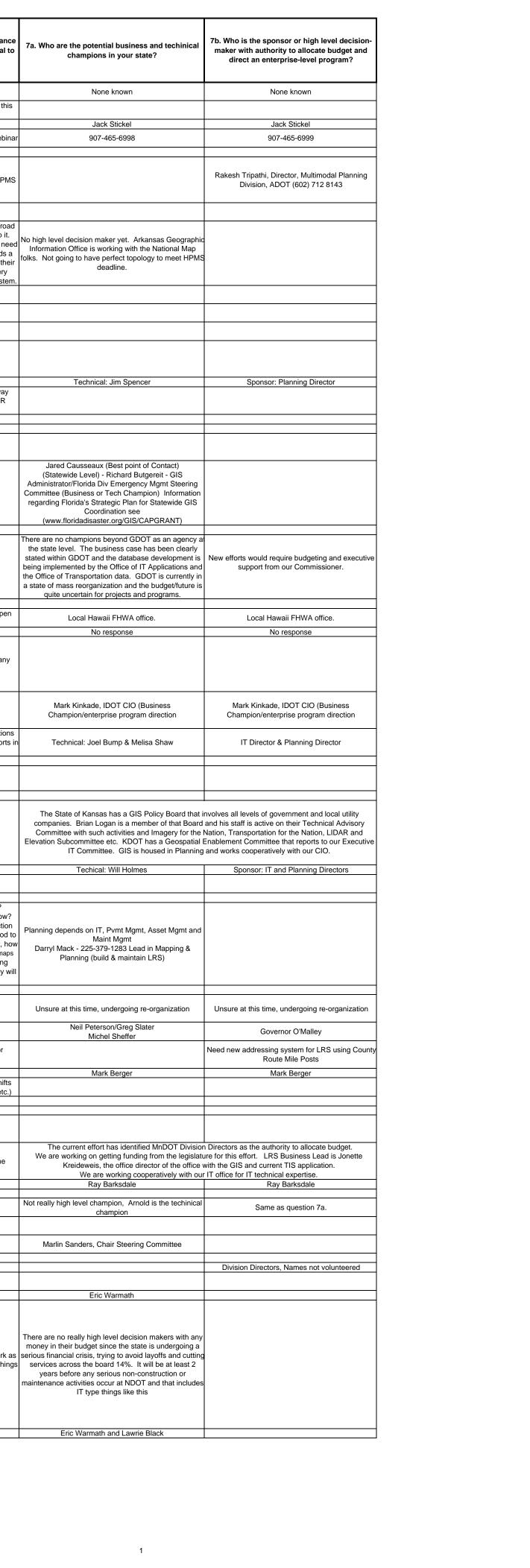
States Responses and any comments added to questions.		Are differing location referencing methods in legacy databases are a current area of concern in your State?	2. Do you have a current efforts on-going to address this concern?	3. Is your state aware of the LRS model developed through NCHRP 20-27 and the work of several lead states who have implemented variations of this model?	4. Would you be interesting in receiving information via webinar about best practices from LST states and the benefits they have seen?	5. Might there be an interest in several LST members visiting your state to share their experiences in implementing an LRS or to review your situation and offer suggestions for your consideration?	6. Is there some other type of assistance from the LST that would be beneficial to your state?	7a. Who are the potential business and techinical champions in your state?	7b. Who is the sponsor or high level decision- maker with authority to allocate budget and direct an enterprise-level program?
ALABAMA	Danny Manley Jeff Brown	No	No	Yes	Yes	No	No	None known	None known
COMMENTS	334-242-6585	Not Really	Not Really		That would be of some assistance		I can't see any need for assistance at this point in time		
ALASKA COMMENTS	Kerry Kirkpatrick-GIS-T 907-465-8957	No	No	Yes	Yes	No But may be interested after listing to webinar	No But may be interested after listing to webinar	Jack Stickel 907-465-6998	Jack Stickel 907-465-6999
ARIZONA	kerry.kirkpatrick@dot.state.ak.us Mick Cseri	No	No	Yes	No	No	Yes	307-403-0330	301-400-0333
	602-712-6171	We currently use our Arizona Transporta referencing system. It's the single source	e for LRS that the entire state utilizes	If you are talking about the data model implemented by Bill Shuman for the lowa					Rakesh Tripathi, Director, Multimodal Planning
COMMENTS	mcseri@azdot.gov	in order to spatially reference anything f signs. ATIS can work with data coming fr	from GPS (x,y location), data involving	DOT, then yes.			Additional resource funding for CPM/HPMS		Division, ADOT (602) 712 8143
ARKANSAS	Sharon Baker	intersection/offset, or crash data based Yes	d off a known reference marker (e.g. Yes	Yes	Yes	Yes	Yes		
ARRANGAG	Mark Bradley	100	State Highway LRS has been in	100	100	100	She would like to send someone their road		
COMMENTS	501-569-2205	Somewhat, Solving road log inventory and HPMS issues by developing an LRS for city and county roads. 75% complete with this effort.	place for 10 years now. County and City LRS will be merged in. They	Tried to copy it the best they could. Can not hire a consultant. Trying to emulate Kentucky and lowa work. They are confident in what they have deleloped.	Always	show someone what they have done and discuss it with them.	log and LRS and have someone map it. Using GeoMedia and concerned about need to fit it all into Arc for HPMS. Arc needs a single use id and they have several in their system that have to map to one. Very interested in experts looking at their system.	No high level decision maker yet. Arkansas Geographic Information Office is working with the National Map folks. Not going to have perfect topology to meet HPMS deadline.	
CALIFORNIA	Oscar Jarquin Lead State Team Rep								
COMMENTS	916-440-0552 oscar_jarquin@dot.ca.gov								
COLORADO	Tami Lang Marv Koleis	No	No		Yes	No	No		
COMMENTS	303-757-9811				Our needs are currently set, but would be interested in staying in contact for				
	marvin.koleis@dot.state.co.us				anything having to do with best practices.				
CONNECTICUT		Yes County - Route - Milepost and State	No	Yes	Yes	Yes	Yes Assistance with standardizing roadway	Technical: Jim Spencer	Sponsor: Planning Director
COMMENTS		Route Milepost. Possible need to include street name and address.					networks for HPMS submittal, TIGER roadway, etc.		
DELAWARE COMMENTS									
FLORIDA	Pat O'Rourke, Mgr./GIS Support Section	NO	No	No	Yes	No	No		
	Transporation Statistics Office	Currently the FDOT LRS and all associa						Jared Causseaux (Best point of Contact)	
COMMENTS	850-414-4732 paul.orourke@dot.state.fl.us	ESRI ArcINFO workstation environment. migrating data and applications to the RDBMS) environment. Primary elemen routes with built-in measures. Busine through domains or application extensior things as route consi	E ESRI ArcSDE (with Oracle as the nts of the model are arcs, nodes and ess rules will be incorporated either ns and customizations to handle such	The representative I spoke with indicated that the NCHRP 20-27(3) work had not been a topic of conversation at FL DOT.	There was interest expressed in attending a webinar to learn about other states' experiences and best practices			(Statewide Level) - Richard Butgereit - GIS Administrator/Florida Div Emergency Mgmt Steering Committee (Business or Tech Champion) Information regarding Florida's Strategic Plan for Statewide GIS Coordination see (www.floridadisaster.org/GIS/CAPGRANT)	
GEORGIA	Teague Buchanan	Yes GDOT has a route milepoint/milepost LR		Yes NCHRP 20-27 was released ages ago with	Yes	Yes	Yes	There are no champions beyond GDOT as an agency at	_
COMMENTS	tebuchanan@dot.ga.gov	the schema. The GIS route milepo Oracle/ArcSDE. The tabular and spat support dynamic segmentation and even	the business logic is being applied to bint/milepost LRS is contained in tial data are manually reconciled to nt mapping of roadway characteristics	reported difficulty in agency implementation/support, albeit vendor systems (Exor) were more favorable. What has changed?			See attached Comments	being implemented by the Office of IT Applications and the Office of Transportation data. GDOT is currently in a state of mass reorganization and the budget/future is	New efforts would require budgeting and executiv support from our Commissioner.
HAWAII	Goro Sulijoadikusumo	supporting HPMS reporting. Potential ne Yes	Yes	Yes	Yes	Yes	Yes	quite uncertain for projects and programs.	
COMMENTS	808-587-1839 gogo_sulijoadikusumo@hawaii.gov		V	Familiar with Iowa, but seems more than Hawaii would need	V	V	Lane modeling, ramps. Promoting open standards for HPMS reporting	Local Hawaii FHWA office.	Local Hawaii FHWA office.
COMMENTS	Brian Emmen 208-332-7889 Brian.Emmen@itd.idaho.gov	Yes We have a number of referencing methodoligies as well as an official linear reference system	options for replacing our current	Yes In talking with some other states, I was made aware of the LRS model that has been developed in lowa and of other states that are working to implement systems similar to the	Yes I would be interested in receiving information. I have talked with Eric Abrams and Steve Kadolph and have requested they keep me posted on the progress with their system	Yes Once we have finished our reviews of our systems and identified our needs, we may request having LST members visit and discuss their experiences in implementation.	No At the current time, I cannot identify any additional assistance	No response	No response
ILLINOIS	William Oesterreich Eric Harm Amy Schutzbach Curt Reynolds	Yes	system. Yes	one in Iowa. Yes	development. Yes	No	Yes	Mark Kinkade, IDOT CIO (Business Champion/enterprise program direction	Mark Kinkade, IDOT CIO (Business Champion/enterprise program direction
COMMENTS	217-524-6532		A project to develop a new roadway inventory/centerline database is	We are aware of the NCHRP 20-27 and some		Not at this time	We would like to maintain communications with the LST for future development efforts in	Technical: Joel Bump & Melisa Shaw	IT Director & Planning Director
INDIANA	217-785-2392	Yes	underway. It is not "on going". Yes	work from other states. Yes	Yes	No.	Illinois.		The Brooker of Flamming Director
COMMENTS		County-Route-Milepost, State-Route- Milespost, GPS	Utilizing EXOR to implement customized solution.						
KANSAS	Brian Logan	No	Yes	Yes	Yes	No	No		
COMMENTS	785-296-4899 785-296-8168 (fax) brian@ksdot.org	Not much. Our LRS effort has standardiz common set of location referencing. We referencing schemes. We know what to see sufficient benefit to offset the	/e have a method for resolving other do; though some data holders do not		Best practices would be interesting. We are aware of the benefits.	We have established an LRS that works. There is no minor improvement that would be worth uprooting the current LRS from the main database and all peripheral databases that synchronize with it. The probability and scope of any improvement would have to be spectacular.		The State of Kansas has a GIS Policy Board that in companies. Brian Logan is a member of that Board a Committee with such activities and Imagery for the N Elevation Subcommittee etc. KDOT has a Geospatial E IT Committee. GIS is housed in Planning a	and his staff is active on their Technical Advisory lation, Transportation for the Nation, LIDAR and nablement Committee that reports to our Executiv
KENTUCKY		Yes County-Route-Milepost, State-Route-	Yes	Yes	Yes	Yes	Yes	Techical: Will Holmes	Sponsor: IT and Planning Directors
COMMENTS LOUISIANA	Jim Mitchell	Milepost, Street name and Address No	Utilizing EXOR Yes	Yes	Yes	No	Yes NCHRP 20-27, is it all or Nothing? Don't have routing, need to retrofit, how? Based LRS ID on exisiting control section		
COMMENTS	225-379-1881	Developed One LRS and stock to it. Currently it is a single Link Representation. Control Section, Loc Mile not Good Link to Route-Mile.	Project to build Public Roads Base. Map Based on Updates to Tiger Data.	But we're not incorporating it.	Sure, Why not	Not at this time	created coding. 18 character code, good to see how others approach. In particular, how are ramps dealt with? (Louisiana ID's remaps with a Type Code Right or Left, etc.) Using sequential # system driven by Inventory will plug into Asset Manager	Darryl Mack - 225-379-1283 Lead in Mapping & Planning (build & maintain LRS)	
MAINE	Thomas Marcotte 207-624-3183	No but looking at changing from 1 form of	Yes Looking to adding a route-X/Y	Yes	Yes	Yes	No Nothing of this time	Hannes and the second s	Hanne with the state of the sta
COMMENTS	thomas.marcotte@marine.gov http://megis.maine.gov/users.asp	linear referencing to adding route-X/Y	method for data collection and need to integrate with exisiting LRS				Nothing at this time.	Unsure at this time, undergoing re-organization Neil Peterson/Greg Slater	Unsure at this time, undergoing re-organization
MARYLAND	Neil Pedersen/ Richard Woo	Yes	Yes	Yes	Yes				Governor O'Malley
		(1) Two ID's/ NI FID 13 Character				No	Not sure	Michel Sheffer	
COMMENTS	410-545-5537	(1) Two ID's/ NLFID 13 Character (2) 32 Character Route ID used for HMIS & Fed Submitton	One LRS / Education on New Route ID	Predecessor developed this and it was based on Model	Midght help them to know if there is something they could do better.	No Probably Not	Not sure Webinar might help. Not looking for something different.	Michel Sheffer	Need new addressing system for LRS using Cour Route Mile Posts
MASSACHUSETTS	Mark Berger	(1) Two ID's/ NLFID 13 Character (2) 32 Character Route ID used for HMIS & Fed. Submition NO	One LRS / Education on New Route ID NO	Predecessor developed this and it was based on Model	Midght help them to know if there is something they could do better. Yes	Probably Not Yes	Webinar might help. Not looking for something different. Yes	Michel Sheffer	
MASSACHUSETTS COMMENTS		(2) 32 Character Route ID used for HMIS & Fed. Submition	.5	on medel	cometiming and count at content	Probably Not	Webinar might help. Not looking for something different.	Michel Sheffer	Route Mile Posts
MASSACHUSETTS	Mark Berger 617-973-7340 mark.berger@state.ma.us	(2) 32 Character Route ID used for HMIS & Fed. Submition	.5	on medel	cometiming and count at content	Probably Not Yes	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts	Michel Sheffer	Route Mile Posts
MASSACHUSETTS COMMENTS MICHIGAN	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol	(2) 32 Character Route ID used for HMIS & Fed. Submition	.5	on medel	cometiming and count at content	Probably Not Yes	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts	Michel Sheffer	Route Mile Posts
MASSACHUSETTS COMMENTS MICHIGAN COMMENTS	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T)	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the a be candidates for a future effort for a MLF will begin with replacing the system the system of the system	Yes available COTS applications that may RS/TIS replacement effort. This effort hat maintains the primary LRM for	NO	Yes Yes We have been in contact with lowa DOT regarding their LRS and contact shortly for clarification on several	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.)	Michel Sheffer Mark Berger Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislatur Kreideweis, the office director of the office w	Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette rith the GIS and current TIS application.
MASSACHUSETTS COMMENTS MICHIGAN COMMENTS MINNESOTA COMMENTS MISSISSIPPI	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol (Section Director) Jonette Kreideweis (TDA Office Director Ray Barksdale or Randy Barrey	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the a be candidates for a future effort for a MLF	Yes available COTS applications that may RS/TIS replacement effort. This effort hat maintains the primary LRM for	NO	Yes Yes Yes We have been in contact with lowa DOT regarding their LRS and contact	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management tools. Yes	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.) No No None that we can think of at this time	Michel Sheffer Mark Berger Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislature	Route Mile Posts Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette ith the GIS and current TIS application.
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MASSACHUSETTS COMMENTS MICHIGAN COMMENTS MINNESOTA COMMENTS MISSISSIPPI COMMENTS MISSOURI COMMENTS MONTANA COMMENTS	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol (Section Director) Jonette Kreideweis (TDA Office Director Ray Barksdale or Randy Barrey 601-359-8206 Arnold Williams or Mara Campbell 573-751-7012 Marlin Sanders or Sue Sillick 406-444-9294	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the a be candidates for a future effort for a MLF will begin with replacing the system the Mn/DOT (Route and Reference Point). I Yes No Went through big enterprise wide LRS called TMS (Transportation Managemen Yes	Yes Available COTS applications that may RS/TIS replacement effort. This effort hat maintains the primary LRM for Future work may expand it to include Yes No project. All data is in one database at Systems). There is still a little bit of	Yes Yes Yes Yes Vaguely Yes	Yes Yes We have been in contact with Iowa DOT regarding their LRS and contact shortly for clarification on several issues and possible pilot efforts. Yes Yes Their system is so different. Would consider sitting in on it. Yes	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management tools. Yes March, April 2009 No Yes 6 to 8 months needed for them to be ready	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.) No No None that we can think of at this time Yes Documentation No Yes Mid-tier ESRI interface	Michel Sheffer Mark Berger Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislatur Kreideweis, the office director of the office w We are working cooperatively with our Ray Barksdale Not really high level champion, Arnold is the techinical	Route Mile Posts Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette ith the GIS and current TIS application. IT office for IT technical expertise. Ray Barksdale Same as question 7a.
MASSACHUSETTS COMMENTS MICHIGAN COMMENTS MINNESOTA COMMENTS MISSISSIPPI COMMENTS MISSOURI COMMENTS MONTANA	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol (Section Director) Jonette Kreideweis (TDA Office Director Ray Barksdale or Randy Barrey 601-359-8206 Arnold Williams or Mara Campbell 573-751-7012 Marlin Sanders or Sue Sillick 406-444-9294 Rose Braun 402-479-3696	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the a be candidates for a future effort for a MLF will begin with replacing the system the Mn/DOT (Route and Reference Point). I Yes No Went through big enterprise wide LRS called TMS (Transportation Managemen)	Yes Available COTS applications that may RS/TIS replacement effort. This effort hat maintains the primary LRM for Future work may expand it to include Yes No Project. All data is in one database at Systems). There is still a little bit of	Yes Yes Yes Yes Vaguely	Yes Yes We have been in contact with lowa DOT regarding their LRS and contact shortly for clarification on several issues and possible pilot efforts. Yes Yes Their system is so different. Would consider sitting in on it. Yes Yes Always interested in what others are	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management tools. Yes March, April 2009 No Yes 6 to 8 months needed for them to be ready No	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.) No None that we can think of at this time Yes Documentation No Yes	Michel Sheffer Mark Berger Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislatur Kreideweis, the office director of the office w We are working cooperatively with our Ray Barksdale Not really high level champion, Arnold is the techinical champion	Route Mile Posts Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette rith the GIS and current TIS application. IT office for IT technical expertise. Ray Barksdale
MASSACHUSETTS COMMENTS MICHIGAN COMMENTS MINNESOTA COMMENTS MISSISSIPPI COMMENTS MISSOURI COMMENTS MONTANA COMMENTS NEBRASKA	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol (Section Director) Jonette Kreideweis (TDA Office Director Ray Barksdale or Randy Barrey 601-359-8206 Arnold Williams or Mara Campbell 573-751-7012 Marlin Sanders or Sue Sillick 406-444-9294 Rose Braun	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the a be candidates for a future effort for a MLF will begin with replacing the system the Mn/DOT (Route and Reference Point). I Yes No Went through big enterprise wide LRS called TMS (Transportation Managemen Yes	Yes Yes Available COTS applications that may RS/TIS replacement effort. This effort hat maintains the primary LRM for Future work may expand it to include Yes No project. All data is in one database the Systems). There is still a little bit of Yes No Yes	Yes Yes Yes Yes Vaguely Yes	Yes Yes We have been in contact with lowa DOT regarding their LRS and contact shortly for clarification on several issues and possible pilot efforts. Yes Yes Their system is so different. Would consider sitting in on it. Yes Yes	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management tools. Yes March, April 2009 No Yes 6 to 8 months needed for them to be ready	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.) No No None that we can think of at this time Yes Documentation No Yes Mid-tier ESRI interface No	Michel Sheffer Mark Berger Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislatur Kreideweis, the office director of the office w We are working cooperatively with our Ray Barksdale Not really high level champion, Arnold is the techinical champion	Route Mile Posts Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette rith the GIS and current TIS application. IT office for IT technical expertise. Ray Barksdale Same as question 7a.
MASSACHUSETTS COMMENTS MICHIGAN COMMENTS MINNESOTA COMMENTS MISSISSIPPI COMMENTS MISSOURI COMMENTS MONTANA COMMENTS NEBRASKA COMMENTS	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol (Section Director) Jonette Kreideweis (TDA Office Director Ray Barksdale or Randy Barrey 601-359-8206 Arnold Williams or Mara Campbell 573-751-7012 Marlin Sanders or Sue Sillick 406-444-9294 Rose Braun 402-479-3696 Rose.braun@nebraska.gov	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the at be candidates for a future effort for a MLF will begin with replacing the system the Mn/DOT (Route and Reference Point). I Yes No Went through big enterprise wide LRS called TMS (Transportation Managemen Yes No No No No No No No No No N	Yes NO Yes No No Yes No Project. All data is in one database the Systems). There is still a little bit of Yes No No Yes Kind ofWe have a solution (more like temporary) but it is not user friendly, is over complicated, inflexible as well as being entirely to software vendor specific. Unfortunately the software part is most difficult since we are migrating our GIS from Intergraph to ESRI over the next 20 months or so. Knowing that IOWA is an Intergraph shop, I wonder if your solution will be	Yes Yes Yes Yes Vaguely Yes Yes	Yes Yes We have been in contact with lowa DOT regarding their LRS and contact shortly for clarification on several issues and possible pilot efforts. Yes Yes Their system is so different. Would consider sitting in on it. Yes Always interested in what others are doing and best practices. Yes	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management tools. Yes March, April 2009 No Yes 6 to 8 months needed for them to be ready No Not necessary No Probably not at this time due to the software	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.) No No None that we can think of at this time Yes Documentation No Yes Mid-tier ESRI interface No Not at this time. Yes	Michel Sheffer Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislatur Kreideweis, the office director of the office w We are working cooperatively with our Ray Barksdale Not really high level champion, Arnold is the technical champion Marlin Sanders, Chair Steering Committee Eric Warmath There are no really high level decision makers with any money in their budget since the state is undergoing a serious financial crisis, trying to avoid layoffs and cutting	Route Mile Posts Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette rith the GIS and current TIS application. IT office for IT technical expertise. Ray Barksdale Same as question 7a.
MASSACHUSETTS COMMENTS MICHIGAN COMMENTS MINNESOTA COMMENTS MISSISSIPPI COMMENTS MISSOURI COMMENTS MONTANA COMMENTS NEBRASKA COMMENTS NEVADA	Mark Berger 617-973-7340 mark.berger@state.ma.us Dan Ross (GIS-T) Matthew Koukol (Section Director) Jonette Kreideweis (TDA Office Director Ray Barksdale or Randy Barrey 601-359-8206 Arnold Williams or Mara Campbell 573-751-7012 Marlin Sanders or Sue Sillick 406-444-9294 Rose Braun 402-479-3696 Rose.braun@nebraska.gov Eric Warmath	(2) 32 Character Route ID used for HMIS & Fed. Submition NO Yes Mn/DOT has initiated a RFI to see the at be candidates for a future effort for a MLF will begin with replacing the system the Mn/DOT (Route and Reference Point). I Yes No Went through big enterprise wide LRS called TMS (Transportation Managemen Yes No No No No No No No No No N	Yes Yes Available COTS applications that may RS/TIS replacement effort. This effort hat maintains the primary LRM for Future work may expand it to include Yes No Project. All data is in one database the Systems). There is still a little bit of Yes No Yes Kind ofWe have a solution (more like temporary) but it is not user friendly, is over complicated, inflexible as well as being entirely to software vendor specific. Unfortunately the software part is most difficult since we are migrating our GIS from Intergraph to ESRI over the next 20 months or so. Knowing that IOWA is an Intergraph	Yes Yes Yes Yes Vaguely Yes Yes Yes Yes Yes Yes Yes Ye	Yes Yes We have been in contact with lowa DOT regarding their LRS and contact shortly for clarification on several issues and possible pilot efforts. Yes Yes Their system is so different. Would consider sitting in on it. Yes Always interested in what others are doing and best practices. Yes Sure. Knowledge is always good. If nothing else it makes you aware of	Probably Not Yes Possibly. Yes Mn/DOT would also be interested in speaking with other Lead State Team members who are currently using a variety of LRS Management tools. Yes March, April 2009 No Yes 6 to 8 months needed for them to be ready No Not necessary No Probably not at this time due to the software training ongoing for the new software and the work focusing on finishing our Right of Way	Webinar might help. Not looking for something different. Yes Possibly assistance related to data shifts from roadway changes (alignments, etc.) No No Noe that we can think of at this time Yes Documentation No Yes Mid-tier ESRI interface No Not at this time. Yes A detailed list of "things that did not work as expected: and "when you do this, bad things"	Michel Sheffer Mark Berger Mark Berger The current effort has identified MnDOT Division We are working on getting funding from the legislatur Kreideweis, the office director of the office we are working cooperatively with our Ray Barksdale Not really high level champion, Arnold is the technical champion Marlin Sanders, Chair Steering Committee Eric Warmath There are no really high level decision makers with any money in their budget since the state is undergoing a serious financial crisis, trying to avoid layoffs and cutting services across the board 14%. It will be at least 2 years before any serious non-construction or maintenance activities occur at NDOT and that includes	Route Mile Posts Mark Berger Directors as the authority to allocate budget. re for this effort. LRS Business Lead is Jonette rith the GIS and current TIS application. IT office for IT technical expertise. Ray Barksdale Same as question 7a.

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States Responses and any comments added to questions.	CONTACT PHONE#/FAX # EMAIL ADDRESS	Are differing location referencing methods in legacy databases are a current area of concern in your State?	Do you have a current efforts on-going to address this concern?	3. Is your state aware of the LRS model developed through NCHRP 20-27 and the work of several lead states who have implemented variations of this model?	about best practices from LST	5. Might there be an interest in several LST members visiting your state to share their experiences in implementing an LRS or to review your situation and offer suggestions for your consideration?	6. Is there some other type of assistance from the LST that would be beneficial to your state?	7a. Who are the potential business and techinical champions in your state?	7b. Who is the sponsor or high level decision- maker with authority to allocate budget and direct an enterprise-level program?
COMMENTS		maintaining several LRM's for many years. E.g. milepost panels, intersections, State and County Cumulative, milepost index. These LRM's are the basis on which we locate our crashes on our 2 networks (State and County Road networks). Since our goal is to accurately locate as many crashes as possible from our central state crash database (NCATS), we have developed many applications to improve this process. Our new "Event GeoLocator" (EGL) application is now coming online. NDOT has no overseeing Office of Transportation Data, therefore each Division is working with their own datasets and standards and policies. A recent FHWA Workshop (Asset Mgmt)has highlighted the need for Data Integration, and LRS enterprise	model. Currently we are working intensely with INTG to improve reliability and stability, so that we can publish several model "Production Datasets". Our MLLRS is a key component of our Safety Management System (SMS). Please find attached by separate email — due it size of docs - some	See Prior Answer. My understanding is that Geotrans came directly out of 20-27 -2. (more focused on LRS) See Phil Hardy's - of INTG presentation attached. Phil is the main developer of the GeoTrans Model and its subsequent Maintenance tools. Routing currently not priority for NDOT – too much	maintenance of mllrs, and development of tools, eg conflation and Integ of new attrib (Transportation Mngr and Fusion); Updating of event and linework geom. and networks; and Temporal/Timestamp aspects	We have hosted several States in the past demonstrating our MLLRS (Wyoming, Iowa, WSDOT, Ohio)	Some type of regular update on each states problems and successes with using LRS. Would like experience on management of Irs for segmented Divisions especially relating to a stds/policies approach. Enterprise Process is an issue here. What should be the policies, and roles of each div in support of Irs? Source centerline data – TIGER or county/city sources?, Do others have legal issues on using commercial data such as Tele-Atlas and Navteq? Are local govts collaborating to automate the integration of datasets (As in WSDOT)?. Is xml used to update networks. What is the future direction of LRS at Director/Asst Dir. level?	I hope that would be us! (Safety Engineering). Our SMS is funded through NDOT and FHWA. Executive level support/sponsor buy in will be key.	We need a Director level authority to allocate budget for Irs, and develop a Strategic plan for "Enterprise LRS".
NEW HAMPSHIRE COMMENTS NEW JERSEY	Dennis Fowler 603-271-3344 Andrew Rowan	Yes	Yes	Yes	No	Yes	No	No response	No response
COMMENTS	609-633-9100 andrew.rowan@oit.state.nj.us	There is some concern	NJDOT has had some success in converting differing location referencing to the departmental standard.	NJDOT/GIS is aware of the NCHRP 20-27	Not at this time	NJDOT is always interested in emerging technologies and business practices.	Not at this time		
X NEW MEXICO COMMENTS	David Fletcher Lead States Team Rep fletcher.d@att.net		o torrow or						
NEW YORK COMMENTS NORTH CAROLINA	Kevin Hunt 518-485-7152 khunt@dot.state.ny.us 'http://www.nysgis.state.ny.us/outreac h/whoswho/whoalpha.cfm?AlphaInde x=H)' Janet Lowe Lead States Team Rep								
COMMENTS NORTH DAKOTA	919-707-2153 jolowe@ncdot.gov Gerald Kautzman	Yes	No	No	Yes	No	No		
X COMMENTS	Gerald working in Planning and Program Delivery. He was on the initial team involved in development	but the DOT IT folks seem to be able to manage these to some extent.			to see what lowa and other are doing to maintain an MLLRS and how it is benefiting the departments.		Not that Gerald could identify.		Transportation Program Deputy Commissioner
X OHIO COMMENTS	David L Blackstone Lead States Team Rep 614-466-2594	Yes County -Route-Milepost, State-Route-	Yes Utilizing Intergraph's Geo	Yes	Yes	Yes	Yes LRS standard adobped by other Federal	David Blackstone	Currently Vacant
OKLAHOMA	Dave.Blackstone@dot.state.oh.us Jay Adams	Milepost No All of Oklahoma DOT uses a single	Transportation Model No	Yes	Yes	No	Agencies: USGS, Census, Etc Yes	Jay Adams Jay is the GIS Coordinator for the DOT, they maintain	Jay Adams
COMMENTS	GIS Coord.	unified LRS which was put into place in the 1960s and simplifies life for Jay immensely. The system is based on a county control and mile point system.		they are aware of the 20-27, but do not need data model to that degree of sophistication.	and hearing what other LICLIC are	Not necessary, but GIS-T is a great opportunity for DOT folks to network and discuss current and future issues regarding transportation and GIS.	Jay may spend some time to see if there are spatial SQL scripts that may benefit ODOT.	data on about 120, 000 centerline public road miles. The LRS they maintain is only for the state's systems about 13, 000 miles. The data is stored in Oracle Spatial and they use LDMX and a schema similar to that to lowa's.	
× OREGON	Dennis Scofield	Yes	Yes	Yes	Yes	Yes	No	Transportation Data Section Managers: Dennis Scofield, Robin Ness, Heather King and Section Manager: David Ringeisen	TDD Administrator: Jerri Bohard
COMMENTS PENNSYLVANIA	503-986-3156 dennis.j.scofield@odot.state.or.us J. Michael Long, PE	Yes While nearly all data collected uses the	Pilot project to integrate use MLRS Yes	Our pilot is 20-27 compliant Yes	Yes	Yes	Unknown at this time No	Mike Long and Frank DeSendi	Jill Reeder, CIO
X COMMENTS RHODE ISLAND		transferrable, local federal aid inventory mimics the LRM, but is not field measured and is not used to locate crashes, and addresses are geocoded through TeleAtlas license, but are not associated with the state roads. Crash locations and highway occupancy permits are the driving forces behind address geocoding on state roads.	A Linear Referencing Management System (LRMS) study and the requirements report were developed to examine feasibility and need. The effort has stalled somewhat because of budget and IT planning.			PennDOT would be very interested in an opportunity to see and hear about best practices in a multi-level LRS environment.	Not at this time, Thank you		
SOUTH CAROLINA COMMENTS		NO SC just recently (2005) upgraded their suite of software to maintain it. They als transportation management system that heavily investigations.	o are using a web-based information it was written by them, and they are			No They would be interested in interaction with respect to seeing what other organizations are doing, but they aren't really interested in assistance at this time.	No	Angela Hance with Road Inventory, Todd Anderson (PM for ITMS) Bill Beck, Assistant Director and chief of Road Data Services.	Angela Hance with Road Inventory, Todd Anderson (PM for ITMS) Bill Beck, Assistant Director and chief of Road Data Services.
SOUTH DAKOTA	Terry Erickson, Rock Hook, Roger Brees	No not on the state system. Regarding all	Yes	Yes	Yes	Yes	No		
X COMMENTS	Currently South Dakota only works with the State Hwy system in their LRS (30+ year old mainframe) with about 8,000 miles.	other systems, the South Dakota DOT does not work with these and has no	planning stages now.	they have heard some of what lowa has as a MLLRS.	they would be interested in what other states are doing to address their LRS issues.	Maybe in the future as they progress with their planning to expand to the all systems.	Not at this time – although it did sound as though they were going to be involved in a HPMS web conference with several other DOTs and lowa was among the other DOTs.		Deputy Secretary
TENNESSEE	Kim McDonough Sherry J. Hankins	No	No	Yes	Yes	Yes	Yes Are you dealing with the direct import of local	William (Vic) Mangrum, IT Director Kim McDonought, IT/GIS Coordinator Jeanne Stevens, Director of the Long Range Planning Division	William (Vic) Mangrum, IT Director Kim McDonought, IT/GIS Coordinator Jeanne Stevens, Director of the Long Range Planning Division
COMMENTS	Sherry.Hankins@state.tn.us	Not really. We have long/lat as well as leading to the last last last last last last last last	ogmiles in our Tennessee Roadway stem (TRIMS) database	Apparently so, but I am not sure to what exter we understand it. I am investigating further.		Possibly once we have had a chance to fully study the LRS model developed through NCHRP 20-27.	street inventory into a statewide database such as what is being developed by the WaTrans TPF? What about the consolidation of address based and LRS based attributes onto a common geometry?		
TEXAS COMMENTS UTAH	Chris Glazier		No	Yes	Yes	No	Yes		
COMMENTS	801-965-4381 cglazier@utah.gov	This has been resolved as far as the uniform linear address, but not the conversion to X/Y.				Not at this time	Organization and Staffing	Craig Hancock, CHANCOCK@utah.gov	
X COMMENTS	Jonathon Croft 802-828-2600	Not Really, only issue is non-std route codes	Yes Have techniques to solve our problems	Yes	Yes	No much benefit since they have mature model Might consider NCHRP 20-27 design in the future.	Yes Would be interesting to see if states are moving towards a similar model would could then drive how HPMS is reported.	Jonathan Croft	Jonathan Croft
VIRGINIA COMMENTS						iadio.	and the first the me is reported.	John Bower	
WASHINGTON	Mark Finch	Yes Developing Rusiness requirements. ESR	Yes	Yes	Yes	Yes	Yes	Ron Cihon (CihonR@wsdot.wa.gov) Mark Finch	
COMMENTS	360-570-2369 FinchM@wsdot.wa.gov	Developing Business requirements, ESR coming in to show them. Al Butler (contributed Package proposed to legislature to replace the TRIP system is top priority	actor through ESRI) had some ideas. e 10 mainframes. LRS component ir . Doing a feasibility study.			They can not travel. After legislative session. After 6 months.	Understanding what other states are doing		
X WEST VIRGINIA COMMENTS		Yes County - Route - Milepost - GPS	NO Very interested in solution.	Yes	Yes	Yes	No	Technical Champion: Hussein Elkhansa	
WISCONSIN X	Jonathan DuChateau Lead States Team Rep 608-266-6975	Yes	Yes	Yes	No	No	Yes Potentially sharing experience of API	Susie Forde (Data Management Chief),	Susie Forde (Data Management Chief),
COMMENTS WYOMING	jonathan.duchateau@dot.state.wi. us					Already a lead state	development for LRS translations/transformations	Mike Gilchrist (GIS Unit Supervisor), Jonathan DuChateau (Enterprise Architect/IT Strategist)	Mike Gilchrist (GIS Unit Supervisor), Jonathan DuChateau (Enterprise Architect/IT Strategist)
COMMENTS San Juan, Puerto Rico	Miguel Martinez-Yordan	Yes	Yes	No	Yes	YES	Yes	DOT & Public Works, Hwy & Transp. Authority(PRHTA), and Municipalities Public Works divisions.	Secretary of the DOT and Executive Director of the PRHTA
X COMMENTS	787-721-8959 (direct) migmartinez@act.dtop.gov.pr	We need different calibration data because we have different referencing systems in Puerto Rico	But it is only in the first stage.	But I will look for more information.	Any help or additional information will be much appreciated.	!!!	Workflows	mamopulado i dollo trollo divisiolis.	. 18177
# of "Yes" Responses # of "NO" Responses % of Yes Responses		22 17 44%	25 15	34 4 68%	36 3 72%	21 19 42%	21 18		
% of No Responses Total % of state responses		34% 78%	50% 30% 80%	8% 76%	6% 78%	38% 80%	42% 36% 78%		
Unresponsive		13%	13%	13%	13%	13%	13%		

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