



Cintra Infraestructuras S.A.
c/o Cintra US LLC
9600 Great Hills Trail, Suite 250E,
Austin, Texas 78759
(512) 637-8545 -Telephone
(512) 637-1498 - Facsimile

November 25, 2013

Via email to: morteza.farajian@vdot.virginia.gov

Mr. Morteza Farajian
Office of Transportation Public-Private Partnerships
600 E. Main Street, Suite 2120
Richmond, VA 23219

Re: Response to Request for Information Regarding Interstate 66 Corridor
Improvements

Dear Mr. Farajian:

Cintra Infraestructuras S.A. ("**Cintra**") and Ferrovial Agroman, S.A. ("**Ferrovial Agroman**") are pleased to submit this response to the Virginia Office of Transportation Public Private Partnerships ("**OTP3**") to the Request for Information ("**RFI**") as lead firms of a bidding consortium yet to be formed to pursue the Interstate 66 Corridor Improvement Project ("**Project**").

This response is intended to convey our interest in participating in this Project and to provide relevant information to be used in developing policy and structure a formal procurement process and Project agreements.

Cintra is highly experienced in public-private partnerships. Coordinating with OTP3, Cintra will effectively contribute to the PPP approach in responding to the region's transportation needs. Our strategy for developing and delivering the Project is aligned with OTP3. We look forward to working with OTP3 to structure the project in a manner that maximizes value while leading to the full implementation of the Project scope.

We are pleased to offer our views in the attached response, and look forward to participating in the Interstate 66 Corridor Improvement Project procurement.

Best regards,

A handwritten signature in blue ink that reads "Antony Elkins". The signature is fluid and cursive.

Antony Elkins
Commercial Director



**OFFICE OF TRANSPORTATION PUBLIC-PRIVATE PARTNERSHIPS
VIRGINIA DEPARTMENT OF TRANSPORTATION
DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION
I66-CORRIDOR IMPROVEMENTS PROJECT**

RESPONSE TO REQUEST FOR INFORMATION

NOVEMBER 25, 2013

RESPONDENT

**CINTRA INFRAESTRUCTURAS, S.A.
FERROVIAL AGROMAN, S.A.**

Table of Contents

POINT OF CONTACT	
1. GENERAL	
2. PROCUREMENT PROCESS	
3. TECHNICAL CHALLENGES AND ALTERNATIVE SOLUTIONS	
4. COMMERCIAL AND FINANCIAL STRUCTURE	
5. ADDITIONAL CONSIDERATIONS	

Point of Contact

The Contact Person for any communications related to this Project is:

Tony Elkins, Commercial Director

Cintra Infraestructuras, S.A.

9600 Great Hills Trail

Suite 250E

Austin, Texas 78759

Office: (512) 637-8537

Cell: (512) 925-0611

Fax: (512) 637-1498

E-mail: telkins@cintra.us

A. General

1. **Please describe your firm, its experience in relation to public-private partnership projects, and its potential interest in relation to the Project (e.g., design/engineering firm, construction firm, operations and maintenance firm, lender, equity investor, etc.)?**

Cintra and Ferrovial Agroman bring together a multi-disciplinary team and provide full end-to-end integration of all project stages.

Cintra – Transportation Infrastructure Developer

Cintra is a wholly-owned subsidiary of Ferrovial S.A. Ferrovial S.A. is one of the few companies with more than 40 years of experience developing, managing, operating and maintaining infrastructure projects. Cintra specializes in the development of **complex PPP** transportation projects. The group's first Design, Build, Finance, Operate, and Maintain ("DBFOM") project was awarded in 1968, and was recently handed-back to the grantor after successfully completing the 35-year concession term. Cintra-Ferrovial was recognized by Public Works Financing Bulletin/Magazine in October 2012 as the top transportation developer by internationally invested capital, with over \$72 B in PPP contracts.

In the last three years Cintra has raised over \$2.5 billion of committed financing for US roadway concession projects in addition to investing \$582 million of its own equity. The LBJ and NTE projects (Texas) are two of the largest P3 projects in United States history and combined represent a total investment of nearly \$5 billion. These financings included \$1.5 billion in TIFIA funds, \$1 billion in tax exempt private activity bonds ("PABs"), and over \$1 billion in equity from private partners, all arranged under a financing plan managed by Cintra's financial team.

Cintra currently manages 20 projects in six countries comprising 1,280 miles of roadways and a cumulative investment of over \$28 B. Cintra has invested more than \$1.5 B of equity and manages **\$5.8 B of direct private investment** in the United States, represented primarily by investments in the Indiana Toll Road, the Chicago Skyway, SH 130, Segments 5 & 6, the North Tarrant Express and the LBJ Express. Information on the SH 130, Segments 5 & 6, North Tarrant Express and LBJ Express is provided under relevant experience. In recognition of these successes, Infrastructure Investor named Cintra "2009 Global Infrastructure Developer of the Year," and "North American Infrastructure Developer of the Year" in 2009, 2010 and 2013, further establishing Cintra as a **leading** P3 infrastructure developer even during challenging financial times.

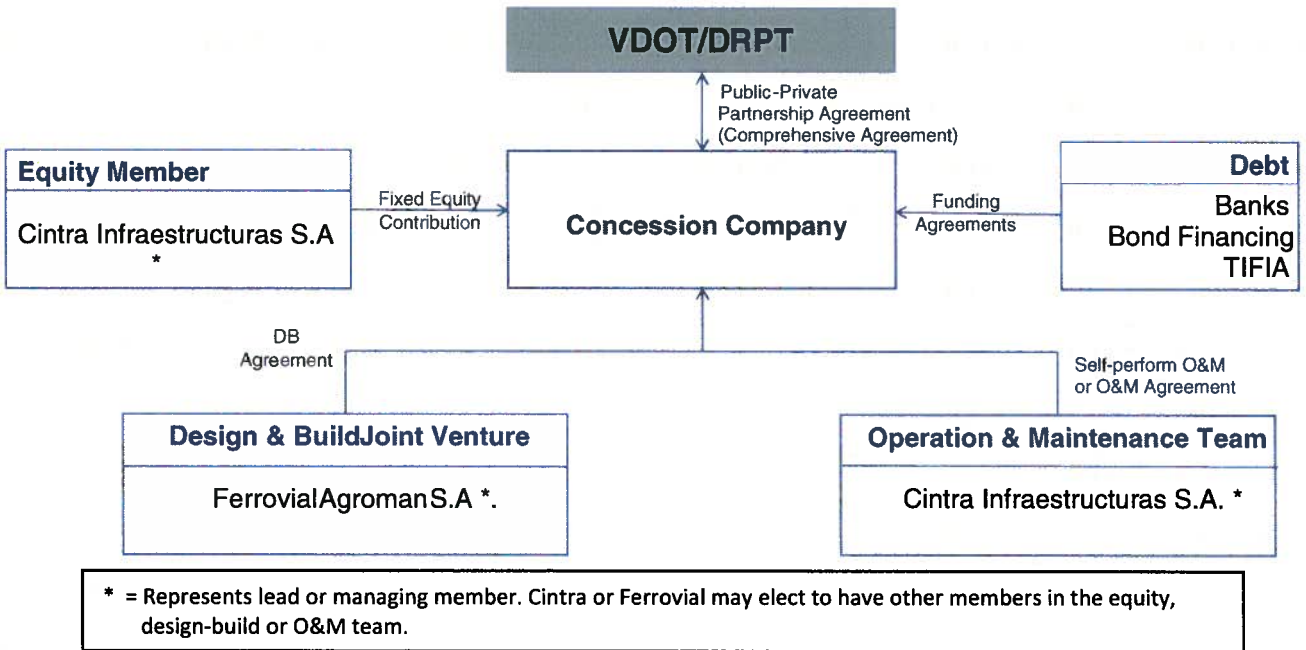
Ferrovial Agroman - Design-Build Contractor

Ferrovial Agroman will join Cintra on the Project as the Design-Build Contractor ("DB Contractor") within the Design-Build Team, managing the design and construction of the Project. The DB Contractor will not invest equity into this Project, but will be expected to have an at-risk security package to support the risks which will be transferred to them during the course of the Project. Ferrovial Agroman is one of the world's preeminent construction firms with more than **80 years** of construction **experience** in design-bid-build, design-build, and public-private partnership projects in all types of infrastructure assets, specializing in large and complex transportation projects. Ferrovial Agroman has designed and constructed 2,700 miles of railways including 440 miles of high speed rail; 2,300 miles of highway concessions; 9,400 miles of new roads; 16,700 miles of rehab of roads; and 270 miles of tunnels. Ferrovial Agroman has been active in the North American transportation industry since 1999, and currently has five major design-build contracts in the U.S. totaling more than \$6 B. Ferrovial Agroman was one of the first construction companies to achieve ISO 9001 certification. Ferrovial Agroman is OHSAS 18001:2007 Certified firm and has a certified Health & Safety Risk Management Plan.

Cintra and Ferrovial Agroman have extensive experience in developing complex infrastructure projects in North America similar in complexity and magnitude to the proposed I-66 Corridor Improvements Project ("the Project").

Assuming that the Virginia Department of Transportation ("VDOT") elects to proceed under a Public-Private Partnership model for the Project, **Cintra** would perform the role of **lead developer/equity member** retaining an interest in the project operations and maintenance. The figure on the following page illustrates how Cintra would develop the Project.

We anticipate that, Cintra would form a Special Purpose Vehicle (Concession Company) that would enter into the Comprehensive Agreement with VDOT and/or the Department of Rail and Public Transportation (DRPT), to design-build-finance-operate-maintain the Project. The equity members will provide the equity and the resources to this Concession Company. The Concession Company will enter into a lump-sum fixed price and fixed schedule contract with the **Design-Build Contractor**, a joint venture led by **Ferrovial Agroman**, for the design and construction of the Project. The Concession Company would also manage operations and maintenance as assigned in the Comprehensive Agreement for the term of the agreement.



Cintra is interested in participating in the Project if it comprises a concession regime that entails private financing (equity+debt) coupled with O&M performed by the private partner, and a construction element that requires advanced design and construction expertise, for a fixed price and schedule. Specifically, we are interested in the Project being procured as, a **traffic risk** concession or an **availability** payment concession or a **combination of both**.

We are confident we can provide a very competitive proposal regardless of the delivery method ultimately chosen by VDOT, due to our unique combination of world-class Financial, Technical and Operational expertise and prior experience with financing and procuring VDOT's Route U.S. 460 Corridor Improvements Project.

Proof of this is the recent proposals won by our Group in North America involving different delivery methods:

- **NTE and LBJ (Texas), demand risk concessions** – TxDOT saved 20% (\$237 million) of the public equity committed to fund both projects. A bundle of value engineering (i.e. innovative design concept) and financial innovation (first time unwrapped PABs for a managed lanes/toll road concession placed in the market) made this achievement possible;
- **407 East Extension (Canada), availability payment concession** – The design concept developed jointly by Ferrovia Agroman's DBJV and Cintra's OM&R teams which integrated O&M and life cycle considerations lead us to submit the most efficient long term OM&R strategy. This paved the way for the optimal project capital structure crafted by our project finance team which afforded Infrastructure Ontario estimated savings of \$40 million; and

Route U.S. 460 Corridor Improvements Project (Virginia, 2012), design-build-finance – Cintra, acting as financial advisor, funded the Ramp-Up Account in a manner that further levered the public funds afforded by VDOT. This measure saved VDOT an estimated \$30 million.

We have a strong commitment to our clients and project stakeholders. We are long distance runners and we will work with VDOT to make the I66 project a viable project and a reality for the community. We have done this in the past and most recently in Virginia with US 460. Cintra-Ferrovial Agroman started working on the Route U.S. 460 back in 2006, and worked with VDOT over a period of 6 years to make US 460's procurement a reality. The US 460 project is currently in the design and pre-construction phase.

2. **Are there any particular concerns with any of the information that has been provided in this RFI, the Detail-Level Project Screening Report or the DEIS? Please explain any concerns and provide any proposed solutions or mitigations to address those concerns.**

Roles of Agencies: It would be helpful to understand the role of the Virginia Department of Rail and Public Transportation ("DRPT"). VDOT should define the role of this agency in the procurement, sign an intergovernmental agreement outlining responsibilities and roles and inform prospective proposers. We recommend a sole point of contact and that VDOT lead the process.

We understand that this project has many stakeholders who want to provide their input and that this may delay, or run the risk of project cancellation. Gathering political support and commitment before moving the project into procurement stage will be critical. The project involves several stakeholders and transportation agencies, so it is important that: 1) Roles and responsibilities are clearly defined and allocated among the various parties; 2) Support is obtained from these agencies and stakeholders before moving the project into the procurement stage; 3) Education of stakeholders on what can/cannot be done is important, as input from these agencies will have an impact on project feasibility and prospective bidders will be working at risk.

Future Metro Expansion: We are recommending that expansion of the Metro not be included within the scope of the private partner for this Project due to high cost considerations and the fact that the level of prospective ridership would not justify the expenditure. In our analysis of potential improvements to the I-66 corridor, we have allowed for and considered the benefit of future Metro expansion. We recommend that should the Metro line be expanded during the concession term, and should this expansion have a detrimental impact on the

Developer's return and investment, the Comprehensive Agreement should contemplate protections to the Developer (compensation for loss of revenue, etc.). This protection will ensure project viability and bankability.

We would recommend that the Metro play a participatory role in the I-66 procurement, specifically with regard to any impact this project may have on current and future Metro service.

Right of Way Acquisition: To accommodate the corridor improvements the recommended solution from VDOT most likely will require ROW acquisition. We have analyzed various alternatives and we believe it is more efficient to acquire some right of way; however it should be limited to the minimum possible. We are aware that ROW is a politically sensitive issue and a big concern with residents. We would like to limit ROW acquisition so it would have as little impact as possible on residents, businesses and the metro area.

- 3. What, if any, advantages will the Commonwealth potentially gain by entering into an agreement in which operations and maintenance, lifecycle responsibility, and/or traffic and revenue risk are transferred to the private sector? How do you assess the likely magnitude of such advantages? What are the potentially offsetting disadvantages?**

Transferring O&M + Lifecycle Responsibilities

The structure that provides the greatest opportunity for long-term efficiencies and cost savings is to allocate operations and maintenance and lifecycle cost to the Concessionaire for the Project, from substantial completion to the end of the concession term.

Integration of O&M + Lifecycle: The benefit of assigning O&M responsibilities to the Concessionaire is that if O&M cost overruns are incurred during the concession period, this risk is borne solely by the Concessionaire. In addition, O&M innovations can be implemented during the design and construction phase, which can lead to a reduction in overall O&M costs. When the same project team is involved in the design, construction, and maintenance of the asset, all interests are aligned and the project is designed cohesively from beginning to end. Finally, when the concession term reaches completion, the Authority will be handed back a well-designed, well-maintained asset that will continue to provide value well into the future. To ensure that the asset is well maintained, the Authority should retain the power for periodic inspection and monitoring of the maintenance and service provided. This will ensure that an experienced Concessionaire is allowed the freedom of exercising their expertise while at the same time conforming to the Authority's stated objectives for the Project.

Additionally, by transferring responsibility for lifecycle maintenance to the public sector, State officials can act as regulators and focus on service planning and performance monitoring instead of managing the day-to-day lifecycle maintenance. Furthermore, by allowing the private sector to maintain the asset, OTP3 can compare the cost to other roads maintained publically, by exposing the cost of public service to the private sector, P3s can enable the cost of public services to the private sector and can enable the cost of public services to be benchmarked against market standards ensuring that the very best monetary value is achieved.

Lastly, by transferring O&M + Lifecycle risks to the Concessionaire, the State achieves budget certainty, which is the ability to be confident of the cost of owning, operating and maintaining the asset during the concession period.

However, if the Authority were to retain maintenance responsibility, one possible advantage is the option of utilizing maintenance crews and assets from other nearby facilities to generate economies of scale. While this can be an effective method, studies have shown that in trying to achieve cost savings, those maintenance services are subject to funding allocation and changes in the economy; this inevitably leads to asset neglect and, eventually, premature deterioration of the facility. It is possible for the Authority to effectively maintain the asset individually, but the private sector has proven more adept at providing a higher level of service at a lower cost for assets similar to the Project.

Transferring Traffic/Revenue Risk

A structure whereby traffic and revenue risk is transferred to the Concessionaire will provide the following advantages to the Commonwealth:

- Lowest funding requirement for public sector
- Provides the greatest value for money or transfer of risk to the Commonwealth
- Strong equity and debt market capacity to finance project
- Typically, a one-time financial commitment when public funds are required
- Developer is incentivized to optimize all project areas throughout the agreement term (design, construction, revenues and operation and maintenance)
- Should provide the Commonwealth with the ability to keep the project "off-credit" from a Ratings Agency perspective, meaning that this project would not impact the credit rating of the Commonwealth.

Potential disadvantages to the Commonwealth:

- Less leverage for private sector

- Finance costs and required equity are higher for Developer due to private sector assuming greater project risk, but overall, the project will result in the lowest project cost for the public sector.
- Reduced spectrum of players willing to bid on a volume risk project compared to an availability payment project. However, we feel confident that, for a project of this size and location (Washington D.C. metro area), and with a grantor with a strong and successful track record procuring P3 projects such as the Commonwealth of Virginia, there will be more than enough qualified developers that will be willing to bid on the Project.

B. Procurement Process

- 4. Do you have any particular concerns with or major observations about the milestone schedule provided in this RFI? Please provide your views on proposed solutions to address these concerns?**

Final environmental clearances including issuance of the Record of Decision are typically required before a public-private partnership can be financed. Obtaining the required environmental documentation is the requirement of the public sector. Ideally, the RFQ should be launched once the project has been environmentally cleared; however should that not be possible, we recommend the RFQ be launched once VDOT has certainty about the viability of the technical concept and the environmental process schedule. This will be perceived by the industry as certainty and commitment by VDOT which will translate into attracting strong and committed private partners. The environmental process and the RFP process can overlap, but the environmental process should be well advanced when the draft RFP is sent to shortlisted proposers.

- 5. What are the critical path items for the procurement of this Project and why?**

- Advisors – VDOT should engage advisors prior to an Industry Forum to advise on technical, financial and legal aspects of this procurement
- Environmental clearance – as described in our response to question #4
- Define a technical solution and delivery method
- Define level of public funding
- Gather the support from stakeholders and political interest
- TIFIA and PAB applications
- RFQ Response Time – recommend 3 months
- RFDP Response Time – recommend a minimum of 9 months
- Financial Close – recommend a minimum of 6 months to achieve financial close

- 6. Looking ahead over the next two to three years, do you believe your firm will be interested in submitting a committed proposal for the development of the Project (any or all of the build concepts)? Are there any particular concerns that may prevent your firm from getting engaged in the project development? How might those concerns be resolved?**

We are not concerned, and we believe in VDOT's track record of procuring P3s, however, it would be important before moving the project forward to:

- Define a technical solution and delivery method
- Define level of public funding
- Gather the support from stakeholders and political interests
- Advance further and get certainty about the environmental process and timeline
- Advance the TIFIA and PAB application process

We have reviewed the 11 options listed in the DEIS, and after much consideration, we are recommending the following three alternatives for VDOT to consider that meet the needs of improving congestion and interconnectivity on the I-66 Corridor. Besides these three alternatives, we will continue to explore other creative options and solicit ideas as the procurement continues to move forward.

2 Reversible Lanes outside the Median (Option 1)

- This option converts 1 HOV to Managed Lanes and adds 1 ML per direction
- Add 60 feet of ROW along the corridor
- Builds 1 additional lane each direction
- Include ramp connections to the Managed Lanes from the 7 main roads (US15, US29, V234, US29, V286, US50, V243) and Direct Connectors to I-495.
- Current: 3 GPL + 1 HOV
- Proposed: 3 GPL + 2 ML
- Advantages
 - Adequately meets the need of corridor by providing 2 extra lanes per direction
 - Eliminates dangerous use of shoulders in current configuration
 - Provides 2 ML per direction in peak hours
 - Preserves median for future Metro expansion
 - Lowest construction cost and least equity of three options analyzed
- Disadvantages
 - High public subsidy required, but lower than 2+2 solution
 - Acquisition of 60 feet of ROW required
 - Does not provide future expansion possibilities as traffic increases, unless median is utilized in the future

2 Reversible Lanes through the Median (Option 2)

- General purpose lane widening would be required along the corridor
- This solution includes the same connections to the Managed Lanes and I-495 as the 2 + 2 Solution

- Current: 3 GPL + 1 HOV
- Proposed: 3 GPL + 1 ML
- Advantages
 - No ROW required
 - Eliminates dangerous use of shoulders in current configuration
- Disadvantages
 - Uses median for ML which would not permit future Metro expansion
 - Generates lowest project revenue
 - Requires a high public subsidy but lower than the 2+2 lanes case

2 + 2 Lanes (Option 3)

- Add 60 feet of ROW along the corridor
- Build 2 additional lanes each direction
- This solution includes the same connections to the Managed Lanes and I-495 as the 2 + 2 Solution
- Section 1 (Capital Beltway to US 50)
 - Current: 3 GPL + 1 HOV with use of shoulders during peak hours
 - Proposed: 3 GPL + 2 ML. Shoulders are not used thereby increasing safety
- Section 2 (US 50 to US 29)
 - Current: 3 GPL + 1 HOV
 - Proposed: 3 GPL + 2 ML
- Section 3 (US 29 to US 15)
 - Current: 3 GPL + 1 HOV
 - Proposed: 3 GPL + 2 ML
- Advantages
 - Best meets the needs of corridor by providing 2 extra lanes per direction
 - Eliminates dangerous use of shoulders in current configuration
 - Provides 2 ML which generates the most project revenue
 - Preserves median for future Metro expansion
- Disadvantages
 - Highest construction cost and highest equity requirement
 - Highest public subsidy required
 - Acquisition of 60 feet of ROW required
 - Highest level of O&M and Capex during concession

Intermodal Connectivity

We acknowledge and agree with VDOT's desire to improve Intermodal Connectivity by increasing the availability and functionality of connections between travel modes. To that end, we are providing the following three recommendations to improve intermodal connectivity:

1) Metro Expansion

We believe that expanding the Metro to the West of Vienna is not currently justified based on prospective ridership and current commuting patterns. Furthermore, any expansion of the Metro would have to have a separate funding mechanism to be paid for from Federal or State sources and would be quite expensive.

By preserving the median in Options 1 and 3, the Metro could be expanded in the future should growth in the corridor justify this expansion.

While we would not advocate current expansion of the Metro, we would be willing to help recommend improvement to the two stations inside the project as well as West Fall Church station with regard to improving access, parking and interconnectivity with bus transit.

2) Bus Rapid Transit

For all three options described above we are recommending that VDOT utilize the concept of Bus Rapid Transit ("BRT"). The BRT concept proposes a new premium transit service operating on the newly built managed lanes. The new managed lane capacity is dedicated first to public transit. All of the remaining capacity above that used by the public transit vehicles is then sold to drivers of personal vehicles who are willing to pay the variable-tolls that assure free-flow of traffic.

Tolling would be dynamically based and the rates would vary by time of day to ensure that traffic flow would be maintained at a predestinated speed (e.g. 55-miles per hour).

3) Park and Ride

VDOT should explore all options to enhance Park and Ride on the corridor. This could include the concessionaire constructing and operating several park and ride garages to promote bus rapid transit.

Recommendation

We believe that the best option to meet the needs of improving congestion in the I-66 corridor is to recommend the 2+2 solution described above in Case 3. This solution provides adequate capacity to solve current and long-term congestion problems while also preserving the median for future Metro expansion. Coupled

with the Bus Rapid Transit and strategically placed parking garages, this could dramatically improve intermodal connectivity.

7. What is the minimum amount of time that your firm requires to develop and submit a committed detailed proposal for the Project after issuance of potential RFP?

We believe that a minimum of nine months from the issuance of the RFDP would be required to fully complete due diligence, design, construction pricing and scheduling, documentation review and to structure the financing.

This timeframe can be shortened should VDOT facilitate detailed information during the RFDP stage to proposers. The more technical information available to proposers during the RFP stage, the better it will serve to shorten the preparation time of detailed responses and will help craft a better technical solution (e.g. detailed geotec data will prevent geotec surveys having to be performed by the DB Team). Sufficient and accurate project information (ROW parcels, utility info, geotec, etc.) greatly benefits the RFP process and will translate into improved project feasibility. Generally, less information means more required time to analyze the project.

C. Technical Challenges and Alternative Solutions

- 8. Based on your experience in the development of similar projects and characteristics of the I-66 corridor, please explain the technical challenges that may be encountered with the highway and transit improvement concepts described in the Tier 1 DEIS. Please provide recommendations for mitigating or overcoming those challenges.**

While we are recommending the implementation of high frequency bus rapid transit, the comprehensive agreement should provide protection mechanisms to developers above a certain level of usage by the BRT.

We are also strongly in favor of a minimum HOV-3 policy for free access on the managed lanes.

Lastly, if the Commonwealth decides to expand the Metro West of Vienna during the term of our concession, the comprehensive agreement should provide protection mechanisms to developers for the impact on the operation of the I-66 Corridor, due to construction work for expansion of the Metro Line and the potential loss of clients once the metro line commences operations.

- 9. Do you believe a bifurcated highway system along the I-66 corridor is technically feasible? Please provide any experience and supportive information that you may be able to share from similar projects.**

A bifurcated solution, whereby we build managed lanes or a subway line either elevated or beneath could work. An elevated solution can be accommodated and we have not detected major challenges for its implementation. A bifurcated solution would require additional public funds support as compared with at grade solutions, as the underground technical concept is the more expensive solution. On Cintra/Ferrovial's LBJ Express (I-635 Managed Lanes) project in Dallas we are employing both elevated and depressed managed lane construction to avoid the need for extra right of way acquisition.

Assuming VDOT elects the elevated solution, there is also the issue of aesthetics of elevated lanes or subway that would have to be considered. There also may be impact (i.e. noise) on adjacent communities if an elevated solution is selected.

10. What are the most significant cost drivers in the development and operation of the ML and BRT concepts along the I-66 corridor? How can these concepts be implemented in such a way as to preserve the potential for rail extension?

- We understand the desire for potential future expansion of the Metro. Preserving the median for this future expansion is a significant capital cost driver.
- The need to acquire the additional 60 feet of ROW in Cases 1 and 2 are relatively minor cost considerations.

11. What, if any interoperability issues do you foresee with the current tolling system on I-495 Express Lanes.

Fully coordinating with the I-495 and I-95 projects will ensure that all are used as a system and more financially viable over the long term. The design must ensure that interoperability is free-flowing and obvious to the consumer with safety as a priority. Usage of E-ZPass as the primary method of collection is suggested as it is transparent and widely used on the East Coast, specifically on the other area facilities. Our strong preference is for VDOT to grant the concessionaire the ability to collect all tolls.

We do recommend a Northern Virginia HOV 3 policy as the standard; we believe this consideration will alleviate consumer confusion and provide for a more financeable project. We also recommend that the Commonwealth aggressively promote and enforce all aspects of HOV 3.

12. What suggestions do you have for better coordination between this Project and other projects currently under design or construction along the I-66 corridor?

We would recommend putting together a detailed coordination plan and conducting regular meetings with the project/construction managers of the other projects to coordinate major construction activities. The coordination plans would be managed by VDOT.

Continued VDOT-OTP3 office coordination with localities and other affected entities is essential.

13. What challenges are associated with managing the lifecycle costs for the improvement concepts as described in the Tier 1 DEIS? What measures would you suggest to mitigate these risks?

We believe that lifecycle responsibilities should be allocated to the concessionaire for the reasons outlined in our response to Question #3. If the Metro would be expanding during the duration of our concession, we would propose that the concessionaire would not be responsible for O&M/lifecycle on the Metro expansion.

14. What adjustments to the Project scope, or development strategies (including potential phasing of project elements) would you consider/recommend to reduce the upfront capital costs and/or the lifecycle costs of the overall project costs?

As noted in our response to Question #6, despite generating the highest revenue, the 2+2 managed lanes would require the highest public subsidy due to the high construction cost, preservation of the median and ROW acquisition. The 2 reversible lanes outside the median would require the lowest public subsidy while still preserving the median for future Metro expansion and also require lower O&M.

Another option to reduce upfront capital costs might be to start the Corridor improvements with the Eastern portion of I-66 and extend it to the West (Haymarket) when public funds become available or congestion levels justify the expansion.

15. Please explain in detail any alternative technical solutions that may enhance the development of the Project. Identify the risks associated with the alternative technical solutions and discuss the potential cost of each technical solution.

Without knowing VDOT's preferred technical solution, it is difficult to explain any detailed possible alternative technical solutions that could be employed to provide cost savings.

D. Commercial and Financial Structure

16. Please explain your firm's interest in the improvement concepts discussed in the Tier 1 DEIS. What is your recommended approach for financing the capital cost of each concept?

We are interested in all solutions in the DEIS that involve the improvement of the roadway system, that involve a challenging construction environment that requires advanced design and construction expertise according to a fixed price and schedule, O&M and private financing.

We would finance our three solutions (as described in our response to Question 6) with a combination of equity, private debt, TIFIA and public subsidy. However, given the high capital needs relative to the revenue generated, we are not of the opinion that this project could support additional senior debt (PAB's).

17. Please discuss your firm's interest in:

- a. Accepting traffic and revenue risk in a toll concession**
- b. Accepting performance risk in an availability structure**

We believe that the Project is well positioned to be procured as a P3. Cintra actively pursues both traffic risk and availability risk payment structures. While we believe this project is very well suited to be structured as a traffic/revenue risk project, Cintra would be interested in pursuing the project if either delivery method were selected by VDOT.

Minimum Revenue Guaranty

Another option that VDOT could consider is providing a Minimum Revenue Guaranty ("MRG") which is a combination of traffic risk and availability payment project. Under this scenario, the Commonwealth would guarantee a minimum amount of revenue per period, regardless of the project's performance. The guaranty provides a great deal of security to debt holders, and leaves the majority of the remaining risk to the equity, so the project could be leveraged further than before and additionally, the cost of the private debt would also be less expensive. The combination of more leverage and less costly debt will fund more project scope and/or lower the required subsidy from the Commonwealth.

For example, if the MRG is set at 70% of expected revenues, we would expect the following:

- If revenues are at 75% of expectations, the Commonwealth pays nothing.

- If revenues are at 68% of expectations, the Commonwealth pays 2% of expected revenues.

18. What is a reasonable concession term for a ML or a BRT concept? Why?

The proper duration for the concession will depend on the delivery method chosen by VDOT. Historically, projects procured under an availability payment model transfer less risk to the private sector and, therefore, have a shorter payback period and require a shorter concession term. Availability payment projects can carry concession terms that commonly range from 30 to 50 years. Projects structured as traffic risk carry more uncertainty, thus requiring a longer concession term to compensate for this elevated level of risk assumed by the private sector. Due to the heightened risk profile of traffic risk projects, concession terms typically range from 50 to 99 years.

E. Additional Considerations

- 19. If your firm is a Disadvantaged Business Enterprise (“DBE”) or a Small, Women-owned, and Minority-owned Business (“SWaM”), please provide any suggestions or comments on how OTP3, VDOT or DRPT can help to develop teaming opportunities with prime contractors.**

Neither Cintra nor Ferrovial are DBE or SWaM firms.

Ferrovial Agroman’s Design-Build model is very conducive to the participation of SBE’s and SwaM’s. With the exception of high-risk tasks, Ferrovial Agroman seeks bids for all work on the project. By sizing these work packages appropriately, Ferrovial Agroman is able to utilize the entire local construction market, including DBE’s and SWaM’s. This model is being used on multi-billion dollar Design-Build and PPP projects and has resulted in over 90% of the work being done by local companies and 100% of DBE goals met halfway through project completion. That being said, it is important to ensure percentages only need to be applied in areas where DBE’s and SWaM’s can realistically participate. For example, in certain aspects of financing, there is no ability for a third party DBE/SWaM firm to participate. As a result, other elements of the project must absorb those percentages in often unrealistic ways.

VDOT can best facilitate opportunities by acting as a liaison between the bidders and DBE/SWaM firms in the way of communications and advertisement of industry outreach forums. It is also helpful for VDOT to educate these Firms and manage their expectations, especially with respect to the longer schedules that these types of projects experience. Often times, agencies have the best of intentions when they connect the DBE/SWaM firms with developers and contractors, but it can create a sense of immediate opportunity, as the projects can take years to develop to a point where the DBE/SWaM firms are able to participate.

- 20. Based on characteristics of the I-66 corridor, suggest the number of persons per vehicle that should be required to qualify as a high-occupant vehicle. Explain why selecting this number may be in public interest and beneficial to comply with the federal Clean Air Act of 1990? Please provide quantitative and qualitative evidence to supports your arguments.**

We strongly encourage VDOT to implement a HOV 3+ tolling policy for the I-66 Corridor. With a HOV 2+ tolling policy the level of usage of the Managed Lanes by vehicles of 2 or more occupants would leave little capacity to sell to potential users (namely Single Occupant Vehicles – SOV), thus impacting the project financial feasibility.

The goal of HOV lanes should be to reduce congestion and to improve air quality. We also believe that HOV 3+ will encourage more carpooling than an HOV 2 policy. HOV 3 coupled with Bus Rapid Transit, more park and ride facilities and the continued use of casual carpooling or "slugging" in the DC Metro area should improve compliance with the Federal Clean Air Act.

21. What additional challenges or risks should OTP3, VDOT, DRPT or CTB be aware of in regard to Project's scope, procurement process, delivery method, term of contract, technical and financial feasibility, etc.?

Enforcement of toll collections, HOV tolling policy and future expansions of the adjacent roads will be critical to ensuring a commercially viable project.

VDOT should be prepared to **deliver a project** which might not be the full scope of the Project as presented today, but still address some of the mobility issues of the region. This would also require the ability to **manage the expectations** of the several stakeholders involved in the decision-making process and the Project in general.

22. Other than the answers that you have already provided, what information would help your firm to make the business decision to engage in the development of the Project?

Our team is very interested in the opportunity and is looking forward to working with VDOT again to make a challenging project a reality which in this case will alleviate the mobility constraints of northern Virginia.

That said, it would be helpful to understand from VDOT what state subsidy might be available for this project, how VDOT would provide assistance with ROW acquisition and how VDOT plans to mitigate toll collection risk.