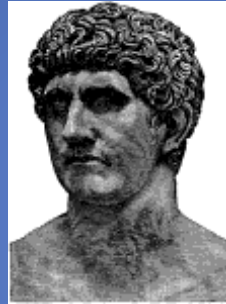


Road Operations and Management Effort (ROME)

NCDOT ROME Project ... *So Far*

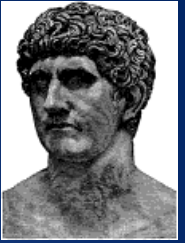


May 7, 2013

John Farley, GISP, CPM
GIS Manager

Jonathan Arnold, PE, MPA, CPM
(Yes, that Jon ARNOLD)
Infrastructure Management Engineer

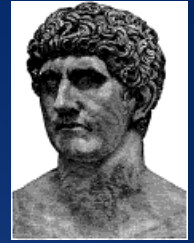
Topics



- ROME project profile
- What key benefits will ROME provide?
- Project status and scope
- How does a DOT prepare for an R&H implementation project (lessons learned, challenges, etc.)?
- How has the current DOT working group provided direct value to the project?
- A brief sampler of Roads and Highways

The ROME Project

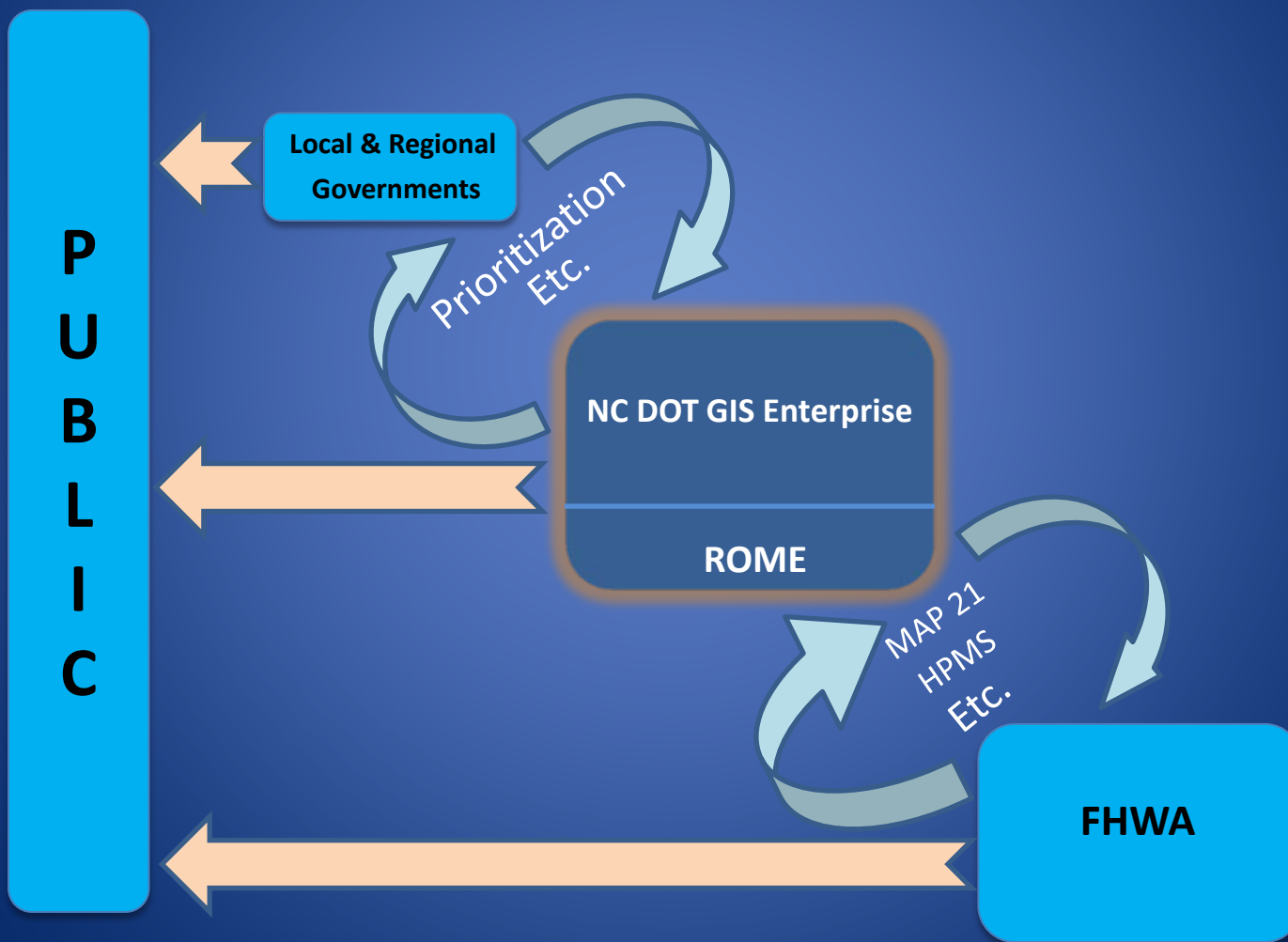
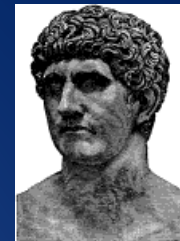
Implementing Roads & Highways



- The core activity of the ROME project is the implementation and integration of Esri's Roads & Highways solution, a COTS product to be customized for NCDOT
- This includes:
 - Integration with our major asset management suite – AgileAssets
 - Integration of ALL roads in North Carolina
- This will allow:
 - Business units to better maintain and integrate their own data against our common enterprise LRS, fostering more accuracy and timeliness of information
 - Expanded and improved synchronization of business systems across a common road network (LRS)
 - Web-based editing of roadway information
 - More automated HPMS reporting

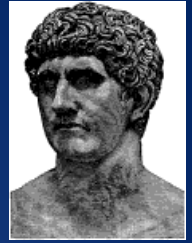


ROME in the Big Picture



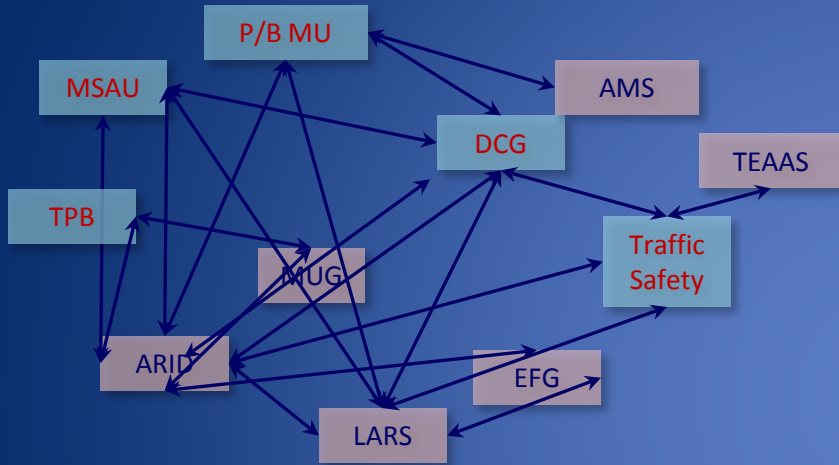
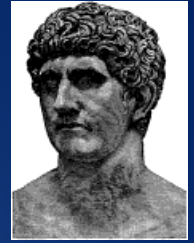
ROME Benefits

Road Operations and Management Effort (ROME)

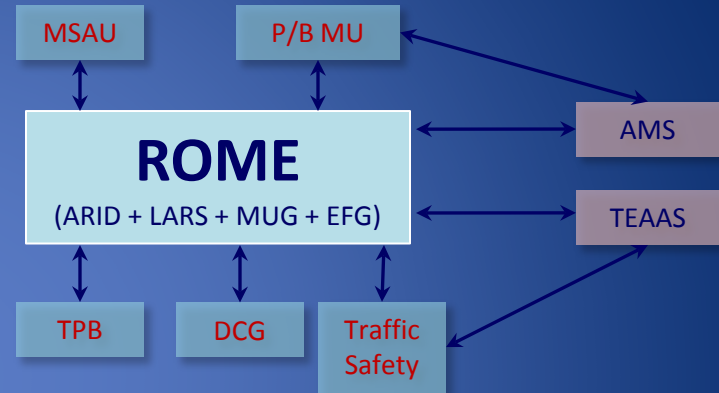


- NCDOT expecting significant change in coming years
 - Soaring population growth will require infrastructure investments, yet funding levels expected to stay modest
 - New Federal requirements (FHWA reporting) are being implemented
- The key to meeting these challenges is better information, delivered with timeliness and accuracy
 - A key component of ROME's ROI is *better information to drive better decisions*
 - Another significant cost savings from ROME will be streamlined workflows to improve efficiencies and effectiveness

Streamlining Workflows



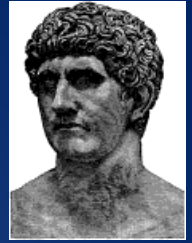
Current Situation



Future State with ROME

- With ROME, workflows between business units will be simplified and more *efficient*, providing more *timely and accurate* information

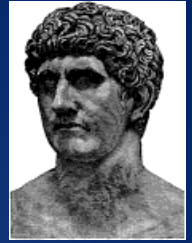
ROME Status and Scope



- Project is in the Planning & Design Phase, having kicked off officially in April 2013
 - Over two years in the making!
- NCDOT team is currently working with Esri to define requirements and the project plan
- Implementation of the ROME solution is expected to occur in Q2/2014
- ROME will include non-system roads to meet emerging requirements
- The Roads and Highways solution will be delivered on version 10.2.1 to gain benefits of critical functionality planned for that release

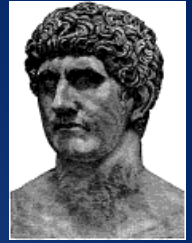
Preparing for a R&H Project

A Few Lessons Learned To Date



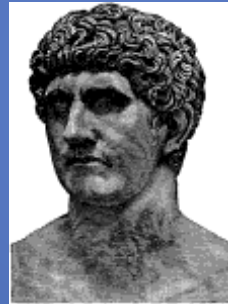
- Plan for a long and epic procurement process with multiple SOW versions (*NCDOT and Esri produced 7*)
- Be sure to understand the R&H version release schedule and the implications for your environment
- Emphasize use of prototypes early to visualize requirements
- Plug into the biweekly DOT calls to exchange information on R&H implementations and avoid known potholes

Value of DOT Working Group

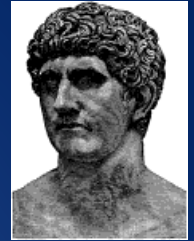


- The DOT working group meets every other Tuesday on a call to discuss topics related to R&H implementations and/or AgileAssets technology integration
 - Currently have about 7 DOTs participating; number growing
- Group has been invaluable in helping to understand challenges, best practices, risks, etc., with these projects
 - Example: Concerns about vendor resources spread across parallel projects
- Last fall, NCDOT hosted a successful DOT summit in Raleigh with Esri and AgileAssets to discuss topics related to R&H implementations

Brief ROME Sampler



Centerline Editing



Roads And Highways Editing

LR5 Network MilePoint Activity Type Create Route

Start Date: 2/15/2013 12:00:00 AM

Retire Date:

Route ID: 22221122

From Measure: 0 Miles

To Measure: 0.701091 Miles

Route Attributes:

Attribute	Value
Route Name	IN3344
Alternate Route ...	ID1234
DOT_ID	
COUNTY_ORDER	

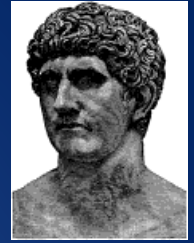
Select Centerline

Choose a single centerline feature:

- 68453
- 68460

OK Cancel

Roadway Characteristics Editor



Map Edit Review

Est Roads and Highways v10.1 - Roadway Characteristics Editor

Network (LMM)
 Mile Marker: 10002501
 View Date: 1/23/2013
 Time Slider

Route popup window:

Field	Value
Object ID	31
From Date	<null>
To Date	<null>
Route ID	10002501
Route Name	NY106
Mile Length	13.33
Mile Point Name	<null>
County Order	<null>
Route Type	<null>

Est Roads and Highways v10.1 - Roadway Characteristics Editor

Delete button

LIKE AND OR NOT Get Unique Values

SELECT * FROM Functional Class WHERE

Select

Redline Route

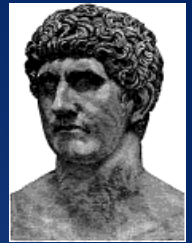
Functional Class

To Date	Notes	Event ID	Functional Class	Route ID	From Measure	To Measure	Location Error
<null>	<null>	27510	3	10002501	0.19	10.93	NO ERROR
<null>	<null>	27513	5	10002601	0.65	9.81	NO ERROR
<null>	<null>	27515	8	10002601	0.81	15.07	NO ERROR
<null>	<null>	28171	4	10002603	0	16.08	PARTIAL MATCH FOR THE TO-MEASURE
<null>	<null>	28013	1	10042303	0	15.75	PARTIAL MATCH FOR THE TO-MEASURE
<null>	<null>	28442	3	10052901	0	12.49	NO ERROR

Page 1 of 1 | Record 1 to 8 | Total 8 Records

Event Attributes

Time



Set Date Filter

Set a common date filter for all network and event layers in the map

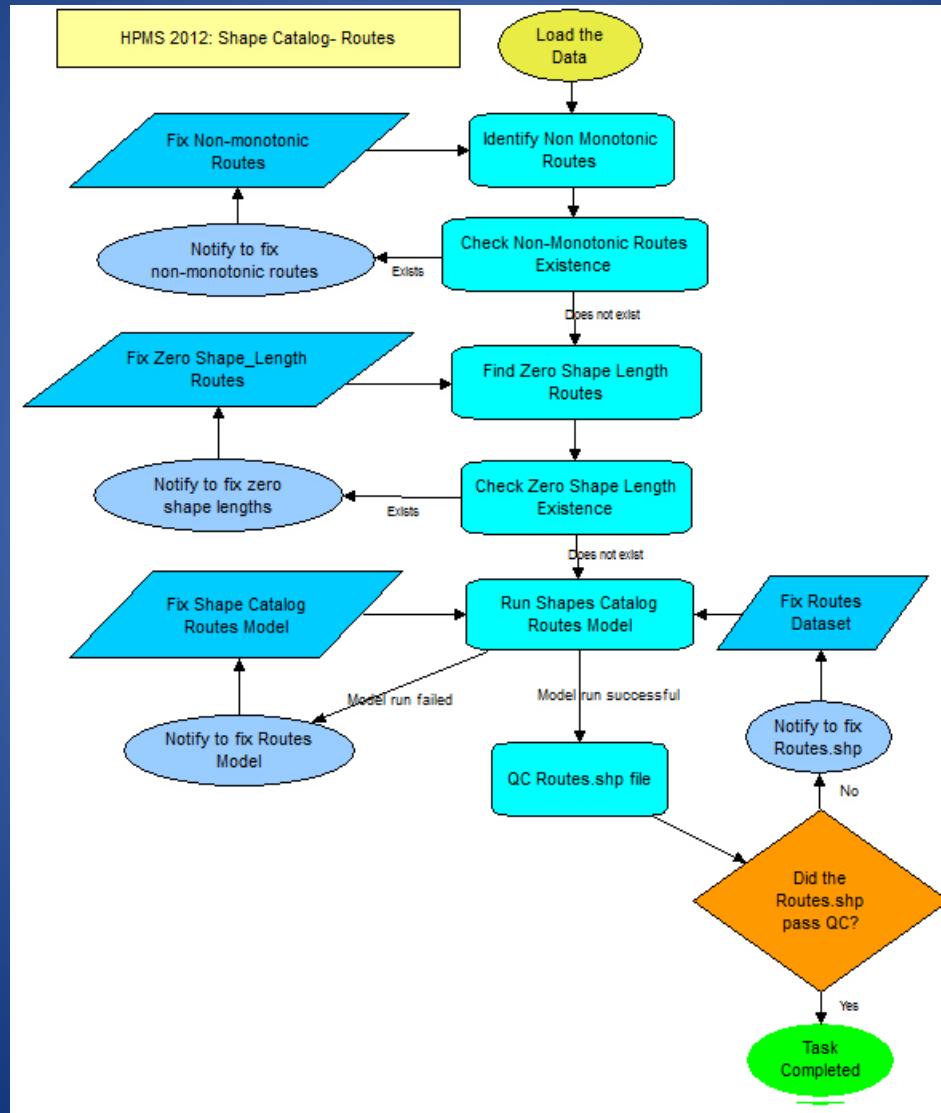
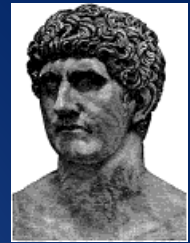
Use current system date and time
 Specific date 02/15/2013 12:00:00 AM
 Layers do not have a date

Details

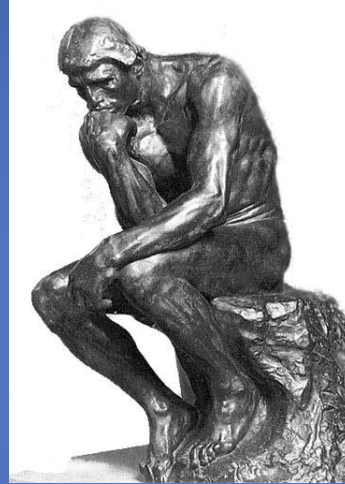
February, 2013						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	1	2
3	4	5	6	7	8	9

Today: 2/15/2013

Workflow Integration



Questions?



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919.707.2151