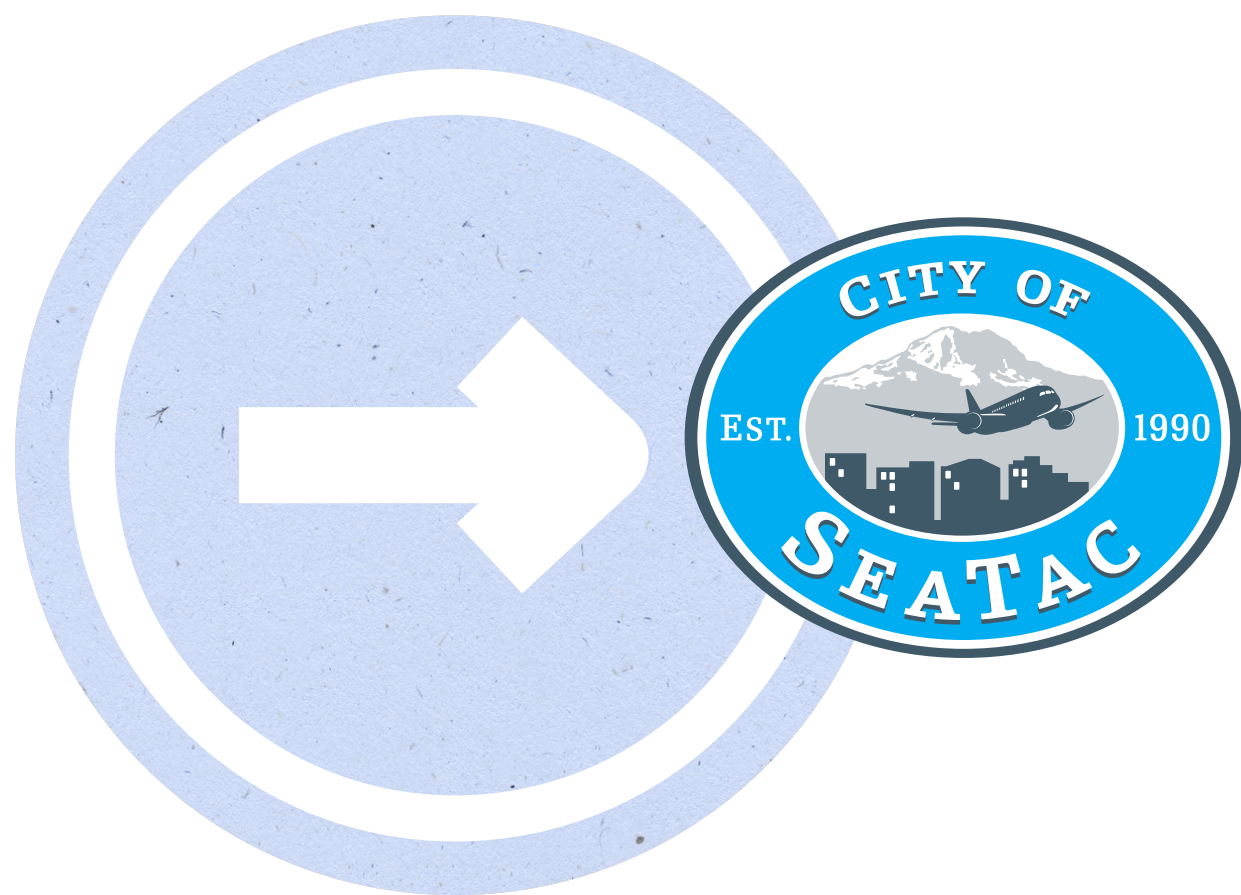
LEVEL OF  
SERVICE  
STANDARDS &  
CONCURRENCY

TRANSPORTATION FUNDING STRATEGIES & IMPACT FEES





## Next Steps



Travel demand model being updated

Forecasts and alternatives evaluation

Multimodal improvements and priorities

Policy updates

Meet with Planning Commission and City Council in November

Public outreach as part of the Comprehensive Plan update process