



**Request for Clarification (RFP #82085N)**  
**Traffic Data and Associated Services along the I-95 Corridor**

**Issued:** September 5, 2007  
**Due:** September 10, 2007

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INRIX<sup>®</sup> is pleased to submit clarifications as requested by email on September 5, 2007. Through our responses ([in blue](#)), we wish to reiterate our desire to support the Coalition and its member agencies by offering the best data available with extensive usage flexibility in a long-term partnership that maximizes the cost-benefit of this project to the agencies.

In reviewing the questions, there is a general point we wish to emphasize that may help address possible confusion in parts of our proposal.

Our “Respondent Comments” in the Traffic Data Requirements table<sup>1</sup> are provided based entirely upon INRIX<sup>®</sup>’s Smart Dust Network, Traffic Fusion Engine and Partner Portal “as is.” This means that our cost proposal fully includes the elements necessary to meet the requirements as described to implement and operate the baseline system for the initial three year operational period, and the basis for costing the base system and rate schedule for coverage and time beyond the initial three years. Thus, within the submitted fee, the Coalition will benefit from continued platform improvements and growth in probe data as described in our proposal.

However, INRIX<sup>®</sup> also recognizes that there are several ways in which the Coalition, or specific member agencies, may wish to improve our service. Examples include covering more roads, improving the quality of the data further, improving data quality in lower volume periods, etc. Thus, we have included several additional Enhanced Source Data Options<sup>2</sup> for consideration. If we are selected, these options – with committed pricing included in the cost proposal – become available to the Coalition and its member agencies. Decisions to utilize – or not – these options will be up to the Coalition. Given the IDIQ nature of the contract, this approach offers great flexibility for the future. It is important to note that INRIX<sup>®</sup> has not added any fees onto the pricing submitted for these enhanced sources; all fees will go directly to these partners.

*Please note that INRIX considers all clarifications are confidential in cases when the “Proposal reference” section is subject to confidentiality claims as listed on page 4-1 of our proposal.*

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<sup>1</sup> Section 3.1 of the RFP, pages 3-12 through 3-14 of our proposal

<sup>2</sup> Described beginning on page 3-20 of our proposal

**Proposal reference:** Page 2 of transmittal letter – “We understand and accept the data ownership and data licensing provisions of the RFP without exception. In fact, we are willing to discuss liberalizing the usage conditions further as we believe strongly that our clients should have the ability to utilize our data to the maximum extent possible ....”

**Clarification requested:**

What is meant by ‘liberalizing usage conditions’? Will this impact cost? Please be more specific regarding the conditions you are willing to liberalize.

**INRIX® Clarification:**

In our response to the Coalition’s 2<sup>nd</sup> Request for Information leading up to this RFP, we provided detailed feedback on the then draft IPR statement (our response is attached on the following page for further detail). The language in Section 6.0 of the RFP regarding data ownership and licensing is similar to the draft IPR statement, so the detail and philosophy of our RFI #2 response apply for our proposal as well.

The specific area we would be willing to liberalize is section 6.2 where there are references to road segment length, speed/travel time ranges, update refresh periods. While we would like to maintain safeguards to prevent automated redistribution of our data to commercial entities, such as the media, we would support removal of all limitations on data usage for all Coalition and member organization assets (signs, HAR, 511, web sites, etc.).

As purchasers of data, we see no reason why the Coalition and its members should – or need to – accept terms that prevent the most robust and effective usage of the data you have paid for, and we believe any reference to reducing the granularity or precision of the data, or increasing its latency, for presentation to the traveling public can be eliminated without harming our ability to conduct business with other customers. These changes – whether they are made or not – have no impact on our submitted cost.

**INRIX® Response to draft IPR statement in RFI #2*****Can your company support the provision of the IPR statement?***

In general, yes we can support the IPR statement, with some suggested clarifications. Philosophically, the only limitations we feel are necessary regarding ownership and use of the data is twofold:

1. Prohibit resale or automated redistribution of data from the Coalition and/or its full member organizations to other public or private entities; and
2. Ensure copyright language is developed and used where practical and appropriate by the Coalition and its full members (e.g., web sites, RSS feeds, email alerts, etc.) to prohibit “screen scraping” or other techniques by which parties other than the Coalition or its full members could attempt to re-purpose the data to circumvent use restrictions. (Note: While we would hope the Coalition and its full members would monitor for such occurrences, the primary goal is to make clear to those considering circumventing the project’s data license that it is illegal, thus allowing the Coalition, its members, or INRIX® to pursue perpetrators, ideally reducing/eliminating such occurrences.)

***Are there portions of the statement which provide risk to the Contractor by diminishing opportunity to resell traffic data in commercial markets?***

Not given our business model and plans, subject to the suggested clarifications above.

***Are there portions of the IPR that are overly restrictive and could be loosened with negligible impact on either the Contractor or the cost of the proposal?***

Yes. We see no reason to restrict the Coalition or full member organization’s use of the data provided by this project as is suggested with the bulleted restrictions proposed. As a purchaser of data, we see no reason why the project’s investors should – or need to – accept terms that prevent the most robust and effective usage of the data you have paid for.

***For information provided freely to the public, could the number of thresholds be increased to four or five with minimal impact?***

Per our previous comment, this question is no longer meaningful.

***Are there further restrictions upon the data which your company would require?  
Please comment on any concerns, and provide input for any IPR issues that are not covered.***

None aside from the general prohibition on re-purposing data outside of the Coalition and its full members outlined above.

*Note: If other submittals to this RFI indicate that such restrictions as proposed in this RFI are maintained, and the published RFP retains such restrictions, then we strongly recommend some sort of scoring or evaluation criteria be included that gives “extra credit” for proposals that offer relaxing of the terms. We feel that broad vs. restricted usage is a key potential proposal differentiator and would be worth great value to the Coalition and its members, and needs to be recognized accordingly.*

**Proposal reference:** Page 3-12, Item 9 [REDACTED]

[REDACTED] total current average data latency = 4.5 minutes”

**Clarification requested:**

The definition of latency as defined in the response to item 9, page 3-12 of the proposal is from generation of probe message to receipt of update from data feed. The definition of latency provided in the RFP in section 1.5.9 on or about page 17 is the difference in time between traffic perturbation and when it is reflected in the data stream. Please clarify your response accordingly.

**INRIX® Clarification:**

Our response was aimed at showing that on average, the time it takes in our service today for source data to move from a vehicle to the customer is 4.5 minutes. Given that the requirement is to detect a traffic perturbation in 8 minutes, we are comfortable that our data as it is provided today can meet this requirement. [REDACTED]

[REDACTED] With our data density, reporting frequencies, processing efficiency and projected improvements in publishing frequency, we fully expect to easily meet the 8 minute maximum latency requirement, and possibly meet the 5 minute maximum latency requirement, from the outset of the project, with continued improvements possible throughout the operational phase.

**Proposal reference:** Page 1-4 “... more than 650,000 commercial fleet, delivery and taxi vehicles; toll tag data; and occupancy and speed measurements from several ...”

**Clarification requested:**

What sources of toll-tag data are included in INRIX<sup>®</sup>'s offering? Are any of these included in this project (within the corridor)? Is TRANSCOM toll-tag data utilized?

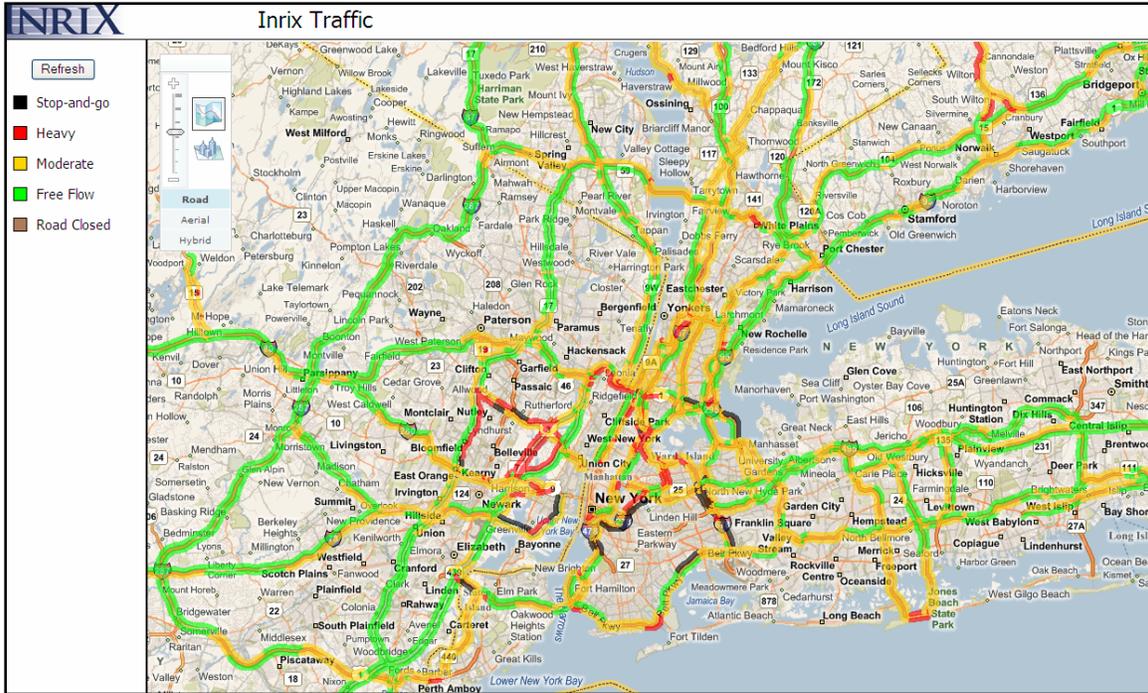
**INRIX<sup>®</sup> Clarification:**

At present, we include toll-tag data from the San Francisco Bay Area in the INRIX<sup>®</sup> Smart Dust Network. This interface is nearly identical to the TRANSCOM interface as they were both developed by the same integrator. Currently, we do not integrate toll-tag data from any portions of the corridor, including TRANSCOM. However, our system can support it and we would be willing to consider doing so.

In late 2006, INRIX<sup>®</sup> evaluated TRANSCOM's available data and determined that while useful, there were more cost-effective ways to scale our coverage in the New York Metropolitan area. The cost to access the data from TRANSCOM was determined to be prohibitive given that only some of the roads we cover in the region have TRANSCOM coverage, that this coverage has widely varying segment lengths (longer segments increase likelihood of latency) and that we would receive no contractual assurance of data feed reliability. Our decision at the time was to focus more on investments that yielded broader national and regional data. (See map on following page for current NYC area coverage.)

In developing this proposal, we re-examined that decision, but again reached the same conclusion: that our investments are better utilized if they yield broader corridor and/or NYC area wide quality improvements. In fact, since the proposal has been submitted, we executed an agreement that made several thousand more vehicles in the NYC area exclusive probe vehicles to INRIX<sup>®</sup>, at a fraction of the fees required to gain access from TRANSCOM and with significantly richer data on the covered roads.

To be clear, technically, our infrastructure supports the integration of toll-tag data from within the corridor and we would welcome detailed discussions with agencies to incorporate such data. To date, the only discussion has been with TRANSCOM and it is a business decision (value for money) to not yet integrate the data. This could of course change over time as factors evolve, such as TRANSCOM's data increases in value and/or coverage, the costs sought for the data moderate, and terms associated with data access more evenly match typical commercial terms that accompany these types of contracts. Our mission is to provide our customers the best data for their investments and will fully recognize that the data available to us is not stagnant.



**Current New York City Metropolitan Area Roadway Coverage**

**Proposal reference:** Page 3-12, item 5 "... at present we have not stratified our tests by speed ranges, though this is easily achievable. Our results by and large have met this level of accuracy requirement and ..."

**Clarification requested:**

Please clarify.

**INRIX® Clarification:**

The RFP contains the requirement of 10 MPH average absolute error (or root mean square error) for each of 4 speed ranges. We also use the root mean square error method in our own ground truth drive testing. A "drive test" usually involves 3-5 drivers driving a metropolitan market for 3-5 days spanning early morning to evening, which generates data that is compared to the information being provided for that market in our Partner Portal.

To date, in addition to generating an overall regional RMS error measure for each drive test, we calculate results based on locations (e.g., specific TMC segment for the whole drive testing period) and by time of day (e.g., all data points gathered during 3-4p.m. for the whole drive testing period during the drive test). We have not subdivided the data to do analysis in different congestion conditions (e.g., 0-30 MPH vs. over 60 MPH). In some recent testing, we are using a customer proprietary approach that assesses our ability to identify when congested conditions are occurring, perhaps the closest testing we have done that attempts to determine performance variations at different states of congestion. These results, which unfortunately are client proprietary, give us confidence that we will be able to meet the specific requirements the RFP for the entire baseline coverage area. As the source data increases over the 9-12 months between now and system evaluation, our results will only get better when comparing Coalition sponsored 2008 analysis as it compares with 2006 and 2007 INRIX® testing.

**Proposal reference:** Page 3-2, DTS Traffic Systems

**Clarification requested:**

Please clarify DTS's role or contribution to the proposal.

**INRIX<sup>®</sup> Clarification:**

*On Page 3-2, our proposal states: "This proposal makes available DTS's expertise in converting or creating traffic count stations that can also generate real-time source data to be used in the project. DTS is offering the exact pay item prices, terms and conditions that currently govern its statewide traffic data services contract with VDOT to the Coalition and its member agencies, allowing – at Coalition/agency option – agencies the potential of establishing or converting sites to dual traffic counting and real-time usage."*

*More detail is provided on Page 3-22 of our proposal: "Digital Traffic Systems (DTS) currently operates and maintains VDOT's and maintains FDOT's traffic count stations under long-term contracts. Further DTS has led the implementation in roughly 100 of VDOT's 400 count stations of dual use equipment, allowing for the stations to continue to provide traffic count data but also to serve as real-time sensors for traffic operations functions. Through this proposal, INRIX<sup>®</sup> is offering to all member agencies the ability to tap the resources of DTS for the same terms under which DTS is contracted by VDOT at present. This would allow any agency at their option to evolve any number of their traffic count stations – or even create stations from scratch – that can provide source data to INRIX<sup>®</sup> and data directly to the agency."*

Utilizing DTS' capabilities is one of our unique enhanced data source options we offer in the proposal. Their participation is not required for INRIX<sup>®</sup> to successfully complete the core requirements of this RFP. We are offering DTS capabilities to provide support in response to Indefinite Delivery, Indefinite Quantity (IDIQ) tasks orders which can build and expand data collection networks and to perform associated support services. Tasks can include but not be limited to: (1) applications and installation of dual use traffic data collection technologies, (2) Traffic Data Collection Timeliness and accuracy of data including calibration, (3) Maintenance and support of the Integration of data from existing compatible sources, (4) Participation and technology tradeoffs of innovative, non-invasive detection technology (including but not limited to video detection), while taking advantage of existing data where available, (5) Traffic signalization experience, (6) Active involvement in the commercial viability of the data (include traffic video distribution systems) for repackaging the information for commercial markets and (7) Specialty Consulting services for data integration and application support.

**Proposal reference:** Pages 3-2 and 3-3 also 3-23, True Position

**Clarification requested:**

Is the small scale test referenced on page 3-3 included in the cost of the base proposal, or is it an additional cost? If the small scale test is successful, will there be additional cost for implementation of the True Position concept over other geographical areas, or will such costs be reflected in the existing cost model? Are Cell Phone carrier agreements in place, if not what is the status of these agreements? If such agreements exist, what is their geographic coverage? What are the existing and planned contractual relationships, if any, between True Position, INRIX, T-mobile, and AT&T as they relate to work on the proposed project?

**INRIX® Clarification:**



**Proposal reference:** Page 3-12, Item 4

**Clarification requested:**

Please clarify. What, if any, of the traffic data referenced in the response to item 4 is included in the cost of the base proposal? Are there extra costs involved with provision of the extra information? If so, are these reflected in the cost proposal?

**INRIX® Clarification:**

None of these additional files are included in the cost of the base proposal. Given the page limitations and the focus on travel time and speed data of the RFP, we did not include detailed information about our other feeds.

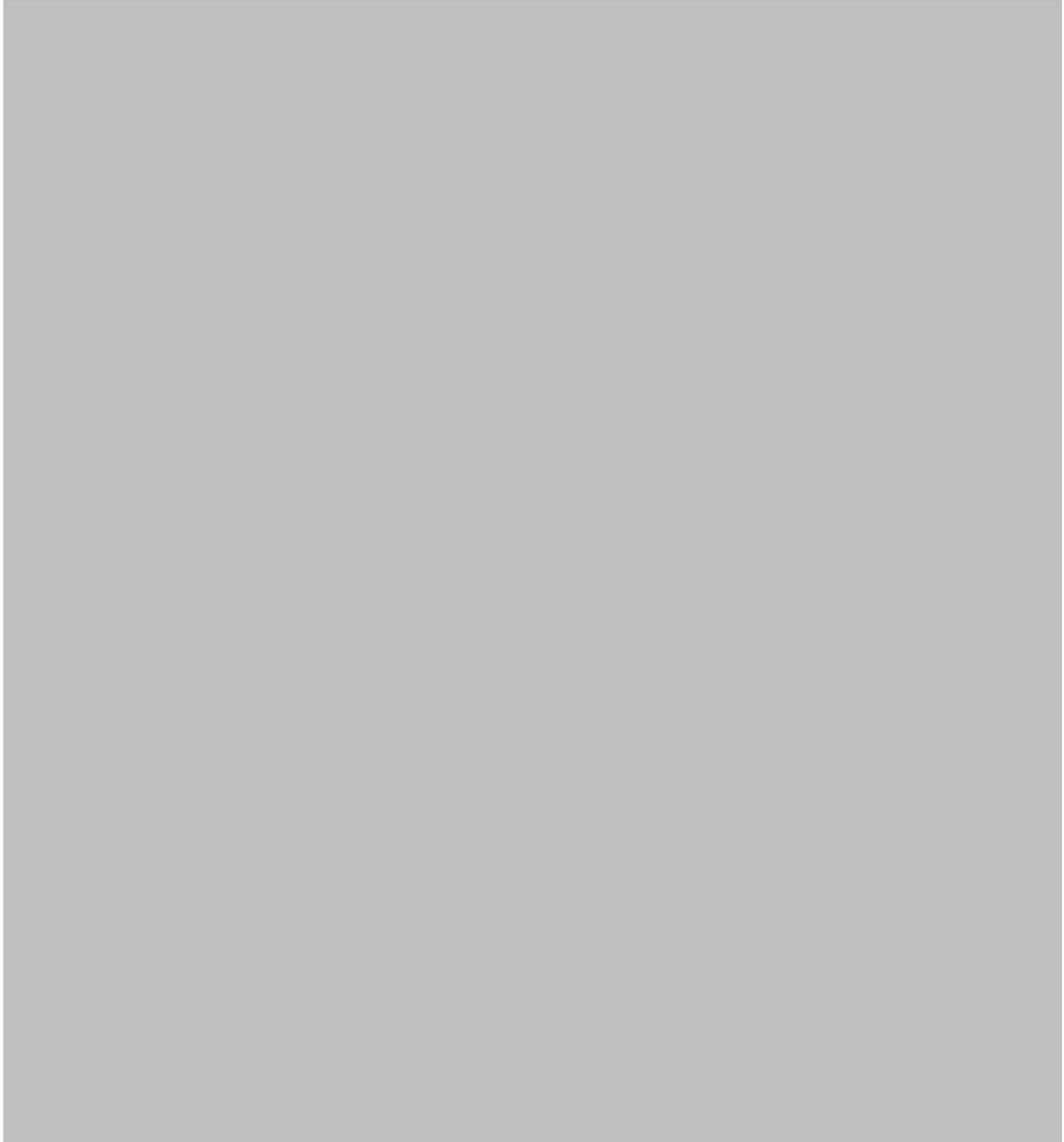
There are a large number of potential approaches to obtain and utilize the additional flow, incident and event data we have available and it does not lend itself to creating “list prices” that will ultimately not prove meaningful. Our expectation was that during the early stages of the project, we would communicate our full portfolio of additional offerings, allowing the Coalition and/or its member agencies to request more details for specific feeds and geography at any point during the contract period. We would then respond to those requests.

**Proposal reference:** Page 3-47, 48

**Clarification requested:**

Do any of the pending patents (and the possibility of not acquiring the patent) affect INRIX's ability to deliver the products associated with the contract? Do any of these contribute to the risk potential of the project?

**INRIX® Clarification:**



**Proposal reference:** Page 3-8, “Additionally, the INRIX Smart Dust Network aggregates real-time incidents and hundreds of market-specific criteria that affect traffic – such as construction and road closures, sporting and entertainments events, school schedules and weather forecasts.”

**Clarification requested:**

How is event information cited on page 3-8 collected? Is such information critical to the performance of the Smart Dust network? Is the collection of any of this data expected to be the responsibility of the Coalition and its members?

**INRIX® Clarification:**

INRIX® employs its own full-time team which is focused on collecting the event information discussed in the proposal. Our team has direct relationships with the venues, school districts, sporting leagues and other bodies that organize, coordinate and schedule events of various types across the country, allowing INRIX® to independently build and maintain unparalleled accuracy, recency and detail in the information it provides and uses.

Much of the information aggregated as part of the Smart Dust Network (events, school schedules, legislative calendars, real-time and forecast weather etc.) provide material lift to the accuracy of INRIX® predictive traffic products, however they do not impact the accuracy of INRIX® real time traffic flow information. [REDACTED]

There are no additional Coalition or member responsibilities to support this data collection effort.



**Proposal reference:** Page 3-8, sidebars

**Clarification requested:**

Clarify the cited >80% road sensor data statistic. Does this reflect 80% of sensors, organizations, or other? To what extent is INRIX's ability to provide quality data dependent upon coalition member's publicly available data, or public systems? What if these sources of data are unavailable? Is the proposal in any way dependent upon increased access to coalition member's incident and traffic data over and above current relationships?

**INRIX® Clarification:**

This is an estimate of the number of nationwide real-time "ITS" sensors (as opposed to traffic count stations that are not real-time in nearly all cases) that have the ability to provide data outside their closed freeway management system to service providers such as INRIX®. The point to emphasize is that on a national scale, while we are prohibited from having access to the ITIP/TTID sensors, the scale of publicly available sensor data dwarfs the proprietary sensor networks in operation.

INRIX®'s ability to deliver quality data, while helped by access to coalition member's publicly available data, it is not dependent upon this access. We have carefully constructed – and continue to build – our Smart Dust Network to minimize dependencies on individual suppliers of source data, be it an agency or a specific GPS probe fleet. While we clearly desire to maintain – and expand with other member agencies if possible – access to agency provided source data, we are not dependent upon this data to meet the project's requirements.

**Proposal reference:** Page 3-29, "... or some equivalent system up to 1000 miles in coverage."

**Clarification requested:**

Where will the 1000 miles of arterial coverage be located? How will it be determined? If, after three years, the coalition decides to continue contracting for traffic data, will the 1000 miles of arterial coverage be included in the base contract price for years 4 through 10, or excluded? Do you agree that the traffic data collected on the 1000 miles of arterials be subject to the same Data Ownership provisions as the data purchased by the Coalition?

**INRIX® Clarification:**

Item 11 in the Traffic Data Requirements Table (Section 3.1) of the RFP alludes to the fact that road coverage might change from those defined as the core system in the RFP. We wanted to make clear in our proposal that we are prepared to offer coverage of either the arterials as defined in the core system – or a similar scale deployment to be determined by the Coalition through the completion of the initial task order beginning the project.

To best describe the business terms for years 4 through 10, we are including material inserted into the cost proposal's cost model section:

*Arterial/alternate route coverage will be provided at no cost initially in the core system (or a resulting system of analogous size) for the base period. If arterial/alternate route coverage is included in years 4-10, a rational per mile price will be established based upon negotiation with the Coalition, although it will not exceed the freeway mileage per year price (the rationale for this is that INRIX® and the Coalition are not currently in a position to value the quality of arterial data provided, and the relative importance of source data – if any – to be provided by the Coalition's member agencies to create the service such as signal system data, etc.).*

We agree that the same data ownership provisions will govern both limited access and arterial data.