

City of Winston-Salem University

Department of Transportation

“Enhancing Mobility, Improving the Journey.”



Mission Statement

- The Transportation Department has a focus on moving people and goods safely and efficiently on the surface transportation system in Winston-Salem and Forsyth County. We aspire to plan, design, construct, operate and maintain our system so that congestion, delay and traffic accidents are minimized while transportation choices and emergency services are maximized.

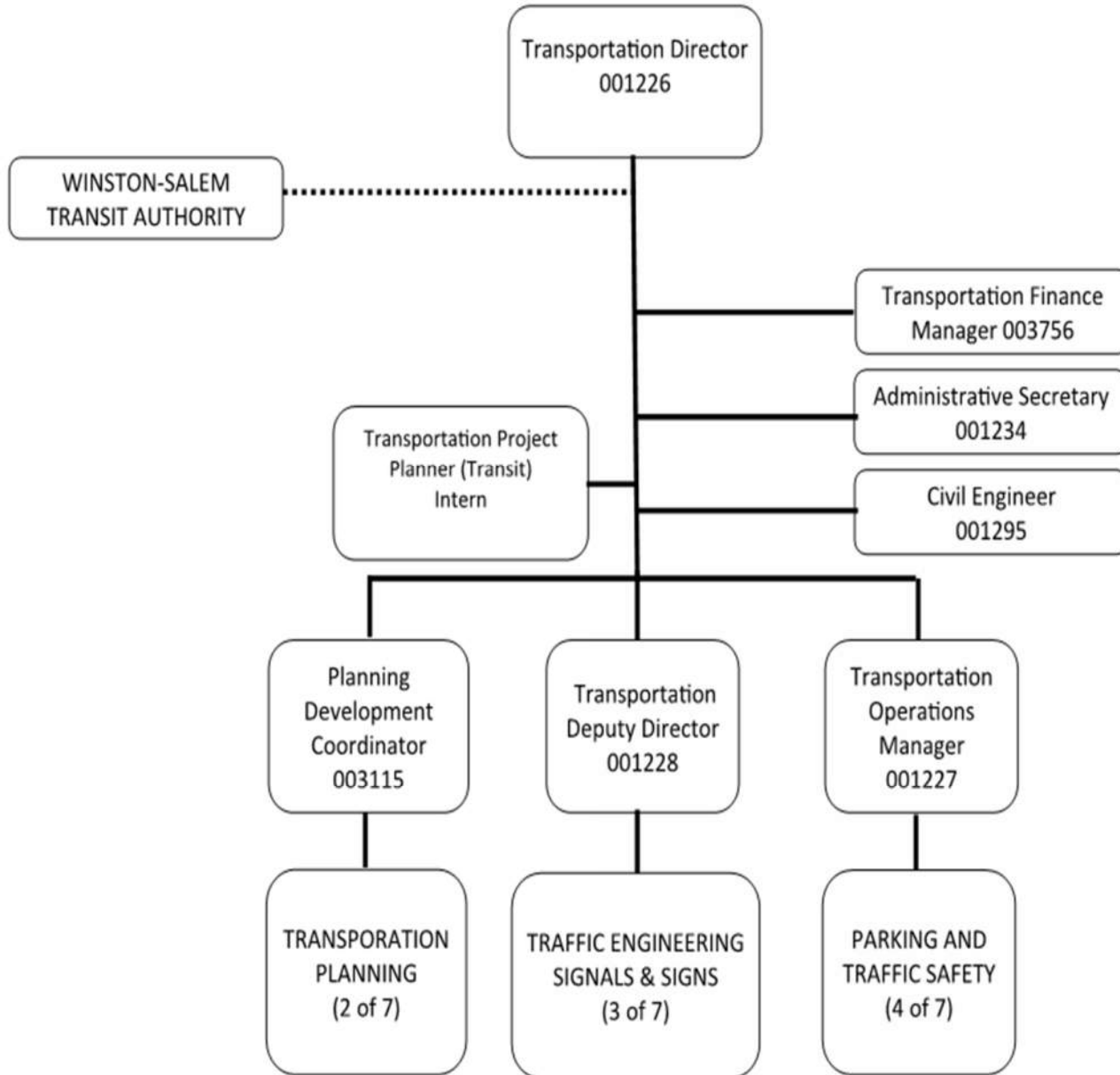


City of Winston-Salem University

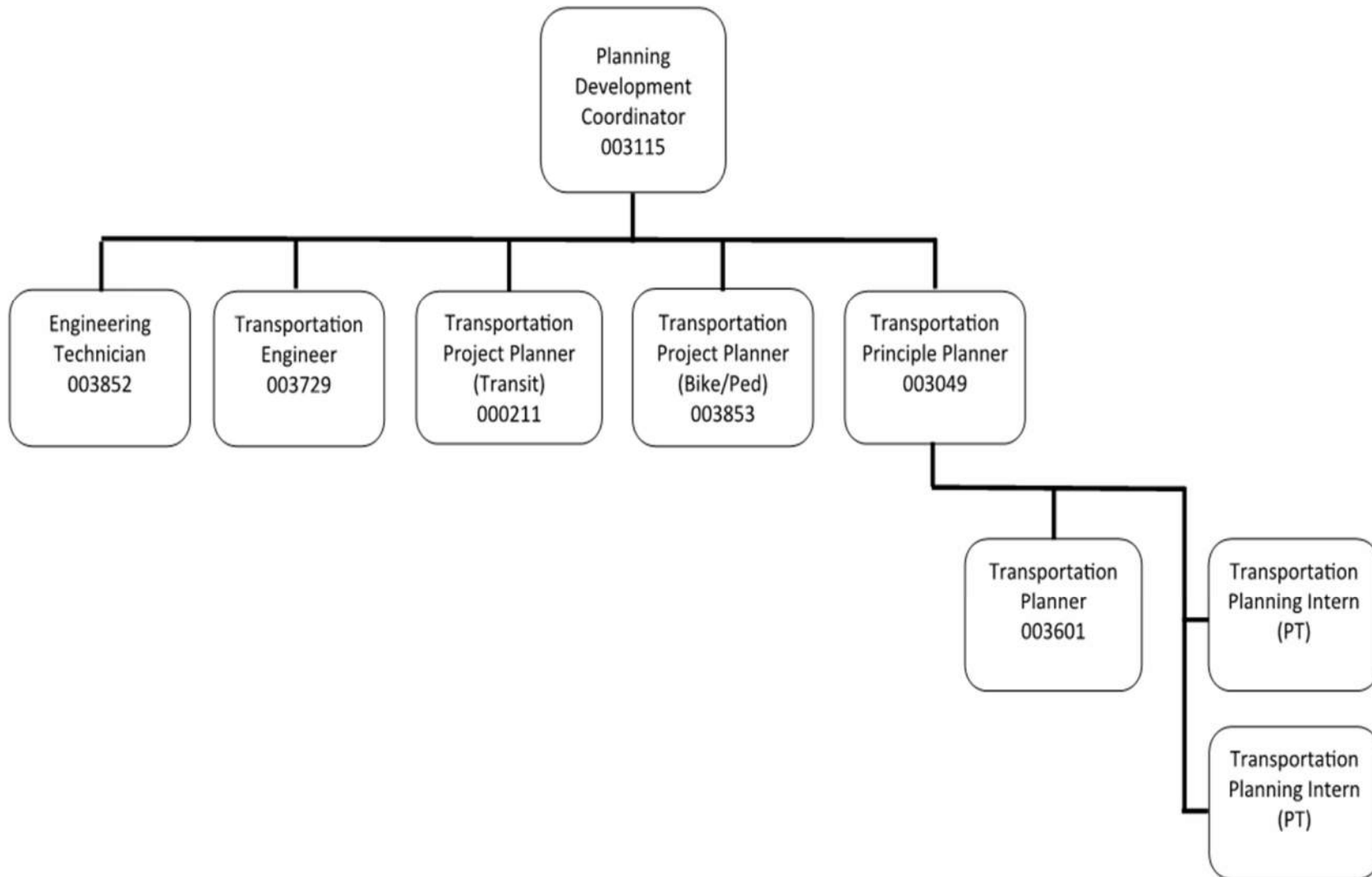
Department Org Chart



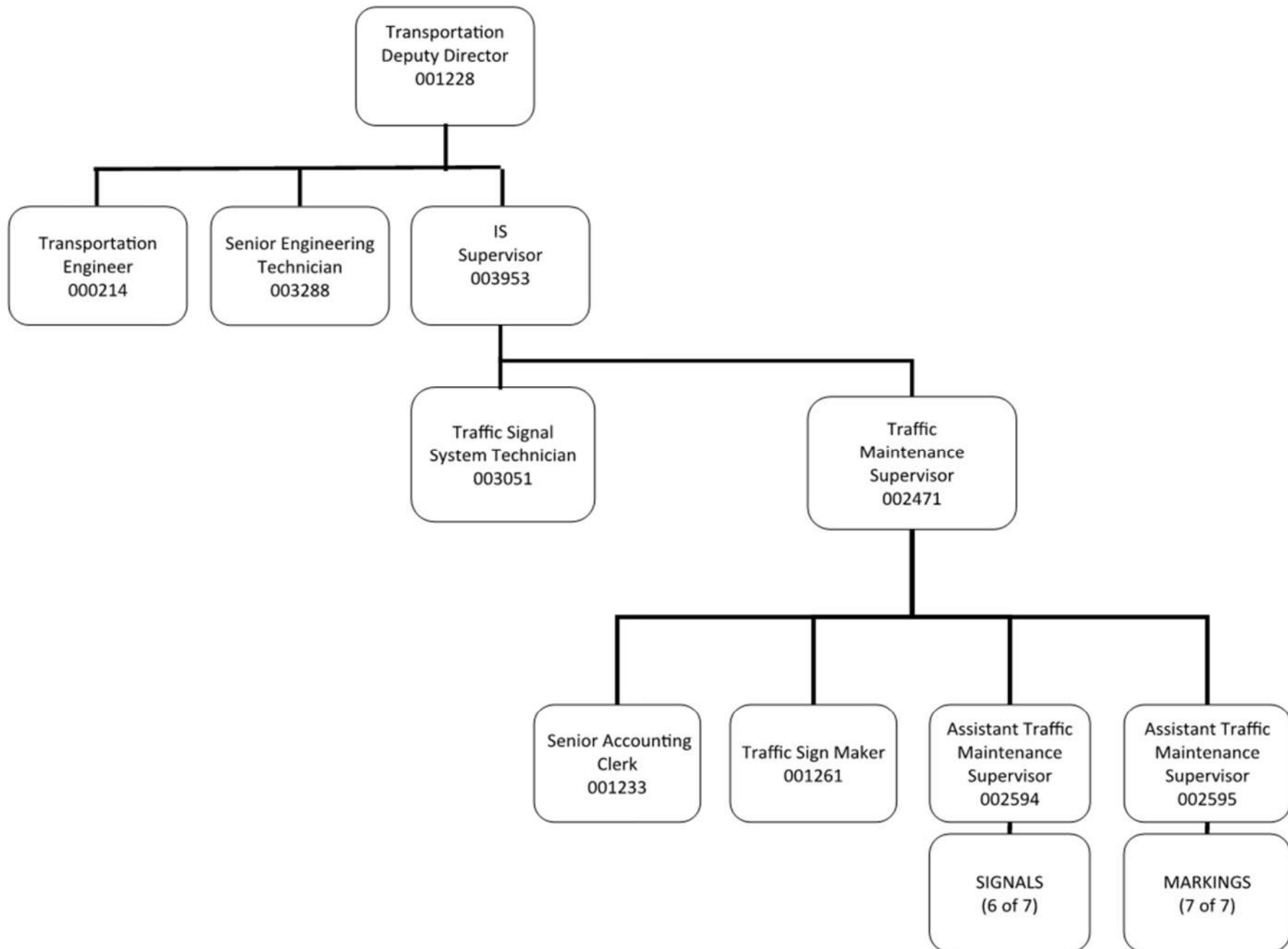
TRANSPORTATION (1 of 7) - ADMINISTRATION 1



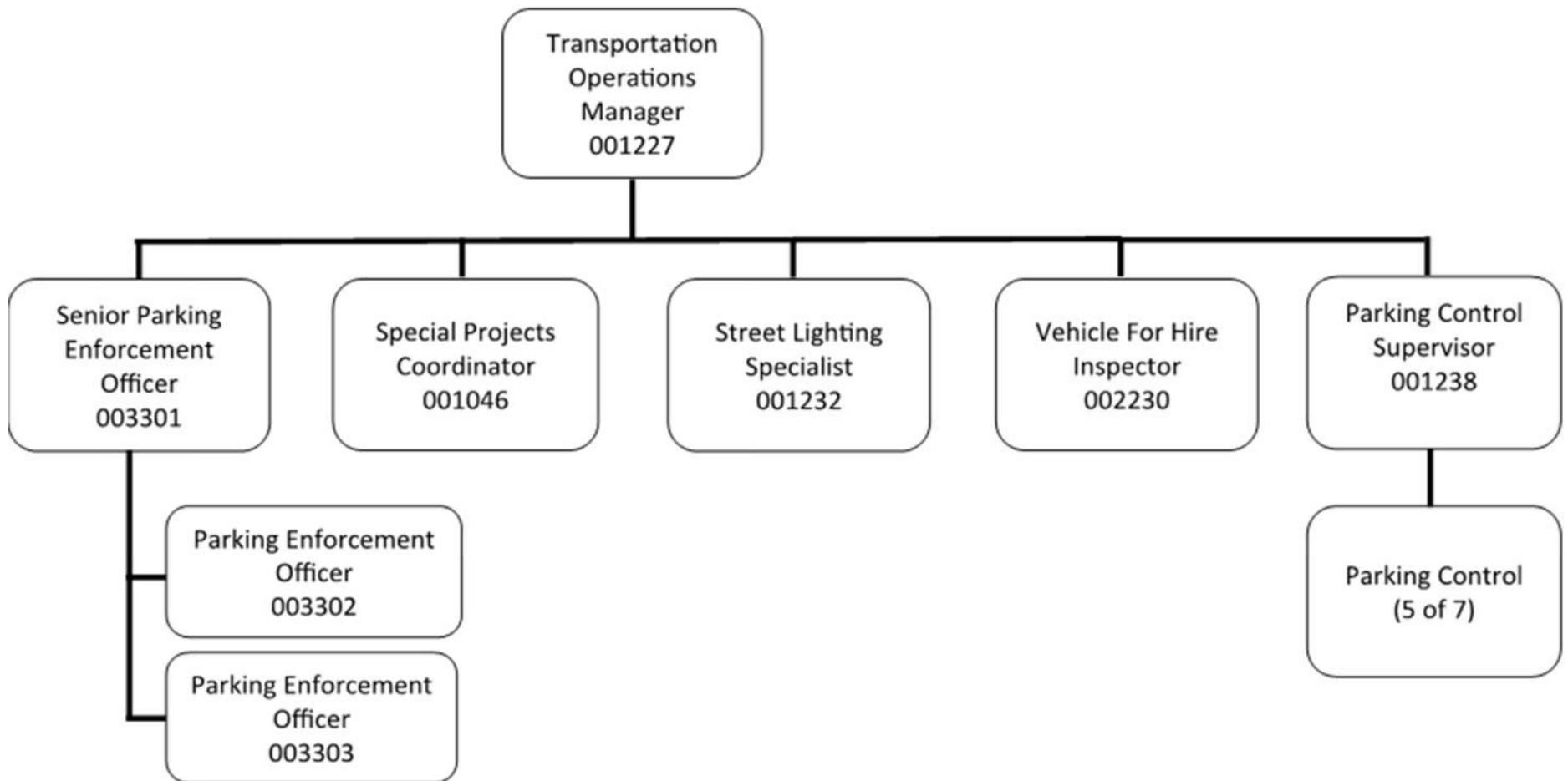
TRANSPORTATION (2 of 7) - PLANNING



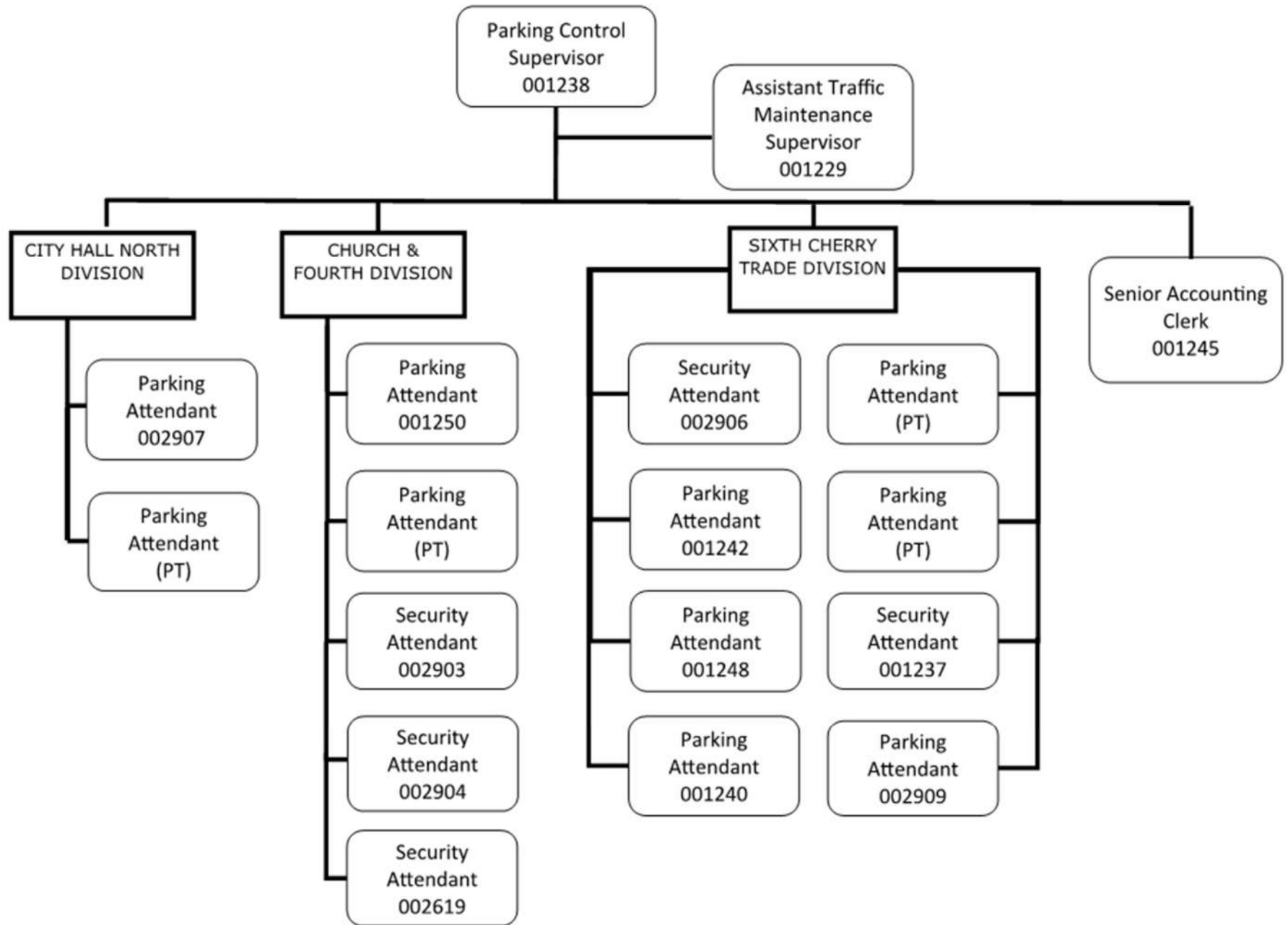
TRANSPORTATION (3 of 7) - TRAFFIC ENGINEERING SIGNALS & SIGNS



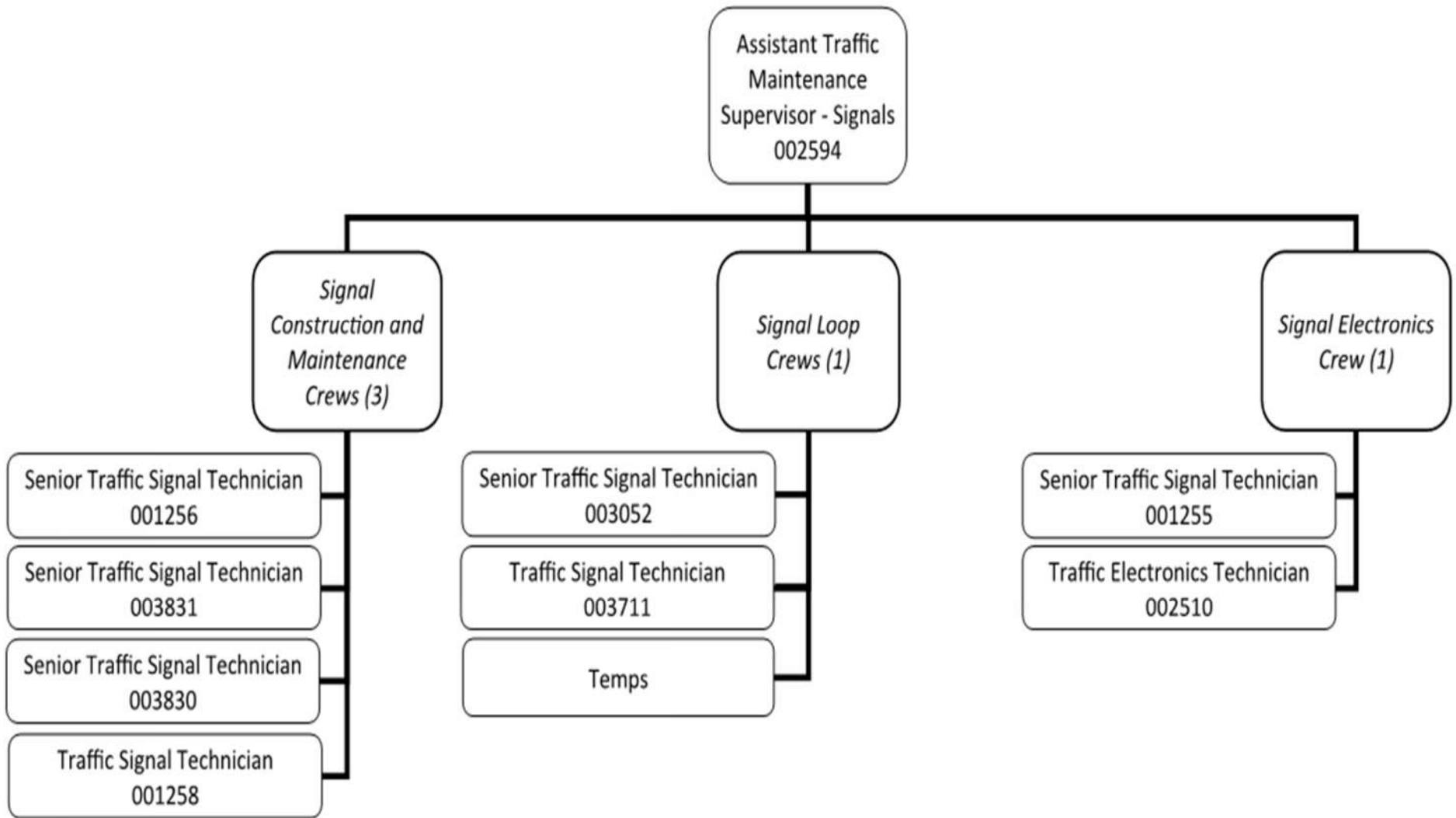
TRANSPORTATION (4 of 7) - PARKING / TRAFFIC SAFETY I



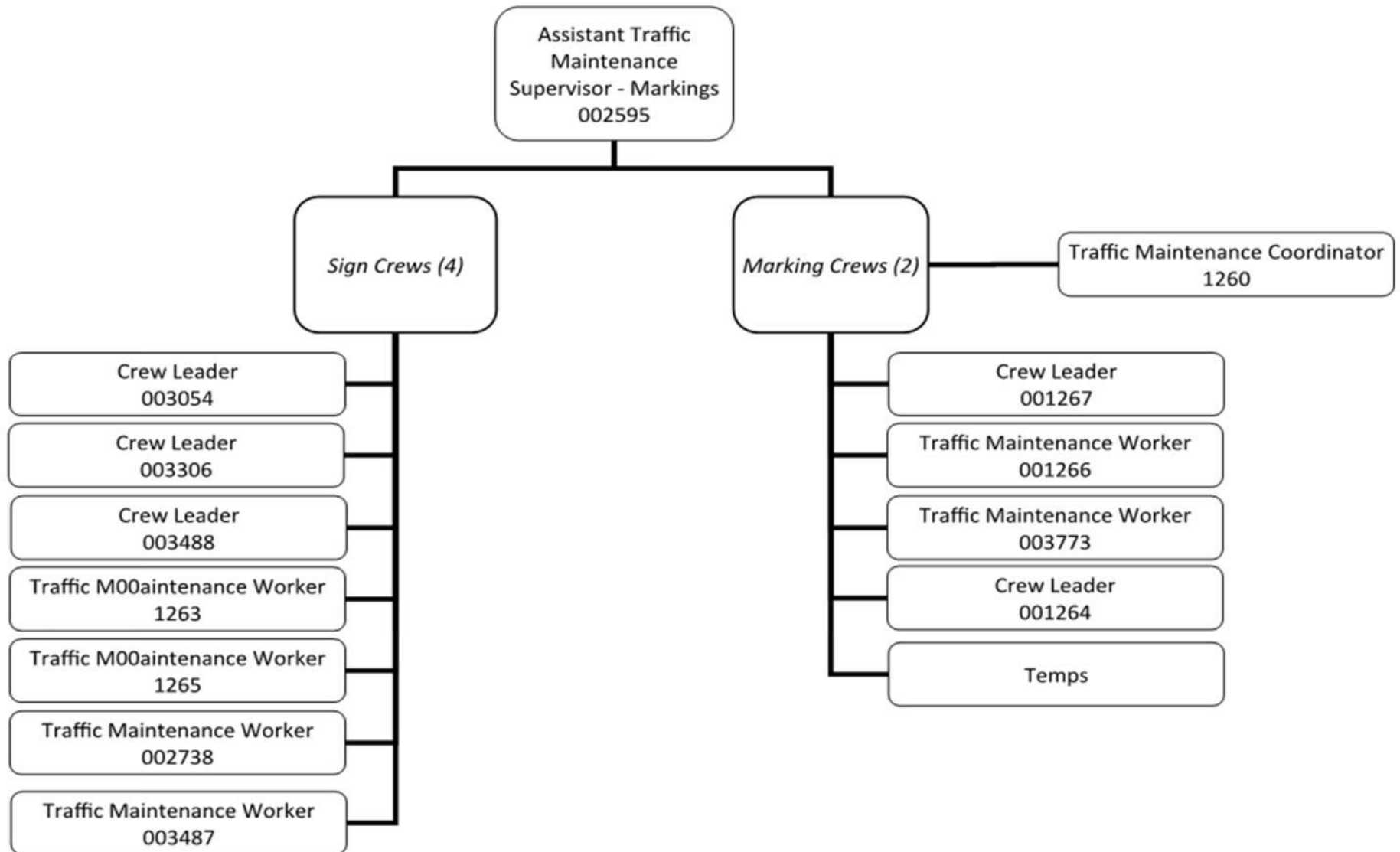
TRANSPORTATION (5 of 7) - PARKING / TRAFFIC SAFETY II—PARKING DECKS/LOT



TRANSPORTATION (6 of 7) - TRAFFIC MAINTENANCE SIGNALS

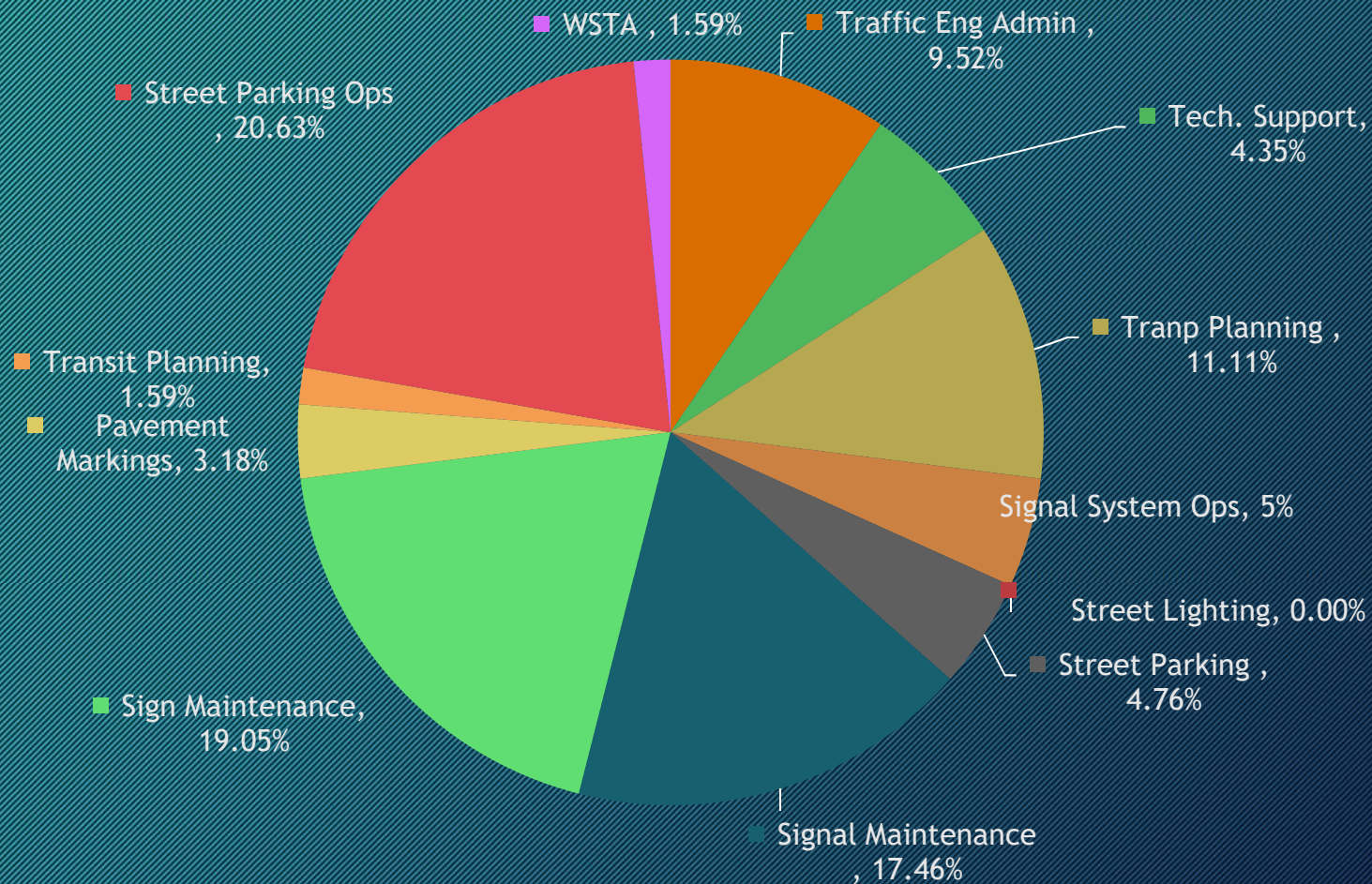


TRANSPORTATION (7 of 7) - TRAFFIC MAINTENANCE MARKINGS



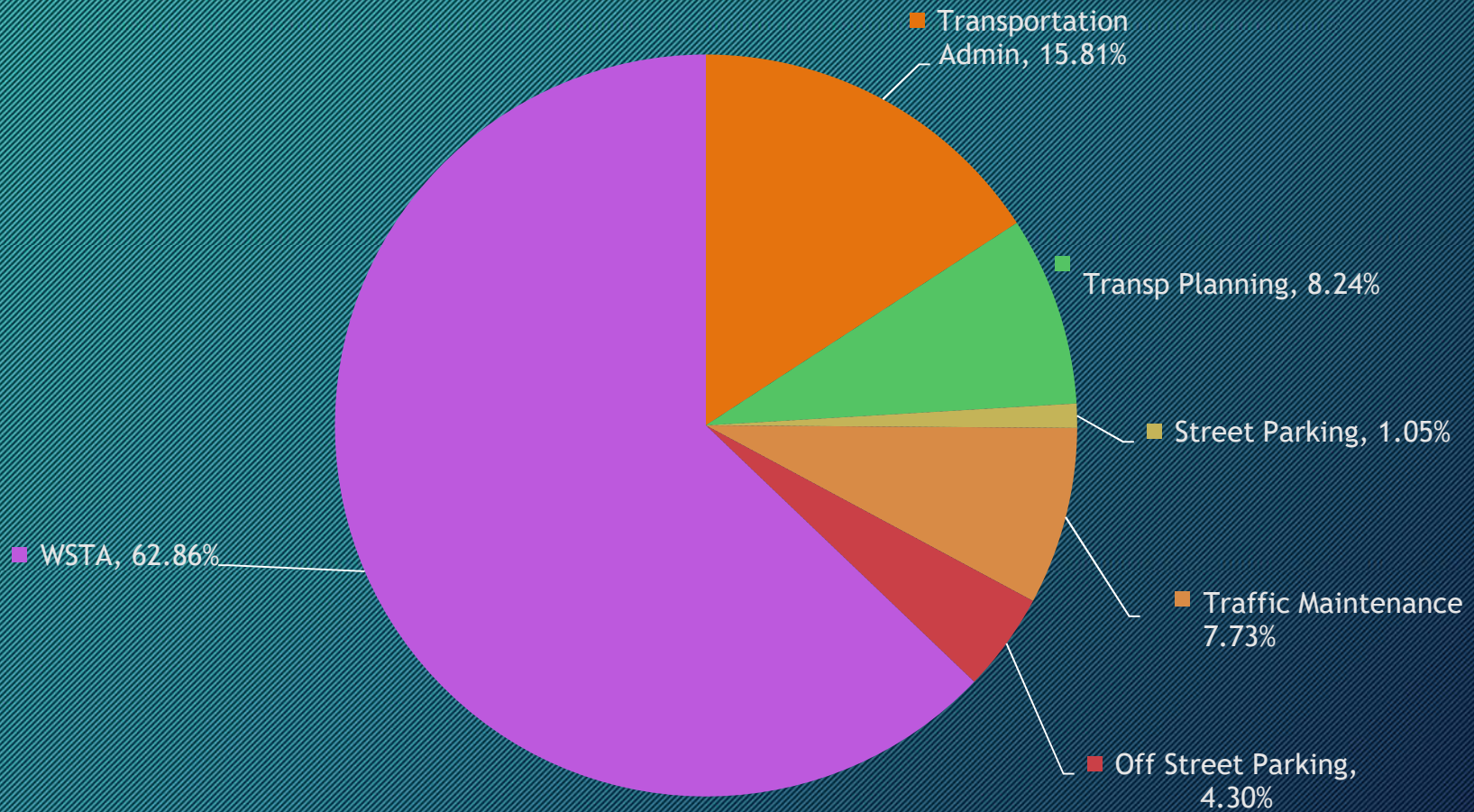
Department Personnel

63 Positions



Department Budget

\$34,277,970



City of Winston-Salem University

Traffic Safety
Traffic Calming
Traffic Operations

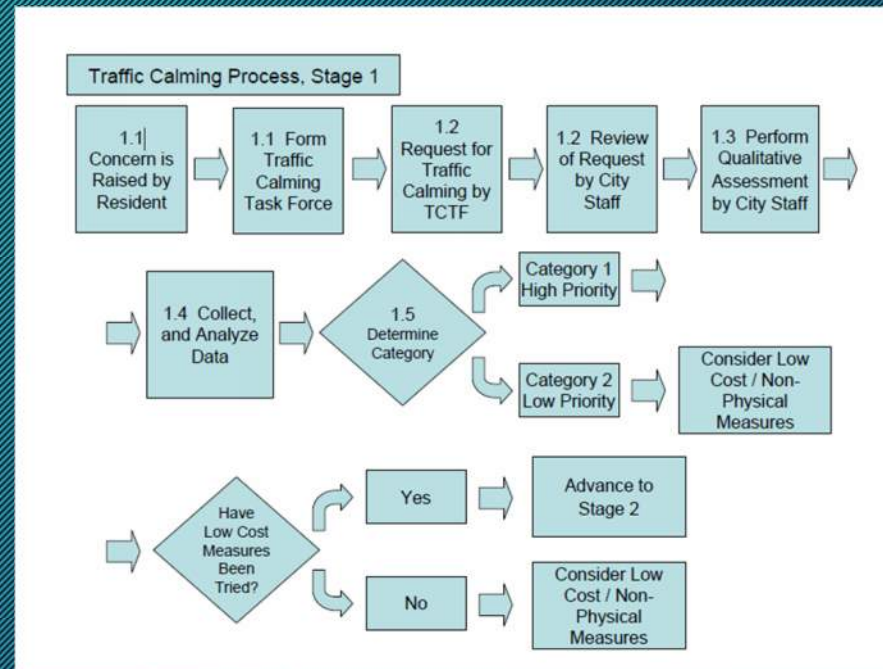
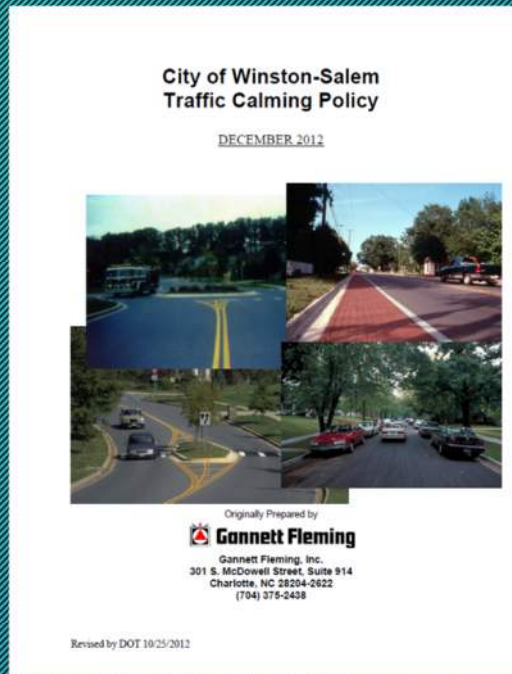


Winston-Salem's “Low Cost” approach to Safety

- Combine safety concerns with everyday Traffic Engineering.
- Use available tools - Signs, Signals & Pavement Markings.
- Instead of Priority Lists ... examine each location for a “Pattern of Crashes” to find a remedy.



Traffic Calming Policy



<http://www.cityofws.org/departments/transportation/safety/traffic-calming-policy>



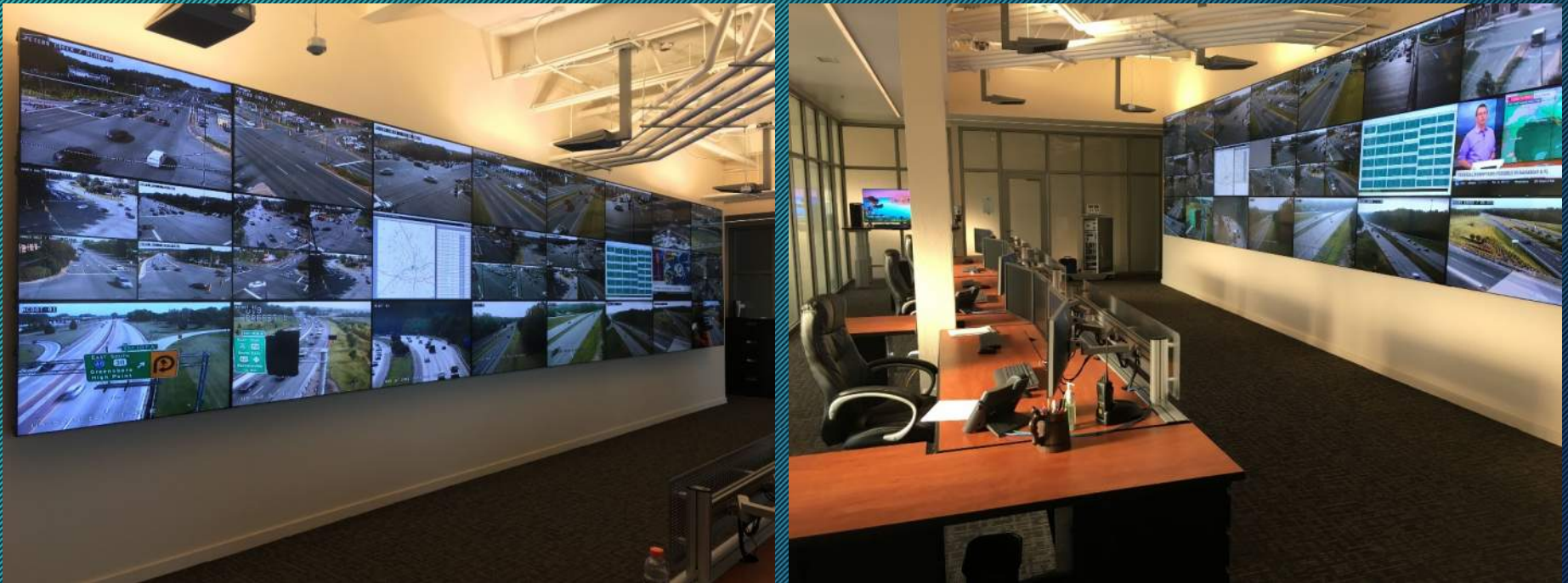
Traffic Operations

- Traffic Engineering
 - Signal Warrant Studies
 - Speed Studies
 - Delay Studies
 - Origin & Destination Studies
 - Sight Distance Studies
- Traffic Signal Systems



Traffic Signal System

Office located at Union Station

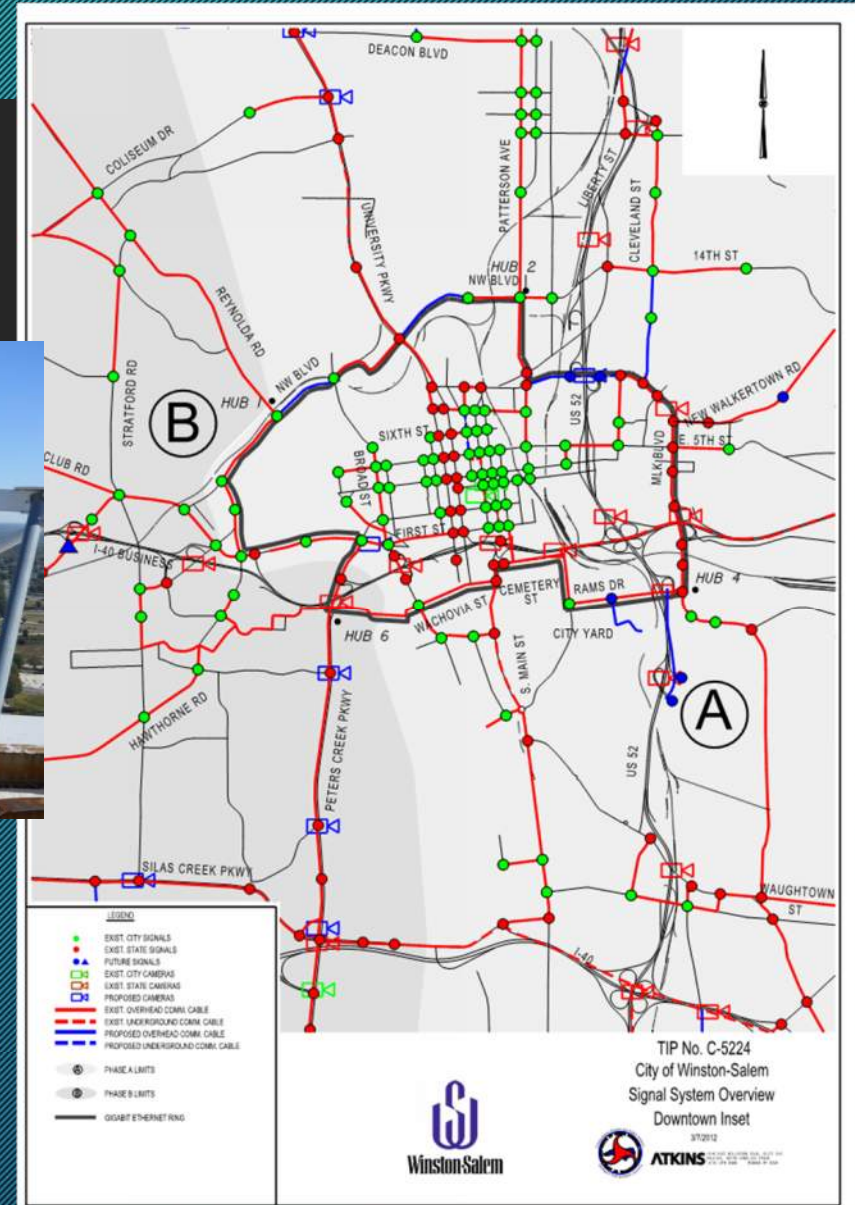


Traffic Signal System

- Computerized system manages the operation of the Traffic Signal Network
 - 398 Signalized Intersections
 - 150 miles of Fiber Optic Communication Cable
 - Downtown operates on a 4.9 GHz wireless system
 - Monitors traffic to identify accidents or congestion
 - 33 city owned traffic surveillance cameras
 - Access to NCDOT cameras in the Piedmont Triad Area



Traffic Signal System



- Handle Citizen calls concerning Traffic Signal Timing or Malfunction
- Evaluates Timing Patterns for Major Corridors



How Traffic Signals Work

- Pre-Timed : Signal Controller Operates on Fixed Times
- Actuated : Vehicles are Detected & Calls Go to Controller
 - Inductive Loops
 - Above Pavement Detection
- Semi-Actuated : Combination of Pre-Timed & Actuated



City of Winston-Salem University

Parking Operations
Street Lighting
& Vehicle for Hire



Parking Operations

Parking Downtown

- City Operates 2 Decks
 - 6th Cherry Trade
 - 4th & Church
- City Operates 3 Surface Lots



Parking Operations

- On-Street Parking Enforcement



- 3 Enforcement Officers
- Primarily Downtown
- Fines from \$15 to \$250
- 11,205 Tickets Issued in '18-'19



Street Lighting

- Installation of New and Maintenance of Existing Streetlights
 - Designed & Authorized By the City
 - Installed by Duke Energy and in some cases Developers
 - Duke Energy Maintains their lights, city maintains privately owned lights in R/W



Street Lighting

- 32,921 Leased Street Lights from Duke Power
- 1,100 City Owned Decorative Street Lights
- \$257,000 Current Monthly Electric Bill
- \$3,425,180 Current Street Lighting Budget



Street Lighting

Nema Head



Street Lighting

Cobra Head



Street Lighting



Decorative



Vehicle for Hire

- Inspection
 - Cleanliness
 - Fare Calculation
 - Insurance
 - Passenger Comfort



Vehicle for Hire

- Taxi Cabs
 - 8 Companies Authorized to Operate 129 Vehicles
- Limousines
 - 26 Companies Authorized to Operate 171 Vehicles
- Horse-Drawn Carriages
 - 2 Companies Authorized to Operate 8 Carriages
- Golf Carts
 - 1 Company Authorized to Operate 1 Cart
- Trolley Pub companies
 - 2 Company Authorized to Operate 2 Trolley Pubs



City of Winston-Salem University

Traffic Maintenance



Traffic Maintenance

Construction and Maintenance of

- Traffic Signals
- Traffic Signs
- Traffic Markings



Traffic Signal Construction & Maintenance

- Control Cabinet
- Poles
- Signal Heads
- Wiring Loops
- Bulb Changeouts
- Pedestrian Signals



Traffic Signs

- **Regulatory**

- Stop
- Yield
- Speed Limit



- **Warning**

- Curve
- Island Keep Right



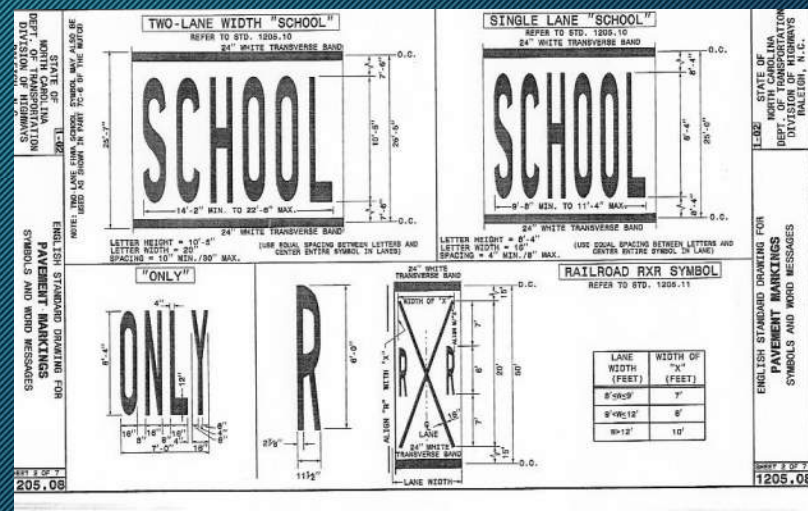
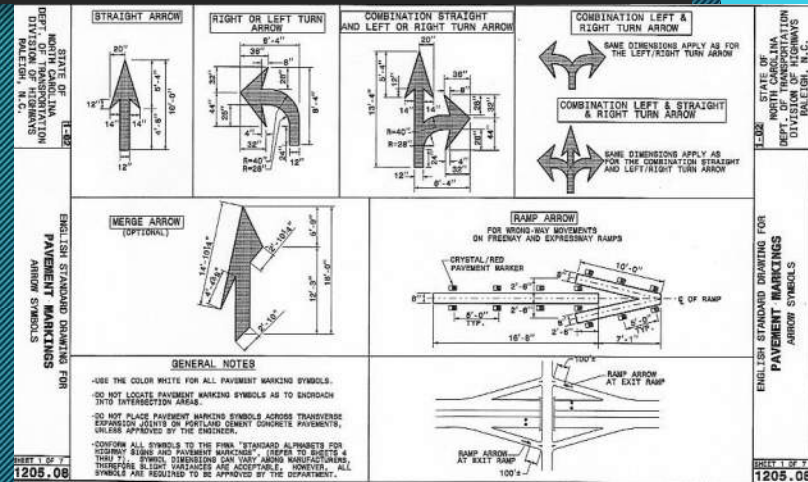
- **Guide**

- Street Markers
- Parking



Traffic Markings

- Lines
- Symbols / Words
- Raised Pavement Markers



Traffic Control Devices

- Temporary

- Flaggers
- Signs
- Barricades
- Drums
- Cones



Traffic Control Devices

- Permanent

- Signs
- Concrete Islands
- Tubular Markers



City of Winston-Salem University

WSTA & Trans-Aid



Winston-Salem Transit Authority (WSTA)

- 58 Buses, 32 Fixed Routes (within the city)
- 42 Mini-buses for County wide service to Elderly & Disabled (Trans-AID)



37 Hybrids
21 Diesels



5 Hybrids
35 Diesels

WSTA Bus Service



- Operating Services

- Monday through Friday: 5:30am to 12:00midnight
- Saturday: 6:30am to 7:00midnight
- Sunday: 6:30am to 7:00pm



WSTA Bus Service

- Fixed Route - 2.7 million trips per year
- Trans-AID - 211,000 trips per year
- \$18.2 million Operating Expense (FY 17-18)
- \$1.5 million Income Generated (FY 17-18)
- Supported by other funding sources
 - Winston-Salem Property Tax Revenues
 - Federal Transit Administration
 - North Carolina Department of Transportation
 - Motor Vehicle Privilege Tax
 - Other City Funds
 - Other Transit Revenues/Advertising
 - Forsyth County
 - Other Grants



WSTA Bus Service

WSTA's Mobility Management Department offers a FREE one on one or group training, Try Transit, to teach citizens how to travel safely and comfortably on the fixed route system.

- The training includes:
 - How to Request Bus Information
 - Planning a Trip
 - Reading the Bus Schedule
 - Boarding and Exiting the Bus
 - Transferring from Bus to Bus
 - Etc.
- For more information about the Try Transit training, please contact WSTA's Mobility Management and Customer Service by email custserv@wstransit.com and 336-727-2000.



WSTA Bus Service

- January 2, 2017 WSTA Fixed Routes changed to
 - 30 Weekday, 15 Night, 16 Saturday, 7 Sunday
- January 2018 WSTA Fixed Routes added 9 more night services, 8 more Saturday services and 9 more Sunday services.
- Total Fixed Routes today include
 - 32 weekday routes
 - 26 with night service routes
 - 16 Sunday service routes



WSTA Bus Passes



Client drop off at Senior Services Center

The Winston Salem City Council approved the **BUS PASS MATCH DISTRIBUTION PROGRAM** to provide bus passes to community agencies that serve low income riders. Local non-profit organizations that provide, or are willing to provide free WSTA bus passes to their clients were invited to apply for additional free passes under a Bus Pass Matching Distribution Program. **For every pass that an agency buys for its clients, the city will provide a matching pass.** City Council allocated \$90,000 for the program, which will be used for : 10-ride or single ride bus passes on WSTA's fixed routes, or 30-ride or single ride Trans-Aid passes.



New For WSTA

- The transit route maps and the WSTA system map have been modernized for easier readability and to promote landmarks throughout the community. These maps were made available in conjunction with the newly added services, effective January 2018. This information is available on the WSTA website (www.wstransit.com), WSDOT webpage (<http://www.cityofws.org/departments/transportation>) and copies are at the Clark Campbell Transportation Center.



WSTA Bus Services

8:00 ROUTE
Effective January 2, 2018

"WHEREVER LIFE TAKES YOU!"

WSTA
WESTA VOLUNTARY TRANSIT SERVICE
171 NC Entry 2-800-735-6262

Want to know how to reduce your wait times?

Use NextBus! WSTA's real-time travel information is available on the NextBus app, track your stop on your mobile device, laptop or computer.

Design your trip your way by signing up to receive text alerts that will let you know when your bus is approaching. You'll also know more about how to use NextBus!

Contact us at:
Phone: 336-772-2000
Website: www.wstransit.com

WSTA bus stops have changed! Look for the green bus stop sign with information on routes you can catch at your stop, and your stop number. Just to keep you the same, bus is arriving, your stop number is on the bus stop sign.

How to Use NextBus app
1.800.735.6262
www.wstransit.com
10233

All WSTA buses are equipped with wheelchair lifts and front loading bicycle racks.

WSTA BUS FARES (Exact fare only)

Adults Fares Transfers - Free
Cash - \$1.00
30-Minute Fares - \$38.00
30-Minute Fares - \$33.00

Eligible Disabled & Medicare Card Holders
Cash - \$1.50 Transfers - Free
30-Minute Fares - \$15.00
30-Minute Fares - \$5.00

Children above the age of 3 and accompanied by an adult ride FREE.

Special Fares for Medicare Card or Veterans Affairs (VA) Card Holders. Call 336-772-2000 for details and disabled assistance.

HOLIDAY SERVICE
WSTA IS CLOSED on the following holidays:
New Year's Day
Birthday of Martin Luther King, Jr.
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

WSTA SERVICE HOURS (vary by route)
Monday - Friday, 5:30 AM to 11:30 PM
Saturday, 6:00 AM to 11:30 PM
Sunday, 7:00 AM to 9:30 PM

MORE EVENING, SATURDAY, & SUNDAY SERVICE ADDED TO EXISTING ROUTES

On January 2, 2018 WSTA began providing additional Evening, Saturday, and/or Sunday service on routes 10233 and 10234. To learn if your route has added service please review the following chart:

Route	Added Service	Added Service	Added Service	Added Service	Added Service
101	X	X	X	X	X
102	X	X	X	X	X
103	X	X	X	X	X
104	X	X	X	X	X
105	X	X	X	X	X
106	X	X	X	X	X
107	X	X	X	X	X
108	X	X	X	X	X
109	X	X	X	X	X

DOWNTOWN MAP

LEGEND

- Route 80
- Route Street
- Transit Point
- WSTA Bus Stop
- Shopping Center
- Transportation Center
- Hospital
- Sporting Venue
- University
- Government Services
- Library
- Elementary School
- Secondary School
- University
- Elementary School
- Secondary School

Monday - Friday

Outbound: Hanes Mall	1	2	3	4	5	4	3	2	1	Inbound: Transit Center
TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4
6:45	6:53	6:59	7:05	7:10	7:15	7:23	7:29	7:45	7:45	7:45
7:45	7:53	7:59	8:05	8:10	8:15	8:23	8:29	8:45	8:45	8:45
8:45	8:53	8:59	9:05	9:10	9:15	9:23	9:29	9:45	9:45	9:45
9:45	9:53	9:59	10:05	10:10	10:15	10:23	10:29	10:45	10:45	10:45
10:45	10:53	10:59	11:05	11:10	11:15	11:23	11:29	11:45	11:45	11:45
11:45	11:53	11:59	12:05	12:10	12:15	12:23	12:29	12:45	12:45	12:45
12:45	12:53	12:59	1:05	1:10	1:15	1:23	1:29	1:45	1:45	1:45
1:45	1:53	1:59	2:05	2:10	2:15	2:23	2:29	2:45	2:45	2:45
2:45	2:53	2:59	3:05	3:10	3:15	3:23	3:29	3:45	3:45	3:45
3:45	3:53	3:59	4:05	4:10	4:15	4:23	4:29	4:45	4:45	4:45
4:45	4:53	4:59	5:05	5:10	5:15	5:23	5:29	5:45	5:45	5:45
5:45	5:53	5:59	6:05	6:10	6:15	6:23	6:29	6:45	6:45	6:45
6:45	6:53	6:59	7:05	7:10	7:15	7:23	7:29	7:45	7:45	7:45
7:45	7:53	7:59	8:05	8:10	8:15	8:23	8:29	8:45	8:45	8:45
8:45	8:53	8:59	9:05	9:10	9:15	9:23	9:29	9:45	9:45	9:45
9:45	9:53	9:59	10:05	10:10	10:15	10:23	10:29	10:45	10:45	10:45
10:45	10:53	10:59	11:05	11:10	11:15	11:23	11:29	11:45	11:45	11:45
11:45	11:53	11:59	12:05	12:10	12:15	12:23	12:29	12:45	12:45	12:45

Saturday

Outbound: Hanes Mall	1	2	3	4	5	4	3	2	1	Inbound: Transit Center
TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4
8:45	8:53	8:59	9:05	9:10	9:15	9:23	9:29	9:45	9:45	9:45
9:45	9:53	9:59	10:05	10:10	10:15	10:23	10:29	10:45	10:45	10:45
10:45	10:53	10:59	11:05	11:10	11:15	11:23	11:29	11:45	11:45	11:45
11:45	11:53	11:59	12:05	12:10	12:15	12:23	12:29	12:45	12:45	12:45
12:45	12:53	12:59	1:05	1:10	1:15	1:23	1:29	1:45	1:45	1:45
1:45	1:53	1:59	2:05	2:10	2:15	2:23	2:29	2:45	2:45	2:45
2:45	2:53	2:59	3:05	3:10	3:15	3:23	3:29	3:45	3:45	3:45
3:45	3:53	3:59	4:05	4:10	4:15	4:23	4:29	4:45	4:45	4:45
4:45	4:53	4:59	5:05	5:10	5:15	5:23	5:29	5:45	5:45	5:45
5:45	5:53	5:59	6:05	6:10	6:15	6:23	6:29	6:45	6:45	6:45
6:45	6:53	6:59	7:05	7:10	7:15	7:23	7:29	7:45	7:45	7:45
7:45	7:53	7:59	8:05	8:10	8:15	8:23	8:29	8:45	8:45	8:45
8:45	8:53	8:59	9:05	9:10	9:15	9:23	9:29	9:45	9:45	9:45
9:45	9:53	9:59	10:05	10:10	10:15	10:23	10:29	10:45	10:45	10:45
10:45	10:53	10:59	11:05	11:10	11:15	11:23	11:29	11:45	11:45	11:45
11:45	11:53	11:59	12:05	12:10	12:15	12:23	12:29	12:45	12:45	12:45

Sunday

Outbound: Hanes Mall	1	2	3	4	5	4	3	2	1	Inbound: Transit Center
TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4	TC Bay A-4
8:30	8:36	8:44	8:55	9:05	9:00	9:06	9:14	9:30	9:30	9:30
9:30	9:36	9:44	9:55	9:55	10:00	10:06	10:14	10:30	10:30	10:30
10:30	10:36	10:44	10:50	10:55	11:00	11:06	11:14	11:30	11:30	11:30
11:30	11:36	11:44	11:50	11:55	12:00	12:06	12:14	12:30	12:30	12:30
12:30	12:36	12:44	12:50	12:55	1:00	1:06	1:14	1:30	1:30	1:30
1:30	1:36	1:44	1:50	1:55	2:00	2:06	2:14	2:30	2:30	2:30
2:30	2:36	2:44	2:50	2:55	3:00	3:06	3:14	3:30	3:30	3:30
3:30	3:36	3:44	3:50	3:55	4:00	4:06	4:14	4:30	4:30	4:30
4:30	4:36	4:44	4:50	4:55	5:00	5:06	5:14	5:30	5:30	5:30
5:30	5:36	5:44	5:50	5:55	6:00	6:06	6:14	6:30	6:30	6:30
6:30	6:36	6:44	6:50	6:55						



WSTA Bus Services

- NEXT BUS Service



nextbus. Settings | ADA Site | Agency Admin

Find Your NextBus **Winston-Salem** ▼

My NextBus Enter Stop No.

... Or select your route, direction, and stop to obtain GPS-based arrival and departure times.

Get Help

Mobile Access

Route 100 Union Stat/ Ftcc Main / Oak Grove ▼

Direction INBOUND Route100 Union Station & FTMC ▼

Stop Silas Creek @ Biscuitville ▼

Destination Select an Option ▼

optional

Attention Passengers - Due to construction on First St and the lane reduction on I-40, Routes 80, 83, 85, 95 and 107 will detour from the regular routes. Speak to a customer service representative for details. [View on map](#)

48 min

Valid as of Wednesday, March 14, 2018 3:35 PM

Also at this stop

- 26 min Route 85 Ftcc Main/Main Str./Silas Creek Pk, INBOUND ROUTE 85 FORSYTH TECH MAIN CAMPUS
- 32 min Route 84 Hanes Mall / Ftcc West, INBOUND 84 FORSYTH TECH WEST CAMPUS
- 86 min Route 85 Ftcc Main/Main Str./Silas Creek Pk, INBOUND ROUTE 85 FORSYTH TECH MAIN CAMPUS
- 92 min Route 84 Hanes Mall / Ftcc West, INBOUND 84 FORSYTH TECH WEST CAMPUS

WSTA

- Website
- Schedule
- Call 336-778-3876 Stop No. 47206
- Text 41411 wsta 47206
- High: 43 Current: 39 Low: 28



City of Winston-Salem University

Transportation Planning



Metropolitan Planning Organization

What is the MPO ?

- MPOs carry out the transportation planning process
- MPOs policy board called the Transportation Advisory Committee (TAC)
- The Winston-Salem Department of Transportation is designated as the lead planning agency (LPA)



Metropolitan Transportation Plan

- Minimum 20 year planning period
- Updated every 3-4 years
- Multi-Modal
- Financially constrained
- Federal requirement adopted only by MPO's but jointly developed with other agencies & approved by the Federal Highway Administration & Federal Transit Administration



Comprehensive Transportation Plan

- Not fiscally restrained
- Adopted mutually between MPO's & NCDOT
- Project recommendations and problem statements
- Inventory maps - Adoption Sheet, Highway Map, Public Transportation & Rail Map, Bicycle Map, and Pedestrian Map
- Highway table containing information such as road width, right-of-way width, traffic volumes and capacities, and the presence of transit and bicycle facilities



Transportation Funding Sources

- State Transportation Improvement Program (STIP)
- Federal Surface Transportation Block Grant - Direct Attributable (ST-DA), Congestion Mitigation and Air Quality (CMAQ) and Enhancement grants, Transportation Alternative Program (TAP)
- City's Capital Improvement Program (CIP)
- City Bond Funds
- NCDOT Discretionary Funds
- Section 5303/5307 Transit Planning/Capital Grants
- Developer Participation



Other Transportation Plans & Documents Available

- Air Quality Conformity & Conformity Report
- Collector Street Plan
- Comprehensive Bicycle Master Plan
- Sidewalk and Pedestrian Facilities Plan
- Metropolitan Transportation Improvement Program
- Public Participation Policy
- Public Transportation-Human Services Coordination Plan
- Traffic Count and other maps, plans and project links on the DOT website



Questions

