## ATDM Deployments (as of January 2016)

No.	ATDM Strategy	Sub-Strategy	Project Name	Project Description	City/ County	State	Lead Agency
1	Active Demand Mgmt.	Dynamic Traveler Information	MITTENS - US 101 In- route Mode Shift	MITTENS (Messaging Infrastructure for Travel Time Estimates to a Network of Signs) displays travel times on a network of signs. The system is capable of generating travel time messages using various traffic data-feeds. MITTENS 1.0 was developed to address Caltrans District 4 requirements to deliver an operational system that could provide driving times for popular destinations in the Bay Area. MITTENS 2.0 is flexible in using different data sources in addition to 511 data to calculate travel time. It also handles smart message display by dynamically generating highway driving times/transit times, and destinations. It is capable of comparing transit travel time and highway travel time, providing information for commuters that encourages motorists to use transit systems in rush hours	San Mateo	CA	Caltrans (with PATH)
2	Active Demand Mgmt.	Dynamic Pricing	Managed Lanes - I-394 Minneapolis	HOT lanes in which car and van poolers and bus users have free access and priority use while drivers of single occupant vehicles choose to use these lanes on an as- needed basis by paying a fee	Minneapol is	MN	MnDOT
3	Active Demand Mgmt.	Dynamic Pricing	SR 91 Express Lanes	Utilizes congestion management pricing to establish tolls for the 91 express lanes. The express lane allows groups of three or more commuters travel for free or at a discount during certain hours. Express Lanes being extended into Riverside County converting HOV to HOT lanes.	Orange County	CA	The Orange County Transportation Authority
4	Active Demand Mgmt.	Dynamic Pricing	Managed Lanes - I-15 San Diego	The managed lanes project in San Diego constitute four managed lanes with movable barrier; and lanes for bus, carpool, vanpool and solo cars who pay distance-based fee.	San Diego	CA	SANDAG
5	Active Demand Mgmt.	Dynamic Pricing	I-680 Express Lane	The I-680 Express Lane gives solo drivers the choice to pay a toll electronically to use the lane while regular carpool users continue to use the lane for free.	San Francisco	CA	Alameda County
6	Active Demand Mgmt.	Dynamic Pricing	I-580 Express Lane	The I-580 Express Lanes are an innovative transportation initiative providing all commuters a reliable travel choice: speedier rides for public transportation and carpools, and the opportunity for solo drivers to pay a toll electronically to use the lanes	San Francisco	CA	Alameda County
7	Active Demand Mgmt.	Dynamic Pricing	I-880 Express Lane: Oakland to Milpitas	The I-880 Express Lane gives solo drivers the choice to pay a toll electronically to use the lane while regular carpool users continue to use the lane for free. To open in 2019	Alameda County	CA	Metropolitan Transportation Commission
8	Active Demand Mgmt.	Dynamic Pricing	Silicon Valley Express Lanes (SR 237)	VTA converted existing HOV lanes on SR 237/I-880 to HOT lanes providing solo drivers the opportunity to use the express lanes for a fee using FasTrack electronic toll collection technology.	San Jose	CA	Valley Transportation Authority

9	Active Demand Mgmt.	Dynamic Pricing	Silicon Valley Express Lanes (SR 85)	This project will convert approximately 27 miles of existing High Occupancy Vehicle (HOV or carpool) lanes to express lanes. The project will also convert the existing HOV direct connector in south San Jose, from U.S. 101 to SR 85, to an express connector.	San Jose	CA	Valley Transportation Authority
10	Active Demand Mgmt.	Dynamic Pricing	Silicon Valley Express Lanes (US 101)	This project will convert 34 miles of existing High Occupancy Vehicle (HOV or carpool) lanes to express lanes from Dunne Avenue in Morgan Hill to the San Mateo County line. Carpools with two or more occupants, motorcycles, transit buses, and eligible hybrids will continue to use the express lanes free of charge. Solo drivers will have the option of paying a toll to use the express lanes during commute hours.	San Jose	CA	Valley Transportation Authority
11	Active Demand Mgmt.	Dynamic Pricing	I-25 HOV Express Lanes	The HOV express lanes allow single occupancy vehicles to use the HOV lanes by paying a toll.	Denver	СО	Colorado DOT
12	Active Demand Mgmt.	Dynamic Pricing	(LeeWay) Managed lanes on Cape Coral bridge	The Cape Coral Bridge is composed of two fixed spans approximately 3400 feet long with a vertical clearance of 55 feet above the Caloosahatchee channel and a width of 95 feet clearance for the center channel.	Fort Myers	FL	LeeWay
13	Active Demand Mgmt.	Dynamic Pricing	(LeeWay) Midpoint Memorial bridge tolling facility	The Midpoint Memorial Toll Facility has a total of 12 lanes divided in the middle by two east & two west bound LeeWay Electronic Toll Collection Dedicated Lanes. There are two attended booth lanes (for oversized loads, change & receipts) and two automatic lanes (for customers with exact coin payment or Electronic Toll Collection) in both directions.	Fort Myers	FL	LeeWay
14	Active Demand Mgmt.	Dynamic Pricing	(LeeWay) Sanibel Causeway tolling facility	The toll facility though small in size, has three traffic toll lanes that process on average over three million vehicles annually. All three traffic lanes flow in a Westerly Direction towards Sanibel Island. Two traffic lanes are designated for patrons who need change and or receipts for payment of tolls and one traffic lane dedicated to Electronic Toll Collection.	Fort Myers	FL	LeeWay
15	Active Demand Mgmt.	Dynamic Pricing	I-95 Express Toll Lanes	95 Express is an innovative, lower-cost alternative to traditional highway construction that offers a variety of options for avoiding congestion. These lanes open in three phases 1A, 1B and 2. 1A and 1B are currently open.	Miami	FL	FLorida DOT
16	Active Demand Mgmt.	Dynamic Pricing	I-75 Express Lanes	The I-75 Express Lanes Project will design a managed lane system along I-75 from the SR 155 interchange in Henry County north to the SR 138 interchange in Henry and Clayton counties, a distance of 12.24 miles. Expected to open in early 2017. No HOV toll exemption	Atlanta	GA	Georgia DOT
17	Active Demand Mgmt.	Dynamic Pricing	I-85 Express Lanes Extension	The existing I-85 Express lane will be extended northward to Hamilton Mill Rd. HOV 3+_will be exempt from paying tolls.	Atlanta	GA	Georgia DOT

18	Active Demand Mgmt.	Dynamic Pricing	Northwest Corridor project	This project will construct approx. 30 miles of reversible, tolled lanes on I-75 and I- 575 in NW metro Atlanta. Expected to open in early 2018. No HOV toll exemption.	Atlanta	GA	Georgia DOT
19	Active Demand Mgmt.	Dynamic Pricing	I-85 Express Lanes	The I-85 Express Lanes span 16 miles from Chamblee Tucker Road, just south of I- 285, to Old Peachtree Road in Gwinnett county. The Express Lanes are open to traffic 24 hours a day, seven days per week. HOV 3+ is exempt from paying tolls	Atlanta	GA	Georgia DOT
20	Active Demand Mgmt.	Dynamic Pricing	Managed Lanes - I-35W Minneapolis	HOT lanes in which car and van poolers and bus users have free access and priority use while drivers of single occupant vehicles choose to use these lanes on an as- needed basis by paying a fee	Minneapol is	MN	Minnesota DOT
21	Active Demand Mgmt.	Dynamic Pricing	Managed Lanes - I-35E St. Paul	HOT lanes in which car and van poolers and bus users have free access and priority use while drivers of single occupant vehicles choose to use these lanes on an as- needed basis by paying a fee (Opening in Late 2015)	Minneapol is	MN	Minnesota DOT
22	Active Demand Mgmt.	Dynamic Pricing	Variable speed limit and Managed Lanes on I-35W	The Mn/DOT has implemented an ATM system on approximately 26 miles of interstate facilities in the Greater Minneapolis/St. Paul region. The I-35W ATM installation, includes several strategies aimed at improving safety and congestion (both recurrent and non-recurrent).	Minneapol is	MN	Minnesota DOT
23	Active Demand Mgmt.	Dynamic Pricing	Northwest Freeway (US 290) QuickRide	In November 2000 the Northwest Freeway HOV lane was converted to HOT use, and is operated in a manner similar to the Katy Freeway. The Northwest QuickRide allows paying two-plus carpools to use the lane only in the morning peak when three-plus occupancy requirements are in effect.	Harris County	ТХ	Texas DOT
24	Active Demand Mgmt.	Dynamic Pricing	HOT lanes and Adaptive Ramp Metering - IH 45 South (Gulf Freeway)	Allows single occupancy vehicles to use the HOV lanes by paying a toll.	Houston	ТХ	Texas DOT
25	Active Demand Mgmt.	Dynamic Pricing	Katy Freeway	Managed lanes on IH 10	Houston	ТХ	Texas DOT
26	Active Demand Mgmt.	Dynamic Pricing	Sam Houston Tollway	HOT lanes, Queue Warning and Adaptive Ramp Metering - US 59 (Southwest Freeway)	Houston	TX	Texas DOT
27	Active Demand Mgmt.	Dynamic Pricing	I-15 Express lanes	Express Pass is an electronic payment system along the I-15 Express Lanes. This system helps UDOT better manage traffic on I-15 by giving more solo drivers the opportunity to use the Express Lanes while ensuring that carpooling remains a benefit.	Salt Lake City	UT	Utah DOT

28	Active Demand Mgmt.	Dynamic Pricing	SR 167 High Occupancy Toll (HOT) Lanes	This four-year pilot project which started in 2008, provides a new option for solo drivers on SR 167 and evaluates how HOT lanes and variable tolling can improve traffic flow and ease congestion. By converting the pre-existing high occupancy vehicle (HOV) lanes into HOT lanes, SR 167 now allows solo drivers to pay a variable, electronically collected toll using a "Good To Go!" transponder to drive in the HOT lane when there is available space	Seattle	WA	Washington State DOT
29	Active Demand Mgmt.	Dynamic Pricing	I-405 Express Toll Lanes (Eastside Corridor Tolling Study)	WSDOT has looked at a range of options to address the projected increase in population and employment along this corridor. Studies acknowledge the importance of connecting I-405 and SR 167 to form a seamless corridor. The Eastside Corridor (made up of sections of Snohomish, King and Pierce counties, stretching down I-405 and SR 167 to SR 512) vision includes new highway lanes, improved interchanges, express toll lanes, expanded transit service including bus rapid transit (BRT) and expanded vanpool programs	Seattle	WA	Washington State DOT
30	Active Demand Mgmt.	Dynamic Pricing	Lake Washington Urban Partnership - SR 520	The Lake Washington Urban Partnership integrates all four Ts - tolling, technology, transit and telecommuting/TDM	Seattle	WA	Washington State DOT
31	Active Demand Mgmt.	Dynamic Ridesharing	Dulles Greenway	The Dulles Greenway offers a congestion management toll, so a motorist can travel at non-congested hours to save money.	Leesburg	VA	Dulles Greenway
32	Active Demand Mgmt.	Dynamic Ridesharing	Bellevue Smart Traveler	The traveler information center TIC integrated phone and paging technology to deliver three types of personal commuter information: (1) dynamic ride matching information, (2) current traffic congestion information, and (3) transit information.	Bellevue	WA	Washington State Transportation Center
33	Active Demand Mgmt.	Dynamic Ridesharing	Goose Express	The service was aimed at individual commuters and allowed users to plan one-way, ad hoc carpools. In addition to planning trips via SMS text message, an online planning interface was added (accessible via www.readysetgoose.com).	Seattle	WA	Washington State DOT
34	Active Demand Mgmt.	Dynamic Ridesharing	Carma	Carma's free iPhone app enables private cars to become part of the public transport network by providing a marketplace for drivers to offer their unused seats to other people in real time	San Francisco, Austin	N/A	Carma
35	Active Demand Mgmt.	N/A	I-805 ATDM Concept	SANDAG is examining potential ATDM strategies for the I-805 corridor in metro San Diego. Key issues are transit and freight mobility. Looking to leverage lessons learned from the I-15 ICM.	San Diego	CA	San Diego Association of Governments
36	Active Demand Mgmt.	Predictive Traveler Information	San Francisco 511	http://511.org/default.asp .San Francisco 511 System provides future driving times to travelers as part of their trip planning services	San Francisco	CA	Metropolitan Transportation Commission

37	Active Demand Mgmt.	Predictive Traveler Information	Video Streaming Solution	Project involved upgrading all field encoders to high and low-bandwidth dual- stream encoders and creation of video streaming servers. Allows streaming lo- bandwidth video to be fed to general public on Smartphone apps and desktop website. Previously, only snapshots were shown. Hi-bandwidth stream is reserved for operators at TMC	statewide	GA	Georgia DOT
38	Active Demand Mgmt.	Predictive Traveler Information	Route Builder	Texas DOT provides route builder to travelers which can compare moving up or delaying trip in 15-minute intervals, to see how it impacts trip time	Houston	ТХ	Texas DOT/ TranStar
39	Active Demand Mgmt.	Time of Day Variable Pricing	SR 91 Express Lanes	Utilizes congestion management pricing to establish tolls for the 91 express lanes. The express lane allows groups of three or more commuters travel for free or at a discount during certain hours.	Riverside County	CA	Riverside County Transportation Commission
40	Active Demand Mgmt.	Time of Day Variable Pricing	I-15 Express Lanes	Utilizes congestion management pricing to establish tolls for the I-15 express lanes. The express lane allows groups of three or more commuters travel for free.	Riverside County	CA	Riverside County Transportation Commission
41	Active Parking Mgmt.	Dynamic Parking Capacity	ParkMe and Parkeon Dynamic parking capacity	Provides parking guidance via smart phones, in-car navigation systems, and personal computers, with maps displaying the best places to find parking.	Austin	ТХ	Texas DOT/Parkme/Par keon
42	Active Parking Mgmt.	Dynamic Parking Reservation	BART Park-and-Ride in Millbrae	The project began in September 2004, following two years of research and development. Electronic sensors in the east lot of the Rockbridge BART park-and-ride facility communicate space availability to commuters on the freeway using two temporary dynamic message signs. BART riders may reserve any of these 50 spaces over the Internet, personal digital assistant (PDA) or telephone.	Millbrae	CA	Caltrans
43	Active Parking Mgmt.	Dynamic Parking Reservation	Smart Parking System Rockridge Station	The system used underground sensors to count vehicles entering and exiting the parking area's reserve lot. The data collected were relayed to a central computer system where vehicle counts were processed and information on parking availability was posted on an Internet website and displayed on two portable dynamic message signs (DMS) located on Highway 24.	Oakland	CA	BART
44	Active Parking Mgmt.	Dynamic Parking Reservation	Orlando International Airport Advanced Parking Mgmt.	One of the U.S airports that has seen the widest application of advanced parking management systems.	Orlando	FL	
45	Active Parking Mgmt.	Dynamic Parking Reservation	Detroit Airport advanced parking management system	One of the U.S airports that has seen the widest application of advanced parking management systems.	Detroit	MI	Detroit Wayne County International Airport

46	Active Parking Mgmt.	Dynamic Parking Reservation	Parking Management System	An online system allows University of Nebraska football fans to reserve their downtown parking spaces in advance.	Lincoln	NE	City of Lincoln
47	Active Parking Mgmt.	Dynamic Priced Parking	SFPark Parking Management	SFpark is a demand-responsive parking pricing and management system. The pilot effort provides real-time parking availability information for on- and off-street parking and also incrementally raises or lowers parking prices based on demand to maintain a minimum level of parking availability	San Francisco	CA	SFMTA
48	Active Parking Mgmt.	Dynamic Priced Parking	Fannin Rail Station Dynamically priced parking	Parking prices are based on events, and intervals between trains reduced during major events when demand is high	Houston	ТΧ	Texas DOT
49	Active Parking Mgmt.	Dynamic Pricing	QuickPark	This Smart Parking Research Pilot Project was implemented at the Carlsbad and Encinitas North County Transit District COASTER train stations from June 2010 to September 2011 in an effort to deliver an effective parking management system.	San Diego	СА	San Diego Association of Governments
50	Active Parking Mgmt.	Dynamic Pricing	LA ExpressPark	ExpressPark program uses new meters and a network of wireless pavement sensors to keep track of parked vehicles in real time. The sensors help transportation officials determine which meters are in use and which have expired. Users are directed to available parking spaces via dynamic message signs and a smart phone application. Pricing is dynamic based on demand.	Los Angeles	CA	Los Angeles DOT
51	Active Parking Mgmt.	Dynamic Pricing	Capri	A regular Stanford commuter, will earn credits when they enter and exit the main Stanford University campus by car at designated off-peak hours Monday through Friday. Credits can be used to win random cash rewards from \$2 to \$50 over and over again on the Capri website. The rewards accumulated on Capri will be disbursed monthly via Stanford's payroll or through bank deposits.	Stanford	CA	Stanford University
52	Active Parking Mgmt.	Dynamic Pricing	PARK Smart	PARK Smart aims to increase the number of available metered parking spaces by encouraging motorists to park no longer than necessary. The meter rate is higher when demand for parking is greatest and decreases when demand is lower.	New York	NY	New York DOT
53	Active Parking Mgmt.	Dynamic Wayfinding	Smart Park Project along Highway 17/880	Santa Clara Valley Transit Authority (VTA) would incorporate advanced technologies in park-and-ride lots to encourage drivers on congested roadways to use transit or rideshare	Santa Clara	CA	Santa Clara VTA
54	Active Parking Mgmt.	Dynamic Wayfinding	Chicago Metra Park-and- Ride (Rock Island Line)	As part of an integrated corridor management plan, the Chicago Metra commuter railroad is deploying an advanced parking management system to guide commuters from the freeway to park-and-ride lots with open parking spaces.	Chicago	ΪL	RTA

55	Active Parking Mgmt. Active Parking Mgmt.	Dynamic Wayfinding Dynamic Wayfinding	Real-Time Transit & Parking Information, Acadia National Park, ME BWI Advanced Parking Management	In 2001-2002, a partnership between the U.S. Departments of Transportation and Interior, Acadia National Park, and the State of Maine, implemented several real- time traveler information systems to provide more timely and accurate information to visitors regarding the Acadia's Island Explorer free shuttle bus service and on-site parking availability. The system determines garage space availability in real time and guides travelers to the available parking spaces. BWI deployed the system to improve the traveler's experience as part of the airport's aggressive growth strategy	Bar Harbor Baltimore	ME MD	National Park Service MAA
57	Active Parking Mgmt.	Dynamic Wayfinding	ParkPGH Parking Management	ParkPGH provides real-time information on available parking. An application, website, and call-in phone number all allow travelers to get current information on the number of available spaces in all nearby garages, with data updated each minute through a feed from the gate system at each garage.	Pittsburgh	PA	The Pittsburg Cultural Trust
58	Active Parking Mgmt.	Dynamic Wayfinding	e-Park	e-Park uses dynamic message signs to direct users to parking garages with remaining capacity. Current garage capacity can be viewed on a mobile-friendly website for 12 parking garages.	Seattle	WA	Seattle DOT
59	Active Traffic Mgmt.	Active Traffic Management	District 7 in Los Angeles and Ventura County	ATM Feasibility & Screening guidance- tool developed to screen ATM strategies and corridor characteristics to evaluate potential ATM deployments which can be applied to any corridor	Los Angeles	CA	Caltrans
60	Active Traffic Mgmt.	Active Traffic Management	Interstate 105	I-105 ATDM feasibility study- modeling of various ATM strategies shows potential benefits; need to seek support/funding for project development	Los Angeles	CA	Caltrans
61	Active Traffic Mgmt.	Adaptive Ramp Metering	ADOT Adaptive Ramp Metering - MILOS	A key contribution of the MILOS research effort was the development of algorithms that consider ramp queues as well as freeway conditions. MILOS was the first system to consider the ramp queues as an integral part of the adaptive ramp metering strategy.	Phoenix	AZ	Arizona DOT
62	Active Traffic Mgmt.	Adaptive Ramp Metering	Interstate 210 Ramp Metering	The main objective of the I-210 Congestion Relief Project is to better regulate vehicle flow upon entering the freeway system. This is being accomplished with advanced metering equipment and technology for use with on-ramp meters, freeway-to-freeway connector meters and HOV Bypass Lane metering.	Los Angeles	CA	Caltrans
63	Active Traffic Mgmt.	Adaptive Ramp Metering	Real-Time Adaptive Ramp Metering on 1-680	The ramp metering plan for southbound I-680 uses a real-time adaptive system that monitors traffic volumes and density and adjusts the ramp metering rate based on thresholds that vary by time of day set for the travel demand at each ramp.	Alameda County	CA	Caltrans

64	Active	Adaptive	Real-Time Adaptive	The MnDOT utilizes a real-time adaptive system that monitors traffic volumes and	Minneapol	MN	Minnesota DOT
	Traffic	Ramp	Ramp Metering	density and adjusts the ramp metering rate based on mainline conditions and travel	is		
	Mgmt.	Metering	Throughout the	demand at each ramp.			
			Minneapolis/St. Paul				
			Region				
65	Active	Adaptive	Adaptive Ramp Metering	ODOT operates adaptive ramp metering at over 100 meters on all major	Portland	OR	Oregon DOT
	I raffic	Ramp	- Entire Portland	interstates and highways in the Portland metropolitan area			
	ivigmt.	wetering	metropolitan area (1-5, 1- 84   -205   -405 OP217				
			US26)				
66	Active	Adaptive	Adaptive Ramp Metering	Texas DOT operates 86 Ramp Metering systems of 6 facilities	Houston	ТХ	Texas DOT
	Traffic	Ramp	- IH 610 (North Loop				
	Mgmt.	Metering	Freeway)				
67	Active	Adaptive	Hardy Toll Road and	The Hardy Toll Road runs from Interstate 45, north of Houston just below the Harris	Houston	ΤX	Texas DOT
	Traffic	Ramp	Adaptive Ramp Metering	County line, to Interstate 610, near central Houston - IH 45 North (North Freeway)			
	Mgmt.	Metering					
68	Active	Adaptive	Westpark Tollway and	Limited access toll road serving western Houston and Harris county.	Houston	ТΧ	Texas DOT
	Traffic	Ramp	Adaptive Ramp Metering				
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69	Active	Adaptive	HOT lanes and Adaptive	Allows single occupancy vehicles to use the HOV lanes by paying a toll.	Houston	IX	Texas DOT
	Mømt	Nattering	South (Gulf Freeway)				
70	Active	Adaptive	Sam Houston Tollway	HOT lanes, Queue Warning and Adaptive Ramp Metering - US 59 (Southwest	Houston	TX	Texas DOT
	Traffic	Ramp		Freeway)			
	Mgmt.	Metering					
71	Active	Adaptive	Connected Corridors I-	The main objective of the I-210 Connected Corridors/Congestion Relief Project is to	Los	CA	Caltrans
	Traffic	Ramp	210 Pilot	better regulate vehicle flow upon entering the freeway system. This is being	Angeles		
	Mgmt.	Metering		accomplished with advanced metering equipment and technology for use with on-			
				Runass Lane metering. This is the first Caltrans lead ICM effort. It involves 4 cities			
				the county of LA LA Metro. Caltrans and LIC Berkeley PATH			
72	Active	Adaptive	Adaptive Signal -SCOOT	SCOOT adaptive signal control - City wide adaptive signal control system.	Ann Arbor	MI	City of Ann
	Traffic	Signal	system		/		Arbor
	Mgmt.	Control			Washtena		
					w County		

73	Active Traffic Mgmt.	Adaptive Signal Control	Adaptive Signal Pilot	Siemens adaptive signal control for M-43/ Saginaw in Lansing MI.	Lansing / Eaton County	MI	Michigan DOT
74	Active Traffic Mgmt.	Adaptive Traffic Signal Control	Oakland County SCATS signal system	Data from detectors using Video Image Processing technology provide information on traffic movement at over 500 signalized intersections in the country. This information is transmitted to a Traffic Control Center located in the Road Commission for Oakland County offices, and is used to vary the cycle length, phase plan and signal offset at these intersections to minimize delay.	Oakland County	MI	Road Commission for Oakland County
75	Active Traffic Mgmt.	Adaptive Traffic Signal Control	Midtown in Motion	Midtown in Motion, includes 100 microwave sensors, 32 traffic video cameras and E-ZPass readers at 23 intersections to measure traffic volumes, congestion and record vehicle travel times. The combined data is transmitted wirelessly to the City's Traffic Management Center in Long Island City, allowing engineers to quickly identify congestion choke points as they occur and remotely adjust Midtown traffic signal patterns to clear traffic jams.	New York	NY	New York DOT
76	Active Traffic Mgmt.	Connected Corridor	Interstate 210 between Route 134 to Interstate 605	Bring together corridor stakeholders to create an environment for mutual cooperation, including sharing knowledge, developing working pilots, and researching and resolving key issues Equip traffic managers and first responders with accurate and reliable information and give them the ability to make real-time decisions to quickly improve traffic flow along the corridor Encourage, facilitate, and incorporate transit and multimodal travel in the corridor Integrate with state, regional, and local environmental, planning, and livability initiatives.	Los Angeles	CA	Caltrans
77	Active Traffic Mgmt.	Dynamic Corridor Congestion Management (DCCM)	Route 110 between Imperial Highway and Interstate 405 interchange (and applicable district wide)	This project requires Caltrans freeway Adaptive Ramp Metering operation to coordinate with adjacent arterial traffic signal operation system for regional Incident Management and relief of congestion on surface street caused by freeway congestion.	Los Angeles	CA	Caltrans

78	Active Traffic Mgmt.	Dynamic Flex Lane	Arroyo Seco Parkway (SR- 110), from Figueroa St to Orange Grove St.	The proposed Dynamic Flexible Lane (DFL) proposes to utilize the outside lane (lane #3) as an acceleration/ deceleration/auxiliary lane during off-peak commute hours. Dynamic Message Signs (DMS) located strategically along the length of the project will be used, and the switching between these two types of operations will be completely automated based on traffic demand for the project area. The system is independently capable of fully adapting to traffic volumes/conditions to address recurrent and non-recurrent congestion and activates the DMS to manage lane #3 accordingly. Lane #3 will be identified with special striping and colored pavement. The project also includes: Queue Warning System and pull-out areas for enforcement purposes.	Los Angeles	CA	Caltrans
79	Active Traffic Mgmt.	Dynamic Junction Control	Dynamic Lanes on Pasadena Freeway	Use of dynamic lane markers for junction control to provide a connector lane during peak hours to I-5 Northbound. Implemented in 2010; currently being upgraded.	Pasadena	CA	Caltrans
80	Active Traffic Mgmt.	Dynamic Lane Management	Route 110 North to Interstate 5 North connector	Limited by its historic preservation requirement, no additional traffic lane and road way realignment was allowed in this project. Caltrans traffic engineers were able to use congestion caused 'slow down' in main lane traffic to safely open an optional turning second lane during traffic peak time to reduce congestion back up at the connector from Route 110 north bound connection to I5 north bound. This deployment relied on traffic detection and signing technology to carry out direction of real-time traffic.	Los Angeles	CA	Caltrans
81	Active Traffic Mgmt.	Dynamic Lane Use Control	Virginia—I-66 ATM Project	The segment of I-66 between U.S. 50 and I-495, where the case study HOV/shoulder lane combination is operational, includes three main lanes in each direction. Starting in 1992, the shoulder was opened to peak-period, peak-direction general purpose traffic, allowing the leftmost lane to operate as an HOV lane. With completion of an ATM project in the fall of 2015, VDOT will implement dynamic lane control, hard shoulder running, queue warning and ultimately variable speed limits.	Northern	VA	Virginia DOT
82	Active Traffic Mgmt.	Dynamic Lane Use Control	Managed Lanes - I-394 Minneapolis	HOT lanes in which car and van poolers and bus users have free access and priority use while drivers of single occupant vehicles choose to use these lanes on an as- needed basis by paying a fee	Minneapol is	MN	Minnesota DOT
83	Active Traffic Mgmt.	Dynamic Lane Use Control	Tolled managed lanes on FM734	Managed Lanes. Gives solo drivers the opportunity to use HOV lanes for a toll	Austin	ТΧ	Texas DOT

84	Active Traffic Mgmt. Active	Dynamic Pricing Dynamic	Virginia - 495/95 Express Lanes	The shoulder is open to all traffic during peak travel periods on weekdays from 7 to 11 a.m. and 2 to 8 p.m. A lane-use management system, with green arrows and red "X's" similar to the lane-control system on I-66, alerts travelers when the shoulder is available. The ATM system is expected to incorporate variable speed limits based on	Northern Washtena	VA	TransUrban Michigan DOT
55	Traffic Mgmt.	Shoulder Lanes	Management	advanced algorithms to improve traffic turbulence in real-time, reduce crash risk, and improve traffic flow. The ATM is also going utilize Dynamic Shoulder use during peak hour congestion and queue warning to reduce crashes and improve safety.	w/Livingst on Counties (Between Brighton and Ann Arbor)		Whethight DOT
86	Active Traffic Mgmt.	Dynamic Shoulder Lanes	Dynamic Shoulder Lanes on I-85	Construction of Flex Shoulder Lane on I-85 Northbound between Jimmy Carter and Indian Trail. LED signs above lane will indicate open/closed status. Automatically controlled using data from mainline Video Detection System	Atlanta	GA	Georgia DOT
87	Active Traffic Mgmt.	Dynamic Shoulder Lanes	Virginia—I-66 ATM Project	The segment of I-66 between U.S. 50 and I-495, where the case study HOV/shoulder lane combination is operational, includes three main lanes in each direction. Starting in 1992, the shoulder was opened to peak-period, peak-direction general purpose traffic, allowing the leftmost lane to operate as an HOV lane. With completion of an ATM project in the fall of 2015, VDOT will implement dynamic lane control, hard shoulder running, queue warning and ultimately variable speed limits.	Northern	VA	Virginia DOT
88	Active Traffic Mgmt.	Dynamic Shoulder Lanes	Virginia - I-495 North Shoulder Lane Use	This 1.5-mile project allows traffic to travel on the left shoulder of northbound I- 495 from where the 495 Express Lanes end to the George Washington Parkway.	Northern	VA	Virginia DOT
89	Active Traffic Mgmt.	Dynamic Speed Limits	I-17 ATM Pilot	ADOT is planning, designing and implementing an ATM system for the I-17 corridor in metro Phoenix. This is a corridor through a highly developed area, so there is not an opportunity for expanding travel lanes. ConOps is focusing on Dynamic Speed Limits, adaptive ramp metering, and LCS. Corridor currently has HOV in place. As of 8/2015, ConOps is in development. Examined shoulder running, but too many constraints with HOV, very limited shoulder on many parts of I-17, and auxiliary lanes. In conjunction, also looking at ICM strategies on adjacent City of Phoenix arterials to better manage demand, and support improved alternate routing in the event of a closure on I-17.	Phoenix, Maricopa County	AZ	Arizona DOT

90	Active Traffic Mgmt.	Dynamic Speed Limits	Variable Speed Limit and RWIS on I-80	Consists of four VSL signs - two eastbound and two westbound. Speed limits are computed using a logic tree based on the 85th percentile speed, visibility (based on stopping sight distance), and pavement conditions (based on frost, ice, rain, or dry conditions)	Truckee River	NV	Nevada DOT
91	Active Traffic Mgmt.	Dynamic Speed Limits	Variable Speed Limit on I- 93	The I-93 Advanced Traffic Management System (ATMS) project involves the installation of strategically located "Intelligent Transportation System" (ITS) devices along the 19-mile corridor that will be controlled by the Traffic Management Center (TMC) in Concord.	Pembroke	NH	New Hampshire DOT
92	Active Traffic Mgmt.	Dynamic Speed Limits and ramp metering	Coordinated Ramp Metering	Combined Variable Speed Limit and Coordinated Ramp Metering for Freeway Traffic Control , Field Test of Coordinated Ramp Metering (CRM) to be tested on SR99 near Sacramento	Sacrament o	CA	Caltrans with PATH
93	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable speed limit on I- 90 from O'Hare to Elgin, IL (24 miles)	The segment of I-66 between U.S. 50 and I-495, where the case study HOV/shoulder lane combination is operational, includes three main lanes in each direction. Starting in 1992, the shoulder was opened to peak-period, peak-direction general purpose traffic, allowing the leftmost lane to operate as an HOV lane. In 2011-2012, IDOT is planning to implement variable speed limits, dynamic lane control and queue warning as part of an ATM deployment project in 2016.	NW Suburban Chicago	IL	IL Tollway
94	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable speed limit and lane control on Delaware Memorial Bridge	Use of VSL and Lane control for travel on the Delaware Memorial Bridge as part of Advanced Traffic Management System	Delaware	DE	Delaware DOT
95	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Project NEON	Construct HIGH OCCUPANCY VEHICLE (HOV) Connector between US 95 AND I 15, direct HOV access ramps at Wall Street, reconstruction of Charleston Blvd. Interchange, and improve local infrastructure, and implement Active Traffic Management system.	Las Vegas/ Clark County	NV	NDOT
96	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	SR 520 / I-90 - Active Traffic Management	WSDOT crews installed a series of electronic speed-limit and lane status signs over each lane on the SR 520 and I-90 bridges over Lake Washington.	Seattle	WA	Washington State DOT
97	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	I-96 Active Traffic Management	Project in development to install ATM on 10 miles of I-96. Potential strategies include dynamic speed advisories, dynamic shoulder lanes, queue warning, and dynamic lane use control.	Oakland County	MI	Michigan DOT

98	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Low Visibility warning system on I-10	Six sensors with forward-scatter technology are used to measure visibility distance, while traffic flow is monitored with a CCTV surveillance system and displayed on monitors in the control room.	Mobile County	AL	Alabama DOT
99	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limit on I- 40	This joint project, with the Northern Arizona University (NAU) produced a fuzzy logic control system that continuously displays highway speeds appropriate to the atmospheric and road surface conditions at locations of interest along the I-40 corridor in rural northern Arizona.	Flagstaff	AZ	Arizona DOT
100	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Active Traffic Management System on I-70 (Phase 1 study)	The ATM system is expected to incorporate variable speed limits based on advanced algorithms to improve traffic turbulence in real-time, reduce crash risk, and improve traffic flow.	Denver	СО	Colorado DOT
101	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Dynamic Downhill Truck Speed Warning System on I-70	The Downhill Truck Speed Warning System (DTSWS) calculates and displays a safe downhill descent speed for each passing truck of greater than 40,000 lbs. gross vehicle weight (GVW) based on each truck's axle configuration and gross vehicle weight, and the downgrade of the highway incline. The variable message sign (VMS) displaying the advised speed is located 250 feet beyond the loop detectors and weigh-in-motion (WIM) strips	Denver	СО	Colorado DOT
102	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Speed harmonization system (weather related) on I-495	Interstate 495 is a six-lane bypass that goes around the city of Wilmington, Delaware. The system begins at the Pennsylvania state line and ends south of Wilmington. There are 23 side-mounted signs on the corridor that are VMS boards inset into black on white speed limit signs	Wilmingto n	DE	Delaware DOT
103	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Speed harmonization system on I-4 (iFlorida Model Deployment)	The system is located on the I-4 corridor along a ten-mile section in downtown Orlando (MP 79-89). The system is located in an urban setting and consists of 20 side-mounted LED signs. The system changes the speed limit based upon lane occupancy and vehicle speed. The thresholds for the system are based on three levels of traffic flow: free flow, light occupancy, and heavy occupancy	Orlando	FL	Florida DOT
104	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limits on I-285	Variable Speed Limit system consists of 176 LED speed limit signs on the northern portion of I-285 (north of I-20). Speed limits vary from 65 to 35 mph in 10 mph increments. Controlled through Navigator ATMS software at TMC	Atlanta	GA	Georgia DOT
105	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limit on I- 95 and I-295	The speed limit is lowered based on road conditions and travel speeds. Specific weather variables that are monitored include precipitation types and amounts, speed drops of more than 20 mph and other incidents can cause a change in the VSL	Portland	ME	Maine DOT

106	Active Traffic Mgmt. Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries Dynamic Speed Limits/Adviso	Variable speed limit and Managed Lanes on I-35W Variable speed limit and Managed Lanes on I-94	The MnDOT has implemented an ATM system on approximately 16 miles of I-35W in the Minneapolis/St. Paul region. The I-35W ATM installation, includes several strategies aimed at improving safety and congestion (both recurrent and non- recurrent). The MnDOT has implemented an ATM system on approximately 10 miles of I-94 in the Minneapolis/St. Paul region. The I-94 ATM installation, includes several strategies aimed at improving safety and congestion (both recurrent and non-	Minneapol is Minneapol is	MN	Minnesota DOT Minnesota DOT
108	Active Traffic Mgmt.	ries Dynamic Speed Limits/Adviso ries	Variable advisory speed limits on I-270	recurrent). Formerly variable speed limit on I-270, MoDOT announced the signs will now serve as advisory only, to pace motorists through pockets of congestion	St. Louis	MO	Missouri DOT
109	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limit on I- 95 and I-78	The first system is on I-95 and is approximately sixty-two miles long. The second system runs the entire length of I-78. There is a total of 109 static panels with changeable speed flip segment/disks between the two corridors.	Trenton	NJ	NJDOT
110	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limit on I- 84	To advise truck drivers what speed they should travel to make it safely down Emigrant Hill, on I-84 between Pendleton and La Grande.	Pendleton	OR	Oregon DOT
111	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable advisory speed limits on I-5 and I-405	Use of speed advisories and travel times on I-5 and I-405 in Portland metropolitan area for congestion mitigation	Portland	OR	Oregon DOT
112	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable speed limit on US26 at interchange with OR47	Use of variable speed limits on US26 at a rural interchange for safety. The system activates when volumes on US26 exceed a threshold indicating heavy traffic heading eastbound from the Oregon Coast towards Portland. The reduced speed improves safety at the rural intersection.	Banks	OR	Oregon DOT
113	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable speed limit on US26 and I-84	Use of variable advisory speeds, queue warning, and travel times on US26 and I-84 for congestion mitigation and road weather management. Uses the same automated variable advisory speed and queue warning system that responds to congestion and road weather conditions as the OR-217 system. Project is in design in 2015 and scheduled for turn-on in 2017.	Portland	OR	Oregon DOT
114	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Low visibility warning system on I-75	There are two side-mounted LED signs located along the corridor that are changed when visibility is poor. When fog is detected on the corridor and the visibility drops below 1320 feet (ft), the system goes into a preliminary mode. The overhead DMS displays a message of Fog conditions, but the speed limit is still 70 mph.	Knoxville	TN	

115	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limit on I- 80	The Utah Department of Transportation (UDOT) implemented VSL signs on I-80 through Parley Canyon.	Wanship	UT	Utah DOT
116	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable speed limit on I- 95/495 (Woodrow Wilson Bridge)	Initially implemented for construction congestion mitigation on the Woodrow Wilson bridge in 2008, the 7 mile section of the I-95/495 beltway now has its VSL operations hours expanded (in 2009) to include daily congestion hours. This project was decommissioned in February 2010.	Alexandria	VA	Virginia DOT
117	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Virginia—I-77 Active Traffic and Safety Management System (ATSMS)	A 12-mile segment of I-77 in southwestern Virginia will operate regulatory variable speed limits that will vary according to reduced visibility conditions. The system is scheduled to be operational Fall 2015.	Hillsville	VA	Virginia DOT
118	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Virginia—1-64 Active Traffic and Safety Management System (ATSMS)	An 11-mile segment of I-64 along Afton Mountain recently had ITS assets and communications infrastructure installed that will allow for the future installation of Variable Speed Limit signs during reduced visibility conditions.	Afton Mountain	VA	Virginia DOT
119	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable Speed Limit on I- 64 and I-664	The systems monitor and change the speed on the approaches to and inside the Hampton Roads Bridge Tunnel and the Monitor Merrimac Memorial Bridge Tunnel.	Hampton Newport News	VA	Virginia DOT
120	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	I-5 - Active Traffic Management	The signs post variable speed limits that help warn drivers of backups ahead and smooth out traffic as it approaches a lane blocking incident. The overhead signs can also quickly close entire lanes and provide warning information to drivers before they reach slower traffic.	Seattle	WA	Washington State DOT
121	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Adverse Weather Variable Speed Limit on I- 90 and US-2	This system consists of 15 overhead mounted Flip-disc and LED signs. The speed limit is based on traction requirements, pavement conditions, visibility, weather (precipitation amount and type), and incident types. There are thresholds for the system, and the speed limit is based on a matrix of the conditions given above.	Seattle	WA	Washington State DOT
122	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	Variable speed limit on I- 80	Wyoming DOT has installed 28 variable speed limit signs along a 52-mile stretch on I-8- in hopes of reducing winter driving accidents. Engineers will have the ability to lower the posted speed depending on the road conditions.	Cheyenne	WY	Wyoming DOT

123	Active Traffic Mgmt.	Dynamic Speed Limits/Adviso ries	ATM System on OR-217	Use of speed advisories, queue warning and travel times on OR-217 for congestion mitigation and road weather management. The variable advisory speed and queue warning system is fully automated and responds to congestion and road weather conditions.	Portland	OR	Oregon DOT
124	Active Traffic Mgmt.	Dynamic Wayfinding	Integrated Corridor Management - I-75 Oakland Co	Use of dynamic trailblazing signs and adjustable signal timing from the Traffic Management Center on arterial routes during a major incident on the adjacent freeway in Oakland and Wayne Counties.	Oakland and Wayne County	MI	Michigan DOT
125	Active Traffic Mgmt.	Dynamic Wayfinding	Integrated Corridor Management - I-696 Macomb Co	Use of dynamic trailblazing signs and adjustable signal timing from the Traffic Management Center on arterial routes during a major incident on the adjacent freeway.	Macomb County	MI	Michigan DOT
126	Active Traffic Mgmt.	Transit Signal Priority	NYCDOT TSP	Operation of centralized transit signal priority system that has MTA buses communicate with the Transit Operations center which provides bus location approaching an signalized intersection to NYCDOT Traffic Management Center which provides transit signal priority based a protocols outlined in the Project PSEAR. Currently TSP in NYC is operated and is being installed BRT (Select Bus Service; SBS) corridors being developed by a NYCDOT / MTA NYC Transit team	New York City	NY	New York City DOT
127	Active Traffic Mgmt.	Various	VAR-STW-Managed Lanes Study	Determine the feasibility of implementing various active traffic and demand management strategies throughout the state.	statewide	ОН	ODOT