North Avenue

Smart Corridor Projects

Buildable Unit Code	Route	Limits	Project Category	Design Elements	Scope of Work	Justification	Project Cost	Priority	Priority Rationale	Recommended Prerequisite	Suggested Inclusion	Adjacent Planned TIP Projects	Comments
2A-1	North Ave	Fair Oaks Rd to County Farm Rd	Signals	Interconnect	• Deploy underground fiber interconnect system along this 1.3-mile corridor. • Tie in with existing fiber interconnect systems west of Fair Oaks Rd and east of County Farm Rd.	• Connects the existing fiber optic interconnects to establish a larger backbone cable along North Ave • Allows for further fiber optic backbone cable expansion along North Ave	$ 390,000.00	Medium	• Isolated communication link that serves a few low-priority assets			08-11-0011	Fiber Optic Cable - Underground
2A-2	North Ave	Powis Rd to Atlantic Dr	Signals	Interconnect	• Deploy wireless interconnect system along this 1.0-mile corridor. • Tie in with existing fiber interconnect systems west of Powis Rd and east of Atlantic Dr.	• Connects the existing fiber optic interconnects to establish greater device accessibility and coordination along North Ave	$ 40,000.00	Low	• Isolated communication link that serves a few low-priority assets			08-98-0041	Wireless - Intersection-to-Intersection
2A-3	North Ave	Smith Rd to Powis Rd	Signals	SCAT Study	• Update coordinated signal timings at all 3 traffic signals. • Maintain coordination via existing fiber optic interconnect.	• Updates traffic signal timing schedules to match current traffic conditions • Previous retiming year: 2014 (see comments)	$ 9,000.00	Low	• Low Congestion • Low Traffic Variability		2A-4, 2C-1, 2B-1, 2A-1, 2A-2	08-98-0041	Since these signals were retimed in 2014, a SCAT Study is recommended in 2020 or later, or following a major land-use or traffic change.
2A-4	North Ave	Atlantic Dr to Fair Oaks Rd	Signals	SCAT Study	• Update coordinated signal timings at all 4 traffic signals. • Maintain coordination via existing fiber optic interconnect.	• Updates traffic signal timing schedules to match current traffic conditions • Previous retiming year: 2013 (see comments)	$ 12,000.00	Low	• Low Congestion • Low Traffic Variability		2B-2, 2A-3, 2C-1, 2B-1, 2A-1, 2A-2	08-98-0041, 08-09-0012	Since these signals were retimed in 2013, a SCAT Study is recommended in 2019 or later, or following a major land-use or traffic change.
2A-5	North Ave	County Farm Rd	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions at this key decision point (County Farm) for diverting traffic to or from Roosevelt Rd or Army Trail Rd	$ 12,500.00	Low	• Low Congestion • Infrequent Diversions	5I-1, 2C-1, 2B-1		08-11-0011	
2A-6	North Ave	IL-59	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions at this key decision point (IL-59) for diverting traffic to or from other east-west corridors, such as I-88 or Roosevelt Rd	$ 12,500.00	Low	• Low Congestion • Infrequent Diversions	5I-1, 2C-1, 2B-1, 2A-1		08-98-0041	

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North Avenue

Smart Corridor Projects

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2B-1	North Ave	Glen Ellyn Rd to Swift Rd	Signals	Interconnect	• Deploy underground fiber interconnect system along this 1.0-mile corridor. • Tie in with existing fiber interconnect systems west of Glen Ellyn Rd and east of Swift Rd.	• Connects the existing fiber optic interconnects to establish a larger backbone cable along North Ave • Allows for further fiber optic backbone cable expansion along North Ave	$ 300,000.00	Medium	• Serves a moderate number of low-priority or medium-priority assets		2C-1	08-11-0011, 08-12-0040, 08-12-0011	Fiber Optic Cable - Underground
2B-2	North Ave	County Farm Rd to Glen Ellyn Rd	Signals	SCAT Study	• Update coordinated signal timings at all 9 traffic signals. • Maintain coordination via existing fiber optic interconnect.	• Updates traffic signal timing schedules to match current traffic conditions • Previous retiming year: 2005	$ 27,000.00	Medium	• Moderate Congestion • Low Traffic Variability		2C-2, 2A-4, 2C-1, 2B-1, 2A-1	08-11-0011, 08-12-0040, 08-12-0011	

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North Avenue
Smart Corridor Projects

Buildable Unit Code	Route	Limits	Project Category	Design Elements	Scope of Work	Justification	Project Cost	Priority	Priority Rationale	Recommended Prerequisite	Suggested Inclusion	Adjacent Planned TIP Projects	Comments
2C-1	North Ave	I-355 Interchange	Signals	Interconnect	• Deploy underground fiber interconnect system between existing fiber optic cable interconnect (Swift Rd to Rohlwing Rd) and the I-355 fiber optic cable. • Tie-in to I-355 backbone fiber optic cable.	• Connects the existing/proposed North Ave backbone cable to the regional ITS architecture to allow remote access to integrated assets • Key access point for ITS architecture expansion along North Ave -- supports backbone cable expansion efforts along North Ave	$ 60,000.00	High	• Key access point to agency backbone cable				Fiber Optic Cable - Underground. Tie-in to I-355 backbone cable requires agency approval from Illinois Tollway.
2C-2	North Ave	Swift Rd to Rohlwing Rd	Signals	SCAT Study/Adaptive Traffic Signal	• Use 2015 traffic signal timing plans as core schedules • Add adaptive traffic signal system at all 4 signals. • Integrate together using existing fiber optic interconnect.	• Allows for traffic signals to change their operation in real-time to accommodate changing traffic conditions that frequently occur at the I-355 interchange • Previous retiming year: 2015 (see comments)	$ 160,000.00	High	• Moderate Congestion • High Traffic Variability	2C-1	2D-5, 2B-2, 2D-2, 2B-1	08-00-0008	Adaptive traffic signals require backhaul communications service to a centralized server. Recommended prerequisites establish communications path to existing fiber optic backbone. Since these signals were retimed in 2015 and an adaptive signal system is recommended, a SCAT Study is not factored into this cost.
2C-3	North Ave	Swift Rd	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2C-4	North Ave	Eastbound, in advance of Swift Rd	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of Swift Rd to provide travel-related information to eastbound traffic. (Key Decision Points: I-355)	• Eastbound sign to provide useful traveler and incident-related information for I-355 and North Ave in advance of the I-355 key decision point	$ 80,000.00	Medium	• In advance of moderate traffic variability • Not near a major decision point between two eastbound routes	2E-1, 2C-5, 2C-1	2B-1		
2C-5	North Ave	Swift Rd to IL-83	Traveler Information	Travel Time System	• Deploy Bluetooth-based travel time monitoring system along this 4-mile corridor	• Allows an agency to monitor traffic conditions along this corridor that may vary dramatically when traffic diverts from I-355 or I-290 (via IL-83) during incidents • Provides useful data that can be posted on adjacent DMS in real-time	$ 40,000.00	Medium	• Moderate Traffic Variability	5I-2, 2D-1, 2D-2, 2C-1	2E-1		
2C-6	North Ave	I-355 NB Ramp	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions at the I-355/North Ave interchange, where traffic may vary depending on conditions on either facility	$ 12,500.00	Medium	• Moderate Congestion • Frequent Diversions to/from I-355	5I-1, 2C-1			
2C-7	North Ave	Swift Rd	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the I-355/North Ave interchange, where traffic may divert to or from Swift Rd depending on conditions along I-355	$ 12,500.00	Low	• Moderate Congestion • Frequent Diversions to/from Swift Rd	5I-1, 2C-1			
2C-8	North Ave	Rohlwing Rd	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the I-355/North Ave interchange, where traffic may divert to or from Rohlwing Rd depending on conditions along I-355	$ 12,500.00	Low	• Moderate Congestion • Frequent Diversions to/from Rohlwing Rd	5I-1, 2C-1		08-00-0008	

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North Avenue
Smart Corridor Projects

Buildable Unit Code	Route	Limits	Project Category	Design Elements	Scope of Work	Justification	Project Cost	Priority	Priority Rationale	Recommended Prerequisite	Suggested Inclusion	Adjacent Planned TIP Projects	Comments
2D-1	North Ave	Ardamore Ave to Villa Ave	Signals	Interconnect	• Deploy underground fiber interconnect system along this 0.5-mile corridor. • Tie in with existing fiber interconnect systems west of Ardmore Ave and east of Villa Ave.	• Connects the existing fiber optic interconnects to establish a larger backbone cable along North Ave • Allows for further fiber optic backbone cable expansion along North Ave	$ 150,000.00	High	• Core communications link that serves many high-priority assets				Fiber Optic Cable - Underground
2D-2	North Ave	Rohlwing Rd to Lombard St	Signals	Interconnect	• Deploy underground fiber interconnect system along this 0.4-mile corridor. • Tie in with existing fiber interconnect systems west of Rohlwing Rd and east of Lombard St.	• Connects the existing fiber optic interconnects to establish a larger backbone cable along North Ave • Allows for further fiber optic backbone cable expansion along North Ave	$ 120,000.00	High	• Core communications link that serves many high-priority assets		2C-1		Fiber Optic Cable - Underground
2D-3	North Ave	Villa Ave to Diplomat West Dr	Signals	SCAT Study	• Update coordinated signal timings at all 2 traffic signals for base operation. • Integrate together using existing fiber optic interconnect.	• Updates traffic signal timing schedules to match current traffic conditions • Previous retiming year: 2002	$ 6,000.00	High	• Moderate Congestion • Low Traffic Variability		2E-3, 2D-1, 2D-2, 2C-1		
2D-4	North Ave	Diplomat West Driveway	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2D-5	North Ave	Lombard St to Ardamore Ave	Signals	SCAT Study	• Update coordinated signal timings at all 8 traffic signals. • Maintain coordination via existing fiber optic interconnect.	• Updates traffic signal timing schedules to match current traffic conditions • Previous retiming year: 2006	$ 24,000.00	Medium	• Moderate Congestion • Low Traffic Variability		2C-2, 2D-1, 2D-2	08-11-0038, 08-13-0018	
2D-6	North Ave	Addison Rd	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on all intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 15,000.00	Medium	• Recommended Pedestrian Improvement				
2D-7	North Ave	Eastbound, in advance of IL-83	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of IL-83 to provide travel-related information to eastbound traffic. (Key Decision Points: IL-83)	• Eastbound sign to provide useful traveler and incident-related information for North Ave and I-290 in advance of the IL-83 key decision point	$ 80,000.00	Low	• In advance of high traffic variability • Not near a major decision point between two eastbound routes	2G-1, 2G-2, 2F-1, 2E-1, 2F-4			

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North Avenue
Smart Corridor Projects

Buildable Unit Code	Route	Limits	Project Category	Design Elements	Scope of Work	Justification	Project Cost	Priority	Priority Rationale	Recommended Prerequisite	Suggested Inclusion	Adjacent Planned TIP Projects	Comments
2E-1	North Ave	IL-83 to I-290	Traveler Information	Travel Time System	• Deploy Bluetooth-based travel time monitoring system along this 2-mile corridor	• Allows an agency to monitor traffic conditions along this corridor that may vary dramatically during changing traffic conditions that frequently occur when I-290 is congested and IL-83/IL-64 are used as alternate routes • Provides useful data that can be posted on adjacent DMS in real-time	$ 20,000.00	High	• High Traffic Variability	5I-2, 2F-4	2F-1		
2E-2	North Ave	Eastbound, in advance of I-290	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of Northwest Ave to provide travel-related information to eastbound traffic. (Key Decision Points: I-290)	• Eastbound sign to provide useful traveler and incident-related information for North Ave and I-290 in advance of the I-290 key decision point	$ 90,000.00	High	• In advance of high traffic variability • Near a major decision point between two eastbound routes (IL-64, I-290)	5I-2, 2G-1, 2G-2, 2F-1, 2F-4		08-14-0037	
2E-3	North Ave	IL-83 to Berteau Ave	Signals	SCAT Study/Adaptive Traffic Signal	• Update coordinated signal timings at all 6 traffic signals for base operation. • Add adaptive traffic signal system at all 6 signals. • Integrate together using existing fiber optic interconnect.	• Updates core traffic signal timing schedules to match current traffic conditions • Allows for traffic signals to change their operation in real-time to accommodate changing traffic conditions that frequently occur when I-290 is congested and IL-83/IL-64 are used as alternate routes • Previous retiming year: 2002	$ 258,000.00	High	• High Congestion • High Traffic Variability	2F-4	2F-5, 2D-3		Adaptive traffic signals require backhaul communications service to a centralized server. Recommended prerequisites establish communications path to existing fiber optic backbone.
2E-4	North Ave	York St to Berteau Ave	Transit	Transit Signal Priority	• Install Transit Signal Priority Readers at 3 intersections along this corridor for Pace Routes.	• Implement to improve on-time performance and headway spacing for PACE bus routes that travel along this corridor	$ 37,500.00	High	• Prioritized Transit Improvement along Pace Routes	2F-4			
2E-5	North Ave	York St	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the York St/IL-64 intersection which may experience surges in traffic if traffic is diverting from I-290 (via Lake Street exit) due to congestion	$ 12,500.00	Medium	• High Congestion • Frequent Diversions to/from I-290 via York Rd	5I-1, 2F-4			
2E-6	North Ave	IL-83	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the IL-83/IL-64 intersection which may experience surges in traffic if traffic is diverting from I-290 (via IL-83 exit) due to congestion	$ 12,500.00	Medium	• High Congestion • Frequent Diversions to/from I-290 via IL-83	5I-1, 2F-4			
2E-7	North Ave	Melrose Ave-Emroy Ave	Pedestrians	Automated Pedestrian Crossing Detection	• Install automated pedestrian detection sensors to replace pedestrian push-buttons.	• Implement to improve safety, efficiency, and pedestrian compliance near Field Elementary School	$ 17,500.00	Low	• Suggested Pedestrian Improvement				

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North Avenue
Smart Corridor Projects

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2F-1	North Ave	I-290 to 35th Ave	Traveler Information	Travel Time System	• Deploy Bluetooth-based travel time monitoring system along this 2.4-mile corridor	• Allows an agency to monitor traffic conditions along this corridor that may vary dramatically during changing traffic conditions that frequently occur when I-290 is congested and IL-83/IL-64 and/or IL-64/IL-43 are used as alternate routes • Provides useful data that can be posted on adjacent DMS in real-time	$ 24,000.00	High	• High Traffic Variability	5I-2, 2F-3, 2F-4	2G-2, 2E-1	04-08-0001	
2F-2	North Ave	Westbound, in advance of I-290	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of Railroad Ave to provide travel-related information to westbound traffic. (Key Decision Points: I-290)	• Westbound sign to provide useful traveler and incident-related information for North Ave and I-290 in advance of the I-290 key decision point	$ 90,000.00	High	• In advance of high traffic variability • Near a major decision point between two westbound routes (IL-64, I-290)	2E-1, 2C-5, 2F-4		08-14-0037, 04-09-0020	
2F-3	North Ave	Roy Ave to 35th Ave	Signals	Interconnect	• Deploy underground fiber interconnect system along this 1.0-mile corridor. • Tie in with existing fiber interconnect systems west of Roy Ave and east of 35th Ave.	• Connects the existing fiber optic interconnects to establish a larger backbone cable along North Ave • Allows for further fiber optic backbone cable expansion along North Ave	$ 300,000.00	High	• Core communications link that serves many high-priority assets			04-08-0001	Fiber Optic Cable - Underground
2F-4	North Ave	Berteau Ave to Northwest Ave	Signals	Interconnect	• Deploy underground fiber interconnect system along this 0.6-mile corridor. • Tie in with existing fiber interconnect systems west of Berteau Ave and east of Northwest Ave. • Tie in with existing backbone cable on I-290.	• Connects the existing fiber optic interconnects to establish a larger backbone cable along North Ave • Connects the existing/proposed North Ave backbone cable to the regional ITS architecture to allow remote access to integrated assets • Allows for further fiber optic backbone cable expansion along North Ave • Key access point for ITS architecture expansion along North Ave -- supports backbone cable expansion efforts along North Ave	$ 240,000.00	High	• Key access point to agency backbone cable			08-14-0037, 04-09-0020	Fiber Optic Cable - Underground. Tie-in to I-290 backbone cable requires agency approval from the Illinois Department of Transportation.
2F-5	North Ave	Northwest Ave to Roy Ave	Signals	Adaptive Traffic Signal	• Use 2013 traffic signal timing plans as core schedules • Add adaptive traffic signal system at all 5 signals. • Integrate together using existing fiber optic interconnect.	• Allows for traffic signals to change their operation in real-time to accommodate changing traffic conditions that frequently occur when I-290 is congested and IL-83/IL-64 and/or IL-64/IL-43 are used as alternate routes • Previous retiming year: 2013 (see comments)	$ 200,000.00	High	• High Congestion • High Traffic Variability	2F-4	2G-4, 2E-3, 2F-3		Adaptive traffic signals require backhaul communications service to a centralized server. Recommended prerequisites establish communications path to existing fiber optic backbone. Since these signals were retimed in 2013 and an adaptive signal system is recommended, a SCAT Study is not factored into this cost.
2F-6	North Ave	Northwest Ave to Roy Ave	Transit	Transit Signal Priority	• Install Transit Signal Priority Readers at 5 intersections along this corridor for Pace Routes.	• Implement to improve on-time performance and headway spacing for PACE bus routes that travel along this corridor	$ 62,500.00	High	• Prioritized Transit Improvement along Pace Routes	2F-4			
2F-7	North Ave	Northwest Ave	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the I-290/IL-64 interchange to monitor if congestion on I-290 is spilling back onto North Ave • Accurate assessment of road conditions allows for accurate messages to be posted on DMS in advance of the congestion	$ 12,500.00	Medium	• High Congestion • Key location to observe (to report) congestion spilling back from I-290 onto North Ave	5I-1, 2F-4		04-09-0020	
2F-8	North Ave	Roy Ave	Transit	Bus Stop Relocation	• Relocate westbound near-side flag stop to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 650.00	Medium	• Recommended Transit Improvement				
2F-9	North Ave	Hillside Ave	Transit	Bus Stop Relocation	• Relocate eastbound and westbound near-side flag stops to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 1,300.00	Medium	• Recommended Transit Improvement				
2F-10	North Ave	Railroad Ave	Transit	Bus Stop Relocation	• Relocate eastbound near-side bus shelter to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 650.00	Medium	• Recommended Transit Improvement				
2F-11	North Ave	Northwest Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on some intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 8,000.00	Medium	• Recommended Pedestrian Improvement			04-09-0020	
2F-12	North Ave	Roy Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on all intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 15,000.00	Medium	• Recommended Pedestrian Improvement				
2F-13	North Ave	Wolf Rd	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on all intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 15,000.00	Medium	• Recommended Pedestrian Improvement				
2F-14	North Ave	Hillside Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on some intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 8,000.00	Medium	• Recommended Pedestrian Improvement				
2F-15	North Ave	Railroad Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on some intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 8,000.00	Medium	• Recommended Pedestrian Improvement				

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North Avenue
Smart Corridor Projects

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2G-1	North Ave	1st Ave to Harlem Ave	Traveler Information	Travel Time System	• Deploy Bluetooth-based travel time monitoring system along this 1.5-mile corridor	• Allows an agency to monitor traffic conditions along this corridor that may vary dramatically during changing traffic conditions that frequently occur when I-290 is congested and IL-64/IL-43 are used as alternate routes • Provides useful data that can be posted on adjacent DMS in real-time	$ 15,000.00	High	• High Traffic Variability	5I-2, 2F-3, 2F-4	2F-1		
2G-2	North Ave	35th Ave to 1st Ave	Traveler Information	Travel Time System	• Deploy Bluetooth-based travel time monitoring system along this 2.1-mile corridor	• Allows an agency to monitor traffic conditions along this corridor that may vary dramatically during changing traffic conditions that frequently occur when I-290 is congested and IL-64/IL-43 are used as alternate routes • Provides useful data that can be posted on adjacent DMS in real-time	$ 21,000.00	High	• High Traffic Variability	5I-2, 2F-3, 2F-4	2F-1, 2G-1		
2G-3	North Ave	Westbound, in advance of 1st Ave	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of IL-171/1st Ave to provide travel-related information to westbound traffic. (Key Decision Points: IL-171)	• Westbound sign to provide useful traveler and incident-related information for North Ave and I-290 in advance of the IL-171/1st Ave key decision point	$ 90,000.00	High	• In advance of high traffic variability • Near a major decision point between two westbound routes (IL-64, I-290 via 1st Ave)	2F-1, 2E-1,2F-3, 2F-4			
2G-4	North Ave	35th Ave to Harlem Ave	Signals	SCAT Study/Adaptive Traffic Signal	• Update coordinated signal timings at all 17 traffic signals for base operation. • Add adaptive traffic signal system at all 17 signals. • Integrate together using existing fiber optic interconnect.	• Updates core traffic signal timing schedules to match current traffic conditions • Allows for traffic signals to change their operation in real-time to accommodate changing traffic conditions that frequently occur when I-290 is congested and IL-64/IL-43 are used as alternate routes • Previous retiming year: 1994	$ 731,000.00	High	• High Congestion • High Traffic Variability	2F-3, 2F-4	2H-3, 2F-5		Adaptive traffic signals require backhaul communications service to a centralized server. Recommended prerequisites establish communications path to existing fiber optic backbone.
2G-5	North Ave	York St to Harlem Ave	Transit	Transit Signal Priority	• Install Transit Signal Priority Readers at 17 intersections along this corridor for Pace Routes.	• Implement to improve on-time performance and headway spacing for PACE bus routes that travel along this corridor	$ 212,500.00	High	• Prioritized Transit Improvement along Pace Routes	2F-3, 2F-4	2G-17, 2G-11, 2G-12, 2G-13, 2G-14, 2G-15, 2G-16, 2F-8, 2F-9, 2F-10		Assumes bus instrumentation is paid for separately, using compatible technologies. Asssumes back-office schedule management or system priority systems, if applicable, are already in place and compatible with proposed technology.
2G-6	North Ave	76th Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2G-7	North Ave	35th Ave-Cornell Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2G-8	North Ave	Harlem Ave	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the IL-43/IL-64 intersection which may experience surges in traffic if traffic is diverting from I-290 (via Harlem Ave exit) due to congestion	$ 12,500.00	Medium	• High Congestion • Frequent Diversions to/from I-290 via Harlem Ave	5I-1, 2F-3, 2F-4			
2G-9	North Ave	1st Ave/IL-171	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the IL-171/IL-64 intersection which may experience surges in traffic if traffic is diverting from I-290 (via 1st Ave exit) due to congestion	$ 12,500.00	Medium	• High Congestion • Frequent Diversions to/from I-290 via 1st Ave	5I-1, 2F-3, 2F-4			
2G-10	North Ave	25th Ave	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the North Ave/25th Ave intersection which may experience surges in traffic if traffic is diverting from I-290 (via 25th Ave exit) due to congestion	$ 12,500.00	Medium	• High Congestion • Frequent Diversions to/from I-290 via 25th Ave	5I-1, 2F-3, 2F-4			
2G-11	North Ave	7th Ave	Transit	Bus Stop Relocation	• Relocate westbound near-side flag stop to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 650.00	Medium	• Recommended Transit Improvement				
2G-12	North Ave	9th Ave	Transit	Bus Stop Relocation	• Relocate eastbound and westbound near-side bus shelter to far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 1,300.00	Medium	• Recommended Transit Improvement				
2G-13	North Ave	George St	Transit	Bus Stop Relocation	• Relocate westbound near-side bus shelter to far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 2,000.00	Medium	• Recommended Transit Improvement				
2G-14	North Ave	15th Ave	Transit	Bus Stop Relocation	• Relocate eastbound and westbound near-side bus shelter to far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 4,000.00	Medium	• Recommended Transit Improvement				
2G-15	North Ave	19th Ave	Transit	Bus Stop Relocation	• Relocate eastbound near-side bus shelter to far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 2,000.00	Medium	• Recommended Transit Improvement				
2G-16	North Ave	Hawthorne Ave	Transit	Bus Stop Relocation	• Relocate eastbound near-side bus shelter to far-side of the intersection. • Relocate westbound near-side flag stop to far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 2,650.00	Medium	• Recommended Transit Improvement				
2G-17	North Ave	1st Ave	Transit	Bus Stop Relocation	• Relocate eastbound near-side bus shelter to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 2,000.00	Medium	• Recommended Transit Improvement				
2G-18	North Ave	Thatcher Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on some intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 8,000.00	Medium	• Recommended Pedestrian Improvement				
2G-19	North Ave	25th Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on some intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 8,000.00	Medium	• Recommended Pedestrian Improvement				
2G-20	North Ave	Eastbound, in advance of 9th Ave	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of 9th Ave to provide travel-related information to eastbound traffic. (Key Decision Points: IL-171)	• Eastbound sign to provide useful traveler and incident-related information for North Ave and I-290 in advance of the IL-171/1st Ave key decision point	$ 90,000.00	Low	• In advance of high traffic variability • Near a major decision point between two eastbound routes (IL-64, I-290 via 1st Ave), but limited traveler information is available on IL-64 due to limited ITS assets	2H-27, 2G-1, 2F-3, 2F-4			

(see letter codes in master document for segment limits)

North Avenue
Smart Corridor Projects

Buildable Unit Code	Route	Limits	Project Category	Design Elements	Scope of Work	Justification	Project Cost	Priority	Priority Rationale	Recommended Prerequisite	Suggested Inclusion	Adjacent Planned TIP Projects	Comments
2H-1	North Ave	Austin Ave to Cicero Ave	Signals	Interconnect	• Deploy wireless interconnect system along this 1.5-mile corridor (*or fiber interconnect if existing conduit is available*). • Tie in with existing fiber interconnect system west of Austin Ave.	• Connects the existing fiber optic interconnects to establish greater device accessibility and coordination along North Ave	$ 60,000.00	High	• Critical communications link to maintain traffic signal coordination between Austin Ave and Cicero Ave			01-97-0092	Wireless - Intersection-to-Intersection
2H-2	North Ave	Menard Ave to Cicero Ave	Signals	SCAT Study/Intersection Detection System	• Update coordinated signal timings at all 7 traffic signals. • Add intersection monitoring at 4 traffic signals.	• Updates core traffic signal timing schedules to match current traffic conditions • Intersection detection allows the traffic signals to provide green lights primarily to North Avenue and provide green lights to side streets only when a vehicle is present, which improves efficiency	$ 61,000.00	High	• Moderate Congestion • Moderate Traffic Variability	2H-1	2H-3, 2F-3, 2F-4	01-97-0092	
2H-3	North Ave	Oak Park Ave to Austin Ave	Signals	SCAT Study	• Update coordinated signal timings at all 5 traffic signals. • Integrate together using existing fiber optic interconnect.	• Updates traffic signal timing schedules to match current traffic conditions • Previous retiming year: 1994	$ 15,000.00	High	• Moderate Congestion • Moderate Traffic Variability		2H-2, 2G-4		
2H-4	North Ave	Oak Park Ave to Cicero Ave	Transit	Transit Signal Priority	• Install Transit Signal Priority Readers at 12 intersections along this corridor for CTA Route.	• Implement to improve on-time performance and headway spacing for CTA bus route 72 that travels along this corridor	$ 150,000.00	High	• Prioritized Transit Improvement along CTA Routes	2H-1, 2F-3, 2F-4	2H-21, 2H-22, 2H-23, 2H-24, 2H-25, 2H-26		Assumes bus instrumentation is paid for separately, using compatible technologies. Asssumes back-office schedule management or system priority systems, if applicable, are already in place and compatible with proposed technology.
2H-5	North Ave	Cicero Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement			01-97-0092	Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-6	North Ave	Narragansett Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-7	North Ave	Natoma Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-8	North Ave	Oak Park Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-9	North Ave	Lamon Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-10	North Ave	Leclaire Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-11	North Ave	Laramie Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-12	North Ave	Long Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-13	North Ave	Central Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-14	North Ave	Menard Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-15	North Ave	Austin Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-16	North Ave	Ridgeland Ave-Mobile Ave	Emergency Services	Emergency Vehicle Preemption	• Install Emergency Vehicle Preemption Reader at intersection and permit priority service for applicable emergency vehicles	• Dedicated priority service for emergency vehicles is critical for public safety	$ 10,000.00	High	• Prioritized Safety Improvement				Assumes emergency vehicle instrumentation is paid for separately, using compatible technologies.
2H-17	North Ave	Cicero Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on all intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 15,000.00	Medium	• Recommended Pedestrian Improvement			01-97-0092	
2H-18	North Ave	Austin Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on all intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 15,000.00	Medium	• Recommended Pedestrian Improvement				
2H-19	North Ave	Natoma Ave	Pedestrians	Pedestrian Countdown Signals	• Install pedestrian countdown signals to accommodate crosswalks that are on all intersection approaches	• Proposed pedestrian countdown signals offer more valuable information to help pedestrians cross the street safely	$ 15,000.00	Medium	• Recommended Pedestrian Improvement				
2H-20	North Ave	Austin Ave to Central Ave	Signing	Sign Survey	• Replace all faded, missing, contradictory, or damaged signs along this 0.5-mile corridor with a new efficient deployment.	• Field observations noted many street signs that were faded and difficult to read	$ 3,750.00	Medium	• Recommended Signing Improvement				
2H-21	North Ave	Cicero Ave	Transit	Bus Stop Relocation	• Relocate eastbound near-side flag stop to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 650.00	Medium	• Recommended Transit Improvement			01-97-0092	
2H-22	North Ave	Laramie Ave	Transit	Bus Stop Relocation	• Relocate eastbound and westbound near-side flag stops to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 1,300.00	Medium	• Recommended Transit Improvement				
2H-23	North Ave	Long Ave	Transit	Bus Stop Relocation	• Relocate eastbound near-side flag stop to far-side of the intersection. • Relocate westbound near-side bus shelter to far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 2,650.00	Medium	• Recommended Transit Improvement				
2H-24	North Ave	Menard Ave	Transit	Bus Stop Relocation	• Relocate eastbound and westbound near-side flag stops to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 1,300.00	Medium	• Recommended Transit Improvement				
2H-25	North Ave	Narragansett Ave	Transit	Bus Stop Relocation	• Relocate westbound near-side flag stop to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 650.00	Medium	• Recommended Transit Improvement				
2H-26	North Ave	Oak Park Ave	Transit	Bus Stop Relocation	• Relocate westbound near-side flag stop to the far-side of the intersection.	• Relocating to far-side improves safety by improving visibility of crossing pedestrians and turning vehicles by removing the obstruction of a stopped bus from the turning lane	$ 650.00	Medium	• Recommended Transit Improvement				
2H-27	North Ave	Harlem Ave to Cicero Ave	Traveler Information	Travel Time System	• Deploy Bluetooth-based travel time monitoring system along this 3-mile corridor	• Allows an agency to monitor traffic conditions along this corridor that may vary dramatically on a day-by-day basis, either from motorists diverting from I-290 or from heavier traffic along either IL-50 or IL-64 • Provides useful data that can be posted on adjacent DMS in real-time	$ 30,000.00	Low	• Low Traffic Variability	5I-2, 2H-1, 2F-3, 2F-4	2G-1	01-97-0092	

(see letter codes in master document for segment limits)

North Avenue

Smart Corridor Projects

Buildable Unit Code	Route	Limits	Project Category	Design Elements	Scope of Work	Justification	Project Cost	Priority	Priority Rationale	Recommended Prerequisite	Suggested Inclusion	Adjacent Planned TIP Projects	Comments
2H-28	North Ave	Westbound, in advance of Laramie Ave	Traveler Information	Dynamic Message Sign	• Deploy Arterial DMS in advance of Laramie Ave to provide travel-related information to westbound traffic. (Key Decision Points: Austin Ave, Harlem Ave)	• Westbound sign to provide useful traveler and incident-related information for North Ave, I-290, and Harlem Ave in advance of the Harlem Ave and/or Austin Ave key decision point	$ 100,000.00	Low	• In advance of moderate traffic variability • Near a major decision point between two westbound routes (IL-64, I-290 via Austin Ave) • Limited space to install sign due to dense urban environment	2H-27, 2G-1, 2G-2, 2F-1, 2H-1, 2F-3, 2F-4			
2H-29	North Ave	Cicero Ave	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the IL-50/IL-64 intersection, which may experience local congestion due to being an intersection of two heavily-traveled routes	$ 12,500.00	Low	• Moderate Congestion • Infrequent Diversions	5I-1, 2H-1, 2F-3, 2F-4		01-97-0092	
2H-30	North Ave	Austin Ave	Road Monitoring	CCTV Cameras	• Install CCTV camera at intersection and integrate with a traffic monitoring agency	• Allows for monitoring conditions near the North Ave/Austin Ave intersection which may experience surges in traffic if traffic is diverting from I-290 (via Austin Ave exit) due to congestion	$ 12,500.00	Low	• Moderate Congestion • Frequent Diversions to/from I-290 via Austin Ave (less prominent than Harlem Ave)	5I-1, 2F-3, 2F-4			
2H-31	North Ave	Leclaire Ave	Pedestrians	Automated Pedestrian Crossing Detection	• Install automated pedestrian detection sensors to replace pedestrian push-buttons.	• Implement to improve safety, efficiency, and pedestrian compliance near Banner Academy West	$ 17,500.00	Low	• Suggested Pedestrian Improvement				

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