

Equities

5 August 2011 | 13 pages

India Roads

Volumes Up....Returns Down

■ Industry Overview

- Aggressive targets - road project awards to be up >50% in FY12E** – NHAI ordered ~5,083kms in FY11 and has a target of awarding ~8,000kms in FY12 (a jump of 57% YoY). Over and above this target, NHAI also plans to award additional 1,000kms of road projects in FY12. Our discussion with NHAI suggests that of this, ~7,300 kms of road orders should easily be achievable. While this seems aggressive given the past track record, recent momentum indicates a fair chance of achieving these targets.
- Sharp spurt in recent in road award activity-** The ordering pipeline seems to be more tilted towards the first half of FY12E – 5,300 kms/ ~67% of the projects are planned to be given out by September 2011. There has been a recent spurt in road projects being awarded by NHAI. GMR won India's largest road project (555km), worth Rs54bn. GVK also won a Rs28bn contract in Madhya Pradesh.
- But competition is getting worse** – NHAI undertook annual prequalification and specified as to the maximum project size a company can bid for (for one project). Around 98 companies have been shortlisted for the small-sized projects. This is evident in the large number of shortlisted bidders for smaller projects. IRB recently highlighted the acute competition in the Rs5-15bn project-cost segment.
- Leading to aggressive bidding** – Almost all players in the road sector have been talking of aggressive bidding but the industry is showing no signs of consolidation. As per NHAI, the authority will have a gain in NPV (premiums escalated by 5% over 20 years) from recent bids to the tune of Rs64bn.
- Returns to trend structurally lower** - We believe that returns on the road sector will structurally trend lower if the situation continues for a while. Aggressive bidding, coupled with high costs as well as interest rates, leave very little room for error on traffic estimation (which would be very optimistic to begin with to justify premiums offered).

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Figure 1. Recent Bids

| Roads | Length (Km) | Date of Bids recd | Project Cost (Rs mn) | (Grant)/ Premium expected (Rs mn) | Annual Premium per Year of winning bid (Rs mn) | Gain in NPV discounted @12% | Winning Company |
|------------------------|-------------|-------------------|----------------------|-----------------------------------|------------------------------------------------|-----------------------------|-----------------|
| Kota-Jhalwar | 88.09 | 22-Mar-11 | 5,300 | (2,280) | 35 | 2,520 | Keti Const. |
| Nagpur - Wainganga | 43.50 | 18-Apr-11 | 4,842 | (1,060) | 274 | 3,220 | JMC Projects |
| Banwa-Adda-Panagarh | 122.88 | 8-Mar-11 | 16,650 | 55 | 1,060 | 8,040 | DSC Ltd |
| Dhankuni- Kharagpur | 111.40 | 25-Feb-11 | 13,962 | 339 | 1,261 | 7,216 | Ashoka Buildcon |
| Beawar - Pali-Pindwara | 244.12 | 18-Mar-11 | 23,380 | 240 | 2,510 | 18,161 | L&T |
| Ahmedabad- Vadodra | 102.30 | 22-Mar-11 | 21,254 | 55 | 3,096 | 24,328 | IRB Infra |
| | | | | | 8,235 | 63,485 | |

Source: NHAI

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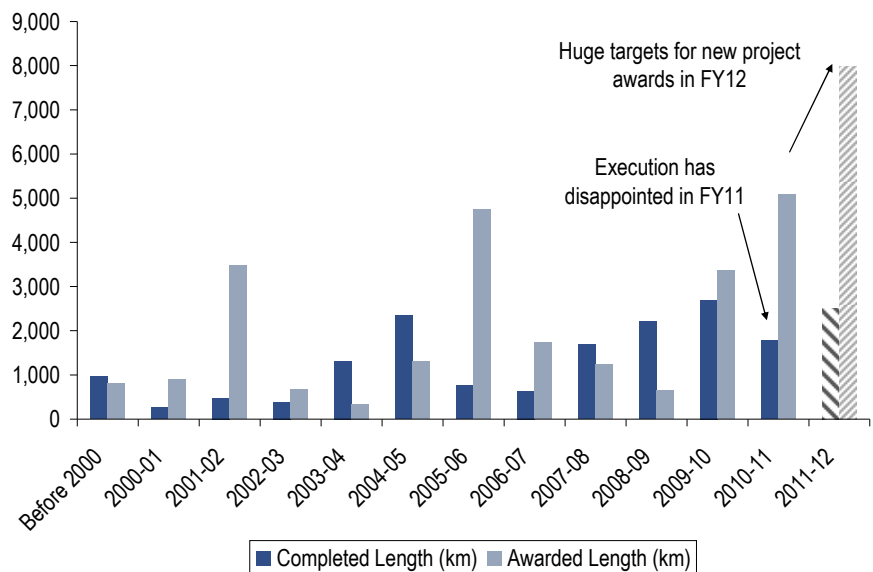
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Ordering to pick up sharply up – +57% YoY

NHAI ordered ~5,083kms in FY11 and has a target of awarding ~8,000kms in FY12 (a jump of 57% YoY. Over and above this target NHAI also plans to award an additional 1,000kms of road projects in FY12.

Our discussion with NHAI suggests that of this ~7,300 kms of road orders should easily be achievable.

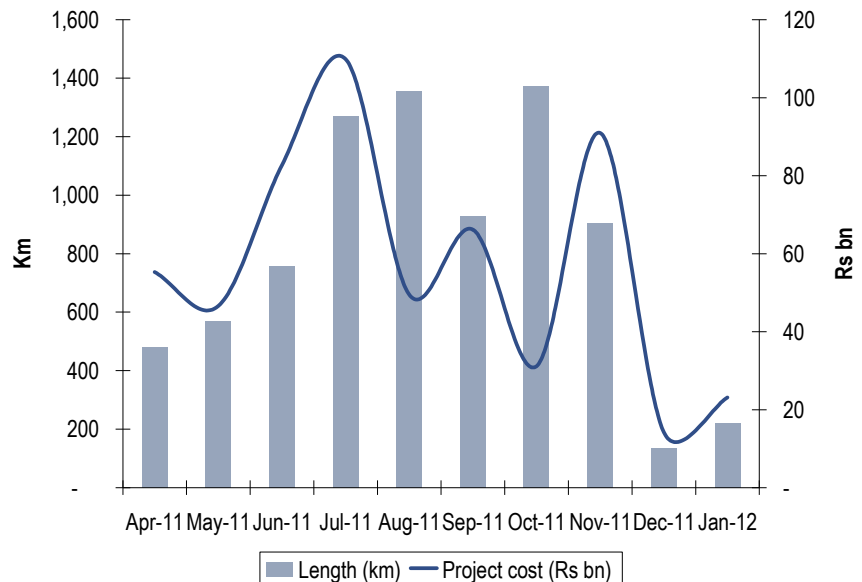
Figure 2. NHAI orders and completed road length



Source: NHAI, Citi Investment Research and Analysis

The ordering pipeline seems to be more tilted towards the first half of FY12E – 5,300 kms/ ~67% of the projects are planned to be given out by September 2011.

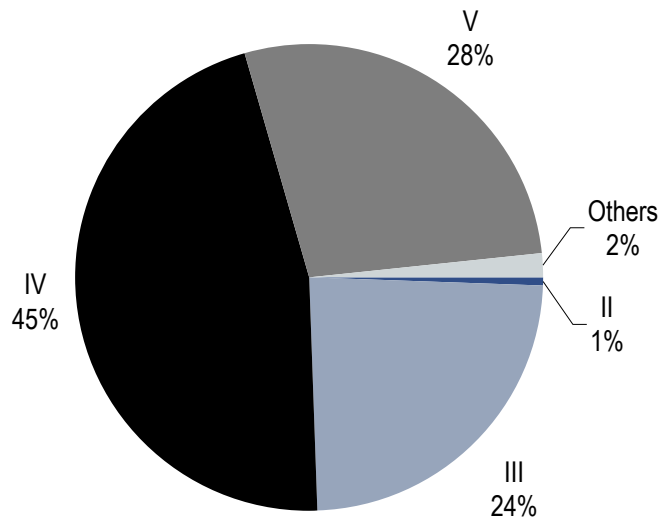
Figure 3. NHAI has lined up 59 projects for bidding in FY12



Source: NHAI, Citi Investment Research and Analysis

~45% of the planned projects are the NHDP – Phase IV phase. This phase entails upgrading of 20,000 km of highways into two-lane highways.

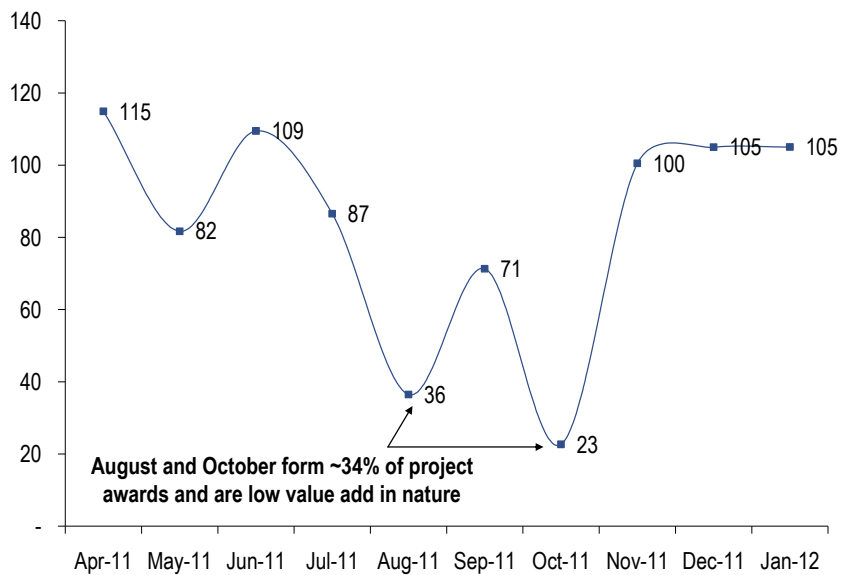
Figure 4. Planned NHAI project awards in FY12 – Break-up by NHDP Phase



Source: NHAI, Citi Investment Research and Analysis

....which probably explains why the cost per km of road projects to be given out in August and October 2011 is lower

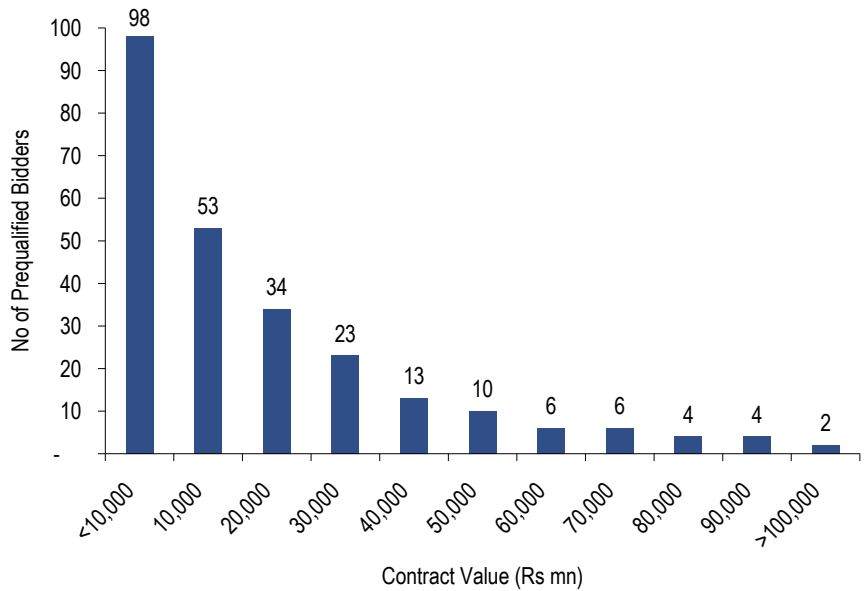
Figure 5. NHAI Project Pipeline – Cost/km (Rs mn)



Source: NHAI, Citi Investment Research and Analysis

NHAI undertook annual prequalification and specified as to the maximum project size a company can bid for (for one project). The analysis of the 98 companies that have pre-qualified indicates that a number of companies have got prequalified for smaller projects...

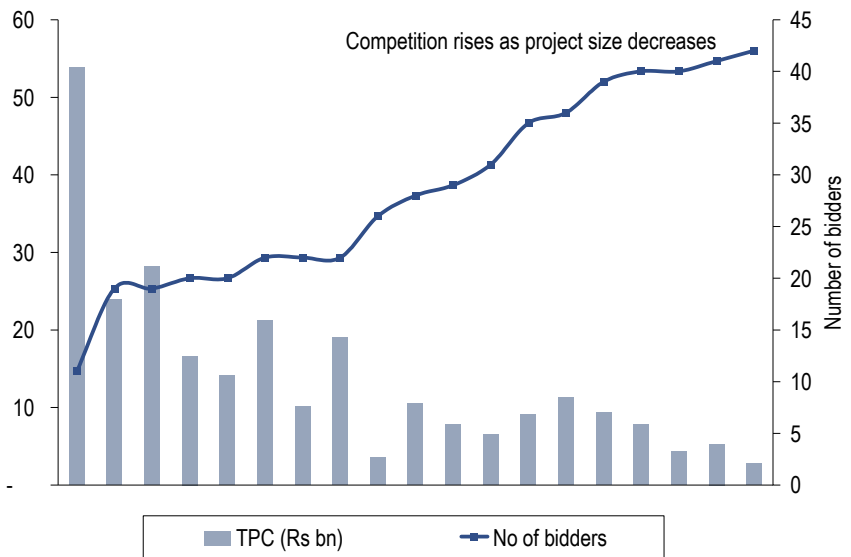
Figure 6. NHAI – Results of Annual Pre-Qualification.



Source: NHAI

.....which is evident in the number of shortlisted bidders for smaller projects. IRB recently highlighted the acute competition in the Rs5-15bn project-cost segment.

Figure 7. NHAI Road bids in 2011 – Competition heating up



Source: NHAI, Citi Investment Research and Analysis

Projects are awarded on the basis of lowest grant demanded or highest revenue share offered to NHAI

Figure 8. Road projects awarded on Grant to be received from NHAI

| Road Section | Length (Km) | Estimated Cost (Rs mn) | Negative Grant (Rs mn) | as a % of project cost |
|---------------------------|-------------|------------------------|------------------------|------------------------|
| Delhi- Gurgaon | 28 | 7100 | 610 | 9% |
| Rajkot Bypass- Jetpur | 36 | 3880 | 590 | 15% |
| Panipat Elevated Highways | 10 | 2700 | 960 | 36% |
| Salem- Karur | 42 | 2530 | 460 | 18% |
| Krishnagiri - Thopurghat | 62 | 3720 | 1400 | 38% |
| Tindivanam - Ulundurpet | 71 | 4800 | 1520 | 32% |
| Thirssur - Angamali | 40 | 3120 | 840 | 27% |
| Jalandhar - Amritsar | 49 | 2630 | 70 | 3% |
| Ambala - Zirakpur | 36 | 2980 | 1060 | 36% |
| Dhule- Pimalgaon | 118 | 5560 | 590 | 11% |
| Vadodra - Bharuch | 83 | 6660 | 4710 | 71% |
| Bharuch - Surat | 65 | 4920 | 5040 | 102% |

Source: NHAI

Some of the projects that have been won recently have very high revenue shares...raising questions to the viability of the projects as well as the IRRs.

Figure 9. Road projects awarded on revenue share to be given to NHAI

| Road Section | Length (km) | Estimated Cost (Rs mn) | Revenue share % |
|---------------------------|-------------|------------------------|-----------------|
| Surat - Dahisar | 239 | 26000 | 38% |
| Gurgaon- Jaipur | 225 | 19000 | 48% |
| Panipat- Jalandhar | 291 | 22000 | 20% |
| Chennai - Tada | 42 | 3170 | 17% |
| Vijaywada - Chilkaluripet | 85 | 11730 | 2% |
| Krishnagiri- Walajhapet | 148 | 12500 | 7% |

Source: NHAI

NHAI has stopped awarding projects on % revenue share offered – have now moved to absolute premium offered.

Figure 10. Road projects awarded on revenue share to be given to NHAI (1st year amount to be escalated by 5% every year)

| Road Section | Length | Estimated Cost | Premium |
|--------------------------------|--------|----------------|----------|
| Chengapalli - Coibatore Bypass | 55 | 8530 | 360.00 |
| Indore- Jabua | 155 | 11750 | 230.00 |
| Hyderabad- Yadgiri | 36 | 3880 | 120.00 |
| Godhara- to MP/ Guj border | 87 | 7860 | 80.00 |
| Panipat-Rohtak | 81 | 8070 | 450.00 |
| Kandla - Mundra port | 71 | 9540 | 420.00 |
| Rohtak- Bawal | 83 | 6500 | 120.00 |
| Deoli- Kota | 83 | 5930 | 490.00 |
| Sambalpur-Baragarh-Chattisgarh | 88 | 9090 | 10.00 |
| Belagaum- Khanpur | 82 | 3590 | 20.00 |
| Jetpur-Somnath | 123 | 8280 | 230.00 |
| Pune - Satara | 140 | 17250 | 910.00 |
| Samaikhiali-Gandhidham | 56 | 8050 | 580.00 |
| Indore-Dewas | 45 | 3250 | 240.00 |
| Belgaum-Dharwad | 80 | 4800 | 310.00 |
| Chitradurga- Tumkur Bypass | 114 | 8390 | 140.00 |
| Hosur-Krishnagiri | 60 | 5350 | 670.00 |
| Panvel - Indapur | 84 | 9430 | 340.00 |
| Luchiyana-Talwandi | 78 | 4790 | 10.00 |
| Dhankuni- Karagpur | 111 | 13960 | 1,260.00 |
| Kota-Jhalwar | 88 | 5300 | 40.00 |
| Ahmedabad- Vadodra | 102 | 21250 | 3,100.00 |
| Barwa-Adda-Panagarh | 123 | 16650 | 1,060.00 |

Source: NHAI

Which obviously benefits the government ...the government gained Rs64bn as NPV gain due to these aggressive bids.

Figure 11. Recent Bids

| Roads | Length (Km) | Date of Bids recd | Project Cost (Rs mn) | (Grant)/ Premium expected (Rs mn) | Annual Premium per Year (Rs mn) | Gain in NPV discounted @12% | Winning Companies |
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Source: NHAI

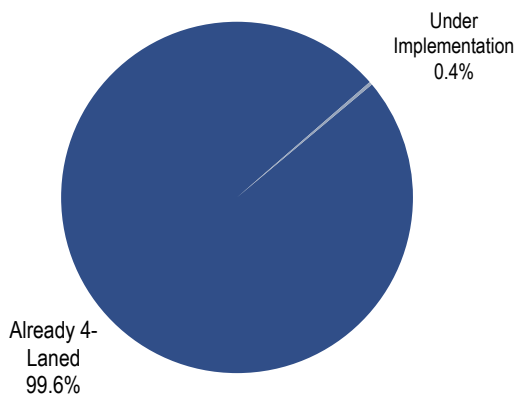
NHDP – Phase-wise implementation

Figure 12. NHDP Phases

| Phase | Length (Km) | Key Projects |
|-------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 7,522 | 98% Completed 5,846 Golden Quadrilateral 981 North South East West Corridor 380 Port Connectivity to Major Ports 315 Other National Highways |
| 2 | 6,887 | 50% Completed 6,391 North South East West Corridor 496 Other National Highways |
| 3 | 12,109 | 4-Laning of Highways - Work in Progress 4,815 Phase III A - Work in progress (~50%) 7,294 Phase III B - Received Cabinet Approval |
| 4 | 14,799 | Union Cabinet approved 4,000 Phase IV A - Toll 1,000 Phase IV A - Annuity 9,799 Phase IV B - Feasibility studies in progress |
| 5 | 6,500 | 6-Laning of GQ and priority NSEW Corridors |
| 6 | 1,000 | Construction of Expressways |
| 7 | 7,00 | Construction of ring roads, flyovers, etc |

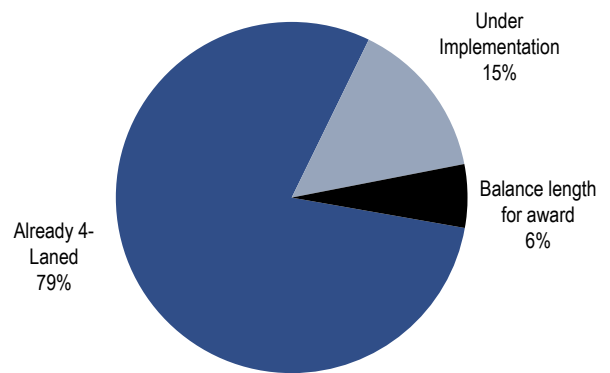
Source: NHAI, Citi Investment Research and Analysis

Figure 13. Golden Quadrilateral – Progress of Implementation



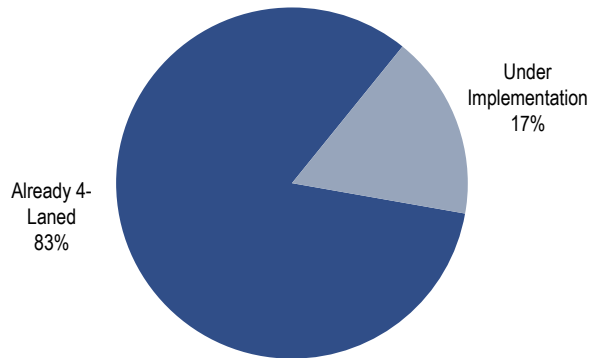
Source: NHAI, Citi Investment Research and Analysis

Figure 14. NSEW – Progress of Implementation



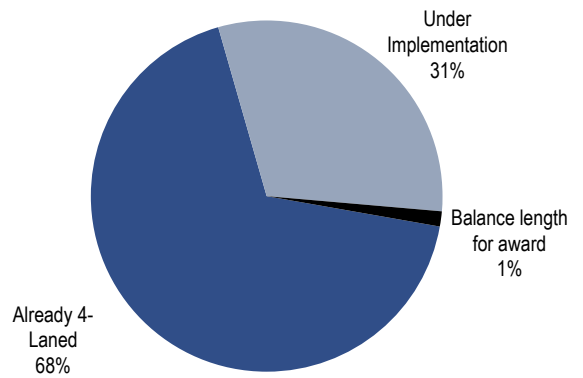
Source: NHAI, Citi Investment Research and Analysis

Figure 15. Port Connectivity – Progress of Implementation



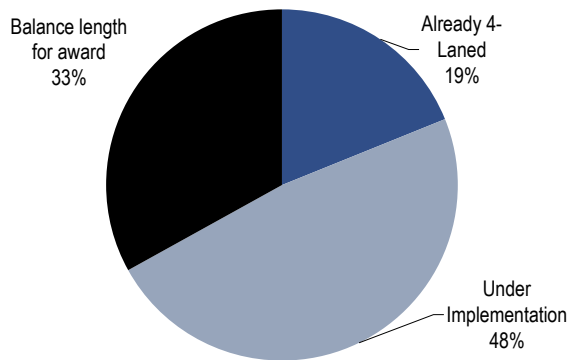
Source: NHAI, Citi Investment Research and Analysis

Figure 16. Other Projects – Progress of Implementation



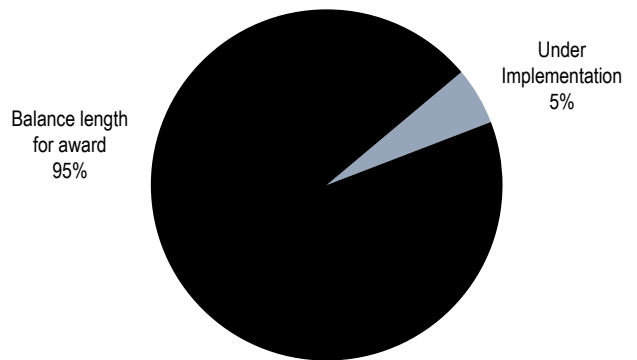
Source: NHAI, Citi Investment Research and Analysis

Figure 17. NHDP Phase III – Progress of Implementation



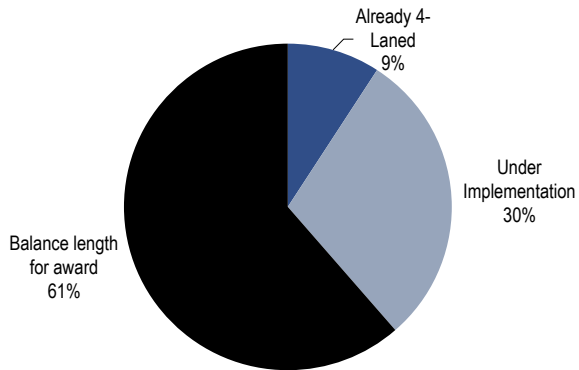
Source: NHAI, Citi Investment Research and Analysis

Figure 18. NHDP Phase IV – Progress of Implementation



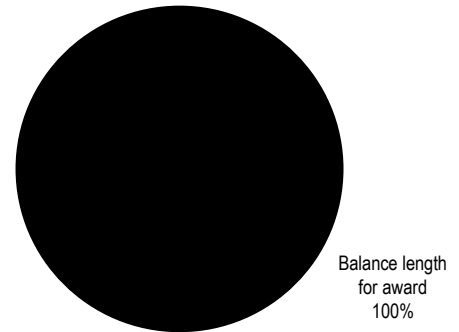
Source: NHAI, Citi Investment Research and Analysis

Figure 19. NHDP Phase V – Progress of Implementation



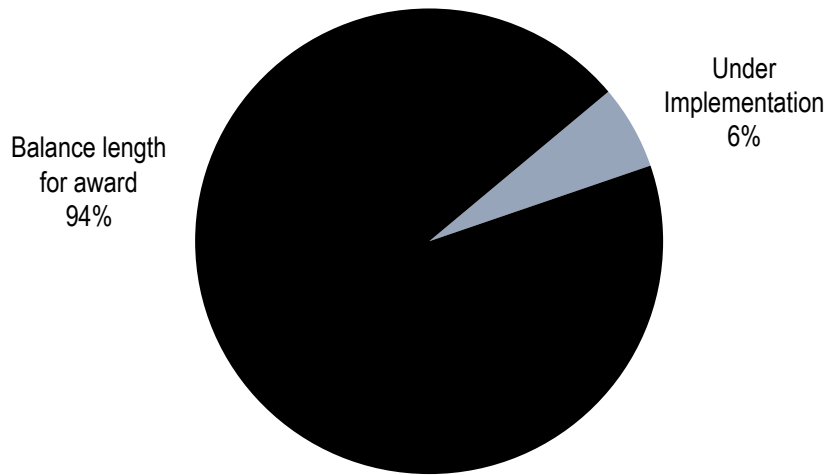
Source: NHAI, Citi Investment Research and Analysis

Figure 20. NHDP Phase VI – Progress of Implementation



Source: NHAI, Citi Investment Research and Analysis

Figure 21. NHDP Phase VII – Progress of Implementation



Source: NHAI, Citi Investment Research and Analysis

Appendix A-1

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